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FOREWORD

Considerable progress has been made in the country in the field of Water Resources development since independence. The Pocket book on Water Data 2005 is a concise and abridged version of the detailed Water & Related Statistics Publication and is intended to serve as a handy reference book containing all water related data of interest and relevance to programme administrators, managers and researchers at one place. The last issue of the publication was published in March 2003 and the present issue is an updated version containing data received up to September 2005.

The collection, compilation, collation and finalisation of the publication was undertaken by the Water Resources Information System (WRIS) Dte. of Information System Organization. Smt. Anupam Bhatnagar, Director and Shri Khursheed Alam, Deputy Director assisted by the Staff of WRIS Dte. and Computer Center have done an excellent job under the guidance of Sh. K.A.D. Sinha Adviser (ISO) in finalization and computerization of the data and giving it a presentable shape. Thanks are due to various Central & State Government Organizations for supplying the requisite information.

Suggestions for improvement in the content, coverage and presentation of next issue are welcome.

**New Delhi
October, 2005**

**(B.S. Ahuja)
Member (WP&P)**

WATER SECTOR AT A GLANCE

	Item		Unit	
1.	Estimated Annual Precipitation (Including snowfall)	4000	BCM	
2.	Geographical Area	328.73	Million Ha.	
3.	Population (Projected as on 1.3.2005)	1097.1	Million	
4	Average Annual Potential in Rivers	1869	BCM	
5.	Per Capita Water Availability (estimated as on 1.3.2005)	1703.6	Cu.M	
6.	Estimated Utilisable Water (i) Surface (ii) Ground	1122 690 432	BCM BCM BCM	
7.	Per Capita Uutilisable Water (estimated as on 1.3.2005)	1022.7	Cu.M	
8.	Projected Water Demand (BCM) i) Domestic ii) Irrigation iii) Industry iv) Energy v) Others Total	2000 42 541 8 2 41 634	2025 73 910 23 15 72 1093	2050 102 1072 63 130 80 1447
9.	Storage Capacity Development i) Completed Projects ii) Projects Under Consideration iii) Projects Under construction	(Up to IX Plan) 212.78 107.54 76.26	(Up to IX Plan) BCM BCM BCM	
10.	Number of Basins and Drainage Area i) Major River Basins ii) Medium River Basins	No 12 46	Area 2528 (Th.Sq.km) 246 (Th.Sq.km)	
11.	Irrigation Potential Created At the time of Independence (Pre-Plan)			
11.1	Created and Utilised i) Major & Medium ii) Minor Irrigation (a+b) a) Surface Water b) Ground Water	22.6 9.7 12.9 6.4 6.5	Million Ha. Million Ha. Million Ha. Million Ha. Million Ha.	

	Five Year Plan Period (Th. Ha.)	Major & Medium (Surface)	Minor (Surface + Ground)	Major & Medium + Minor
11.2	I Plan (1951 – 56)	2486	1159	3645
	II Plan (1956 – 61)	2143	671	2814
	III Plan (1961 – 66)	2231	2269	4500
	Annual Plans (1966 – 69)	1530	2020	3550
	IV Plan (1969 – 74)	2608	4380	6988
	V Plan (1974 – 78)	4014	3900	7914
	Annual Plans (1978 – 80)	1895	2700	4595
	VI Plan (1980 – 1985)	3401	7521	10922
	VII Plan (1985 – 90)	2225	9086	11311
	Annual Plans (1990-92)	821	3743	4564
	VIII Plan (1992 – 97)	2213	7545	9758
	IX Plan (1997 – 2002)	4092	5792	9884
	X Plan (2002 – 07) Target	9926	5228	15154
11.3	<u>Up to (2001-02)</u>			
	(a). Major & Medium			
	i) Ultimate	58.5	Million Ha.	
	ii) Created	37.0	Million Ha.	
	iii) Utilised	31.0	Million Ha.	
	(b). Minor (Surface & Ground)			
	i) Ultimate	81.5	Million Ha.	
	ii) Created	56.9	Million Ha.	
	iii) Utilised	49.0	Million Ha.	
	(c). Total (Major, Medium & Minor)			
	i) Ultimate	140.0	Million Ha.	
	ii) Created	93.9	Million Ha.	
	iii) Utilised	80.0	Million Ha.	
12.	Number of Major & Medium and ERM Irrigation Projects	Major	Medium	ERM
	i) Completed in Pre-Plan	74	143	-
	ii) Completed in Plan Period upto IX Plan	154	774	87
	iii) Ongoing in X Plan	163	222	86
	iv) New in X Plan	69	113	86

13.	Accelerated Irrigation Benefit Programme (AIBP)			
	i) Year of commencement	1996-97		
	ii) CLA* released upto 31.03.05	16402	Rs. Crore	
	iii) Ultimate Irrigation Potential	22.3	Million Ha.	
14.	iv) Potential Created upto 31.3.05 (*CLA-Central Loan Assistance)	2.66	Million Ha.-	
	Number of New Projects under Appraisal (As on 03.01.2005)			
15.	Major	92		
	Medium	88		
15.	CAD Programme			
16.	Year of Commencement	1974-75		
	Projects under taken as on March 2005	310	Number	
	Projects Completed	162*	Number	
	Ongoing Projects	133**	Number	
	Projects yet to start	95	Number	
	Culturable Command Area(Total)	22.7	Million Ha.	
	Culturable command Area (On going Projects)	17.06	Million Ha.	
	Ultimate Irrigation potential (* 12 Projects fore closed) (** 23 projects have been clubbed into 8 projects)	21.9	Million Ha.	
	Physical Achievements upto 31 March 2004 (cumulative)			
	i) Field Channels	16.63	Million Ha.	
16.1	ii) Land Leveling	2.19	Million Ha.	
	iii) Warabandi	10.66	Million Ha.	
	iv) Field Drains	1.34	Million Ha.	
16.	Land Use			
16.1	Land Classification (2001-02)			
16.1	Geographical Area	328.7	Million Ha.	
	Reporting Area	306.0	Million Ha.	
	Forest Area	69.1	Million Ha.	
	Not Available for Cultivation	43.2	Million Ha.	
	Other uncultivated land excluding Fallow Land	27.4	Million Ha.	
	Fallow Land	24.9	Million Ha.	
	Total Cultivable Land	183.0	Million Ha.	
	Total Cultivated Area	156.0	Million Ha.	
16.2	Area Sown (2001-02)			
16.2	Total Cultivable Area	183.00	Million Ha.	
	Gross Sown Area	190.3	Million Ha.	
	Net Sown Area	141.3	Million Ha.	
	(% of Gross to Net Sown Area)	134.7		

16.3.	Area Irrigated (2001-02)			
	i) Gross	76.4	Million Ha.	
	ii) Net	55.9	Million Ha.	
16.4.	Net Area Irrigated by source (Relates to 2000-01)	54.7	Million Ha.	
	i) Canals	16.0	Million Ha.	
	ii) Tanks	2.5	Million Ha.	
	iii) Wells	33.3	Million Ha.	
	iv) Others	2.9	Million Ha.	
17.	Area & Production of Foodgrains			
	Year	Area Million Ha	Production (Million Tonne)	
	1950-51	97.3	50.8	
	1980-81	126.7	129.6	
	1990-91	127.8	176.39	
	1998-99	125.2	203.6	
	1999-00	123.1	209.8	
	2000-01	121.0	196.8	
	2001-02	122.8	212.9	
	2002-03	113.9	174.8	
	2003-04	123.3	213.5	
18.	Production of Principal Foodgrains (2003-04)			
	i) Rice	88.28	Million Tonne	
	ii) Wheat	72.11	Million Tonne	
	iii) Coarse Cereals	38.12	Million Tonne	
	iv) Pulses	14.94	Million Tonne	
19.	Expenditure on Irrigation Sector (Million Rs.)	Total	% Expenditure on Irrigation to all Sectors	
	First Plan (1951-56)	4418	23	
	Second Plan (1956-61)	5416	12	
	Third Plan (1961-66)	10175	12	
	Annual Plans (1966-69)	9859	15	
	Fourth Plan (1969-74)	24096	15	
	Fifth Plan (1974-78)	40901	14	
	Annual Plans (1978-80)	32705	14	
	Sixth Plan (1980-85)	115287	11	
	Seventh Plan (1985-90)	187477	9	
	Annual Plan (1990-91)	44082	8	

	Annual Plan (1991-92)	46759	7	
	VIIIth Plan (1992-97)	340795	7	
	IXth Plan (1997-2002)	628091	7	
	X Plan(Approved outlay)	898165	6	
	Annual Plan (2002-2003)	155015	11	
	(Revised Approved Outlay)			
20.	Land Degradation			
20.1	Area Subject to Water and Wind Erosion	124.92	Million Ha.	
20.2	Area affected due to other reasons	48.73	Million Ha.	
	i) Water Logging	8.53	Million Ha.	
	ii) Salt Affected	7.62	Million Ha.	
	iii) Degraded Forest	19.49	Million Ha.	
	iv) Special Problems Area	4.20	Million Ha.	
	v) Ravines	3.97	Million Ha.	
	vi) Shifting Cultivation	4.92	Million Ha.	
	Total (20.1 + 20.2)	173.65	Million Ha.	
21	Water User Associations (as on 30 June 04)			
	Number	53388		
	Area Covered	10097	Million Ha.	
22.	Area Covered Under Drought Prone Area Programme (As on April 2003)			
	i) No. of States	16		
	ii) No. of Districts	182		
	iii) No. of Blocks	972		
	iv) Area of Blocks	745914	Sq.Km.	
23.	Flood Damages during 2004			
	i) Area affected	8.47	Million Ha.	
	ii) Cropped Area Affected	2.92	Million Ha.	
	iii) Value of Damages to Crops	7557	Million Rupees	
	iv) Population Affected	34.19	Million Nos.	
	v) Human Lives lost	1650	Nos.	
	vi) Cattle Lost	67417	Nos.	
	vii) Damage to Public Utilities	22283	Million Rupees	
	viii) No. of Houses Damaged	15.44	Million	
	ix) Value of Damaged Houses	8177	Million Rupees	
24.	Flood Management Programme			
	i) Year of commencement	1958		
	ii) Flood Prone Area	40.00	Million Ha.	
	iii) Area Benefited (Upto March 2003)	16.46	Million Ha.	

	iv) Expenditure on Flood Management Works up to 31 March 2002 (Anticipated/Actual)			
a)	Total	30810	Million Rupees	
b)	States/Uts	26185	Million Rupees	
c)	Central Sector	4625	Million Rupees	
v)	Flood Forecasting Performance (between 1.5.04 & 31.10.04)			
a)	No. of Flood Forecasting Stations Operated	172		
b)	No. of Flood Forecasting Station which Issued Forecast	114		
c)	Total No. of Forecasts Issued	4889		
d)	Total No. of Correct Forecasts within (+/- 15cm)/(+/-20% cumecs)	4696		
e)	% age of Correct Forecasts	96.1		

OVERVIEW

1. The total quantum of available water may be presently enough for our requirements. But its availability is highly irregular. It is not available in places where we want it, at the time when we want it and in quantities in which we want it. This precious resource is also getting continuously strained due to consistently increasing population, large scale industrialisation and growth of urbanisation.

2. Precipitation (including snowfall) is the source of all water on the earth. The average annual precipitation over the country is estimated at 4000 BCM of which a part goes towards increasing ground water storage, a part is lost as evapo-transpiration and the remaining appears as surface water. The water resources potential of the country which occurs as natural run off in the rivers is estimated as about 1869 BCM., considering both surface and ground water as one system. Due to various constraints of topography, uneven distribution of resource over space and time, and geographic only about 1122 BCM of the total potential can be put to beneficial use, 690 BCM through surface water resources and 432 BCM by ground water.

3. The water resource development is a must for economic prosperity and for enhancing the quality of life of the people. India is among the foremost countries in the world in exploiting its river water resources for conservation of water for irrigation, flood control, generation of hydro power and water supply, industrial and various other miscellaneous uses. A large number of projects, dams, barrages, hydro power structures, canal net work etc. have come all over the country in successive five year plans. A milestone in water resources development is creation of huge storage capacity because of which it has now become possible to provide assured irrigation in the command areas, to ensure supply for hydro and thermal power plants located at different places and to meet requirements for various other uses. Flood moderation has been effected in flood prone areas where storages have been provided. The supply of drinking water in remote areas has also become possible.

4. We have a total of 12 Major River Basins (catchment area more than 20,000 sq.kms. each) with total catchment area of 252.8 M.Ha and 46 Medium River Basins (catchment area between 2,000 and 20,000 sq.kms. each) with total catchment area of 24.6 M.Ha. and 8 minor river basins with catchment area of less than 2000 sq.km. and 6 desert river which flow for some distance and are lost in desert. The Ganga - Brahamputra-Meghna basin has the largest catchment area of about 110 M.Ha. accounting for approximately 43% of the catchment area of all major rivers in the country followed by Indus(32.1M.Ha), Godavari(31.3 M.Ha), Krishna(25.9 M.Ha) and Mahanadi(14.2 M.Ha). The Ganga-Brahamputra-Meghna system is also the major contributor to total water resources accounting for approximately 60% of the total water resource potential and 40% of the utilisable surface water. The other sources of inland water resources include canals, reservoirs, tanks & ponds, beels, oxbow lakes, derelict water and brackish water covering an area of approximately 7.4 M.Ha.

5. The rainfall in the country is mostly confined to four monsoon months between June to September during which almost 80% of the total rainfall takes place. In order to make water available to the people throughout the year for meeting their requirements and planning various developmental activities, the water resources projects envisage storage of

water by creation of reservoir. A storage capacity of 212.78 BCM has been created in the country taking into consideration the storage due to major and medium projects. The projects under construction will add another 76.26 BCM and the projects under consideration will add another 107.54 BCM. The likely storage available will therefore be 396.58 BCM.

6. The agriculture is of fundamental importance in India's economy contributing about 20 – 21% of gross domestic product (GDP) and generates two third of the employment. The assured irrigation water supply is of utmost importance for food security. The total ultimate irrigation potential of the country is estimated at 140.0 M.Ha (Major& Medium Irrigation projects-58.5 M.Ha and Minor Irrigation projects-81.5 M.Ha) with UP, Bihar, MP and AP accounting for 52%. The per capita availability of total ultimate irrigation potential works out to 136 Ha/thousand persons with Manipur having the highest 253 Ha/thousand persons followed by Punjab (246) and Orissa (240). An irrigation potential of 93.9 M.Ha has been created of which 80.0 M.Ha.(85%) could be utilised upto 2001-2002.

7. The total foodgrain production, which was only about 51 million tonnes at the time of commencement of the first five year plan, has gone upto 213.45 million tonnes in 2003-2004. The import of foodgrains was inevitable to cover up the shortage in the initial years after independence. But the country is self sufficient in foodgrains now. The availability of assured irrigation water made possible by water resources projects has played a lead role in achievement of this distinction. The irrigation facilities have also resulted in significant increase in crop productivity ultimately reflecting on total production. But inspite of all these impressive achievements, the net sown area in the country remained at about 141.1 M.Ha. during 2000-01. Net area under irrigation, at 54.7 M.Ha. which is 29% of the gross sown area (187 M.Ha.) at present, will also require increase to catch up with our increasing population for food security.

8. Another important activity in water resources sector relates to the launching of Command Area Development (CAD) Programme in 1974-75 as a Centrally Sponsored Scheme to ensure speedy utilisation of irrigation potential created and to improve productivity in selected irrigation commands. With a modest start covering 60 selected major and medium irrigation projects with a culturable command area (CCA) of 15 M.Ha., the programme as on 31 March 2005 has undertaken 310 projects covering 22.7 M.Ha. CCA. The programme is being implemented through 53 Command Area Development Authorities (CADA)/ Irrigation Departments directly where CADA has not been set up, 162 (out of which 12 projects fore closed) project have so far been completed and 95 projects are yet to start under CAD Programme. There are 133 on going projects of which 23 projects have been clubbed into 8 projects

9. Flood is one of the most devastating natural calamity causing extensive damage to life and property. Prior to independence, very little attention was paid to planned flood management. After the disastrous flood experienced in the country in 1954, a National Programme of Flood Management was launched. The flood control measures adopted in the programme include structural measures like construction of reservoirs, embankments, drainage improvement works etc., and non structural measures like flood plain zoning, flood proofing, flood forecasting etc. Under the National Programme of Flood Management 34,398 Kms of new embankments and 51,318 kms of drainage channels have been constructed. In addition, 2400 towns (including some important villages) and 4720 villages have been raised above flood levels. All these works have resulted in

providing reasonable degree of protection and reducing the intensity of flood to an area of about 16.46 m.ha. against the total flood prone area of 40 m.ha. in the country. The flood forecasting and advance warning has also played a significant role in reducing the loss of life and property for which 172 flood forecasting stations are functioning covering major inter state rivers.

10. Other positive achievements in Water Resources Sector include increase in availability of safe drinking water both in urban and rural areas and reduction in the severity of drought to a large extent. The irrigation development in tribal areas has also been accorded due priority.

11. All developmental activities including water resources development involve environmental change. The water resource development is necessary for economic prosperity and has brought tremendous benefits. Gradually, however, the environmental aspects associated with water resource development viz soil erosion, land degradation, submergence of forests, agricultural land, archaeological and historical monuments, displacement of people, effect on flora and fauna etc have also became prominent resulting in ensuring steps that it leads to enhancement in the quality of environment rather than its degradation. Compensatory afforestation and resettlement/ rehabilitation of the project affected people have, therefore, been accorded due priority. The adverse impact of the projects on soil erosion and land degradation are also receiving due attention for which various schemes are in operation. Unfortunately, the positive aspects of water resources projects having bearing on socio economic benefits are not getting highlighted in the absence of adequate data and negative aspects getting prominence resulting in hindrance in execution of projects. We have to build up necessary data base if we are to ensure and justify huge public investments in water resources projects.

12. The need for water resources development for overall socio-economic development was duly recognised at the very outset of commencement of the first five year plan. Accordingly, systematic water resources development works have been carried out through successive five year plans. A large number of water resources projects for irrigation, power generation, drinking water, industrial uses, civic supplies etc., have been implemented and several others are under construction or consideration. As a consequence, we are presently marginally surplus in food resulting in savings in foreign exchange and substantial increase in power generation. A total of around 90% of the population has been covered under drinking water supply scheme. Reasonable flood protection has been provided to 16.46 M.Ha. flood prone area and we have been able to successfully combat drought. Inspite of all these achievements, however, we cannot afford to be complacent. We have, however, to go a long way in development of our vast water resources potential to cope up for the rapidly growing population and rising demand for water for various competing sectors. The per capita water availability is continuously declining from 5176 Cu.M. in 1951 to 1820 Cu. M., on 1st March 2001 and 1703.6 Cu.M on 1st March 2005. The water being a State subject, the State Governments have the basic responsibility for execution of the projects and control over use of this resource. Sustained and Coordinated action and efforts are, therefore, also required on the part of States for optimum development and management of the scarce water resources. The national water policy of 2002 provides direction for development of the water resources of the country for maintaining environmental equilibrium, ensuring equity and efficient uses.

1. WATER RESOURCES

**Chart 1 SEASON-WISE RAINFALL IN THE COUNTRY (1.1.2003 TO
31.12.2003)**

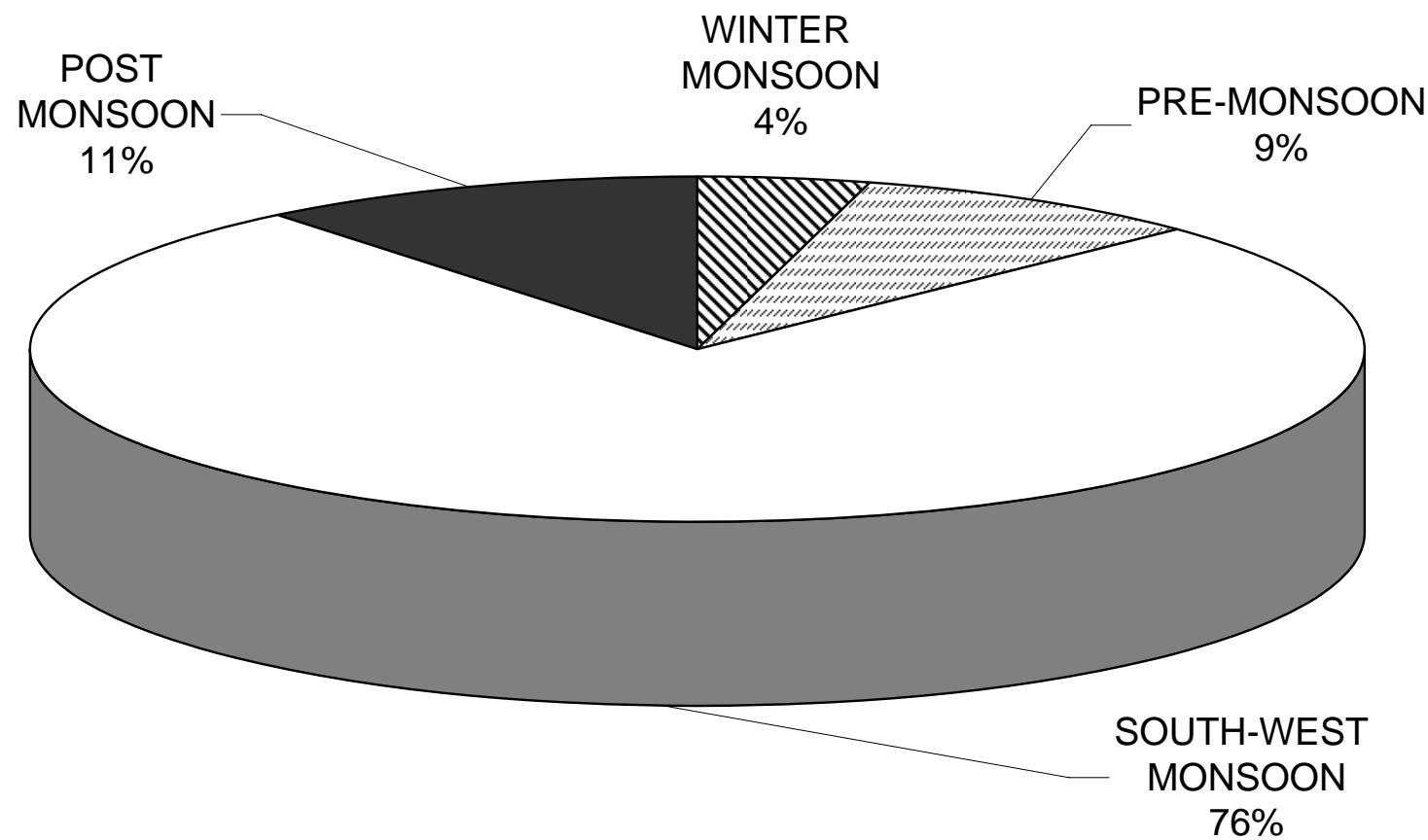


TABLE 1.1 RAINFALL IN DIFFERENT METEOROLOGICAL SUB- DIVISIONS OF
THE COUNTRY DURING 1-1-2003 to 31-12-2003

(Unit : In Millimetre)

Sl. No.	Sub-Division	Area (Sq. Kms)	Winter Monsoon			Pre -Monsoon			South-West Monsoon			Post Monsoon			Total Rainfall			Estimated Volume of Actual Rainfall (BCM) (\$)	
			(1.1.2003 to 28.2.2003)			(1.3.2003 to 31.5.2003)			(1.6.2003 to 30.9.2003)			(1.10.2003 to 31.12.2003)			(1.1.2003 to 31.12.2003)				
			Actual	Normal	% Departur e from Normal	Actual	Normal	% Departur e from Normal	Actual	Normal	% Departur e from Normal	Actual	Normal	% Departur e from Normal	Actual	Normal	% Departur e from Normal		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
1	Andaman & Nicobar Island	8293	65.4	117.4	-44	411.9	487.3	-15	1225.3	1559.6	-21	744.3	781.4	-5	2446.9	2945.7	-17	20.29	
2	Arunachal Pradesh	83578	81.5	123	-34	483.8	705.4	-31	1957.5	1934.6	1	238.4	240.2	-1	2761.2	3003.2	-8	230.78	
3	Assam and Meghalaya	101012	39.3	46.8	-16	602	755.3	-20	1936.1	1821	6	257.7	194.1	33	2835.1	2817.2	1	286.38	
4	Nagaland, Mizoram, Manipur and Tripura	70447	22.4	40.3	-44	476.5	529.5	-10	1325.2	1326.9	0	204.9	203.5	1	2029.0	2100.2	-3	142.94	
5	Sub-Himalayan West Bengal and Sikkim	28924	98.8	73.8	34	531.3	495.4	7	2337.4	2053	14	321	186.6	72	3288.5	2808.8	17	95.12	
6	Gangetic West Bengal	66228	19.4	30	-35	196	171	15	869.9	1111.4	-22	372.5	148.9	150	1457.8	1461.3	0	96.55	
7	Orissa	155782	22.3	31.6	-29	91.4	101.9	-10	1255.5	1159.4	8	381.4	157.4	142	1750.6	1450.3	21	272.71	
8	Jharkhand	79638	31.3	36.8	-15	53.6	83.3	-36	937.4	1077.4	-13	276.9	98.8	180	1299.2	1296.3	0	103.47	
9	Bihar	94238	68.4	29.5	132	77	74.6	3	1140.1	1006.7	13	169.3	81.7	107	1454.8	1192.5	22	137.10	
10	U.P.East	146509	59.3	32.9	80	20	29.4	-32	1074.7	898.8	20	23.1	59.8	-61	1177.1	1020.9	15	172.46	
11	U.P.West	96732	78.4	36.1	117	23.9	28.5	-16	1005.3	759.9	32	21.9	48.8	-55	1129.5	873.3	29	109.26	
12	Uttaranchal	51122	251.3	95.8	162	188.8	119.3	58	1428.7	1284	11	34.9	87.1	-60	1903.7	1586.2	20	97.32	
13	Haryana, Chandi.& Delhi	45821	57.4	38.1	51	20.2	36.1	-44	627.5	515.3	22	15.6	30	-48	720.7	619.5	16	33.02	
14	Punjab	50362	96.3	50.2	92	44.5	53.4	-17	490.6	507.1	-3	13.7	41.5	-67	645.1	652.2	-1	32.49	
15	Himachal Pradesh	55673	138.9	179.8	-23	131.9	208.5	-37	963.7	907.4	6	34.4	100.4	-66	1268.9	1396.1	-9	70.64	
16	Jammu and Kashmir	222236	246.1	164.7	49	320.3	286.2	12	424.3	460.6	-8	115.4	118.5	-3	1106.1	1030.0	7	245.82	
17	Rajasthan West	195086	32.6	8.7	275	1.9	18.2	-90	351.7	289.4	22	0.5	9.3	-95	386.7	325.6	19	75.44	
18	Rajasthan East	147128	35.1	12.5	181	5.2	16.6	-69	588.7	630.7	-7	1.3	25.6	-95	630.3	685.4	-8	92.73	
19	M.P. West	229550	35.7	17.3	106	7.6	14.4	-47	961.7	907.7	6	6	51.6	-88	1011.0	991.0	2	232.08	
20	M.P. East	78091	83.9	44.4	89	7.9	27.7	-71	1412.6	1120.9	26	28.1	59.3	-53	1532.5	1252.3	22	119.67	

Contd..

TABLE 1.1 RAINFALL IN DIFFERENT METEOROLOGICAL SUB- DIVISIONS OF
THE COUNTRY DURING 1-1-2003 to 31-12-2003

(Unit : In Millimetre)

Sl. No.	Sub-Division	Area (Sq. Kms)	Winter Monsoon			Pre -Monsoon			South-West Monsoon			Post Monsoon			Total Rainfall			Estimated Volume of Actual Rainfall (BCM) (\$)	
			(1.1.2003 to 28.2.2003)			(1.3.2003 to 31.5.2003)			(1.6.2003 to 30.09.2003)			(1.10.2003 to 31.12.2003)			(1.1.2003 to 31.12.2003)				
			Actual	Normal	% Departur e from Normal	Actual	Normal	% Departur e from Normal	Actual	Normal	% Departur e from Normal	Actual	Normal	% Departur e from Normal	Actual	Normal	% Departur e from Normal		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
21	Gujarat Region #	86597	9.2	1.5	513	0.1	7.7	-99	1246.8	1037.5	20	3.3	37.3	-91	1259.4	1084.0	16	109.06	
22	Saurashtra & Kutch	109990	1.6	1.1	45	2.2	5.2	-58	724.6	550.4	32	4.7	31.1	-85	733.1	587.8	25	80.63	
23	Konkan and Goa	34095	0.3	8	-96	0.2	38.2	-99	2789.6	2809.6	-1	38.4	136.9	-72	2828.5	2992.7	-5	96.44	
24	Madhya Maharashtra	115306	1.1	3.4	-68	3.2	43.3	-93	704.8	750.5	-6	31.2	105.4	-70	740.3	902.6	-18	85.36	
25	Marathwada	64525	1.6	5.8	-72	3	30.5	-90	627.5	703.1	-11	13.1	94.5	-86	645.2	833.9	-23	41.63	
26	Vidarbha	97537	25.1	22.8	10	30.3	29.8	2	944.2	969.3	-3	33.3	74.9	-56	1032.9	1096.8	-6	100.75	
27	Chattisgarh	135200	56.6	24.6	130	50.8	45.2	12	1441.8	1172.5	23	153.5	76	102	1702.7	1318.3	29	230.21	
28	Coastal Andhra Pradesh	93045	13.8	14.2	-3	63.4	81.9	-23	645.1	608.4	6	396.3	311.4	27	1118.6	1015.9	10	104.08	
29	Telangana	114726	2.7	10.5	-74	31.8	52.5	-39	845.7	774.8	9	126.5	108.2	17	1006.7	946.0	6	115.49	
30	Rayalaseema	69043	0.4	7.2	-94	32.3	81.1	-60	429.7	380.5	13	191.6	215.2	-11	654.0	684.0	-4	45.15	
31	Tamil Nadu and Pondicherry	130549	12.7	33.2	-62	127.8	135.1	-5	350	323.1	8	434.5	469.3	-7	925.0	960.7	-4	120.76	
32	Coastal Karnataka	18717	1.5	3.1	-52	55.6	180.2	-69	2827.3	3187.9	-11	202.1	267.3	-24	3086.5	3638.5	-15	57.77	
33	North Interior Karnataka	79895	1.3	3.5	-63	46.9	90.4	-48	317.3	478.1	-34	108.1	139.5	-23	473.6	711.5	-33	37.84	
34	South Interior Karnataka	93161	5.3	4.9	8	72.6	159	-54	524.7	698.2	-25	215.3	202.7	6	817.9	1064.8	-23	76.20	
35	Kerala	38864	54.1	26.2	106	283.3	397.6	-29	1455.9	2136.1	-32	482.5	505.6	-5	2275.8	3065.5	-26	88.45	
36	Lakshadweep	32	30.1	35.8	-16	156.1	232.4	-33	941.7	985.2	-4	405.3	328.9	23	1533.2	1582.3	-3	0.05	
All India		3287732	51	38	35	108	132	-18	940	899	5	134	125	7	1234	1194	3	4057.35	

Source : Indian Meteorological Department

\$ Col 19 = Col.3 X Col. 16 / 1000000

BCM : Billion Cubic Metres

Note # Gujarat Region (Sr.No. 21) includes Union Territories, Daman, Dadra & Nagar Haveli

2. Percentage departure is based on actual rainfall in comparison to corresponding normal rainfall

**TABLE 1.2 STATEWISE DISTRIBUTION OF NO. OF DISTRICTS
WITH EXCESS, NORMAL, DEFICIENT AND SCANTY
RAINFALL DURING 1.6.2003 TO 30.9.2003**

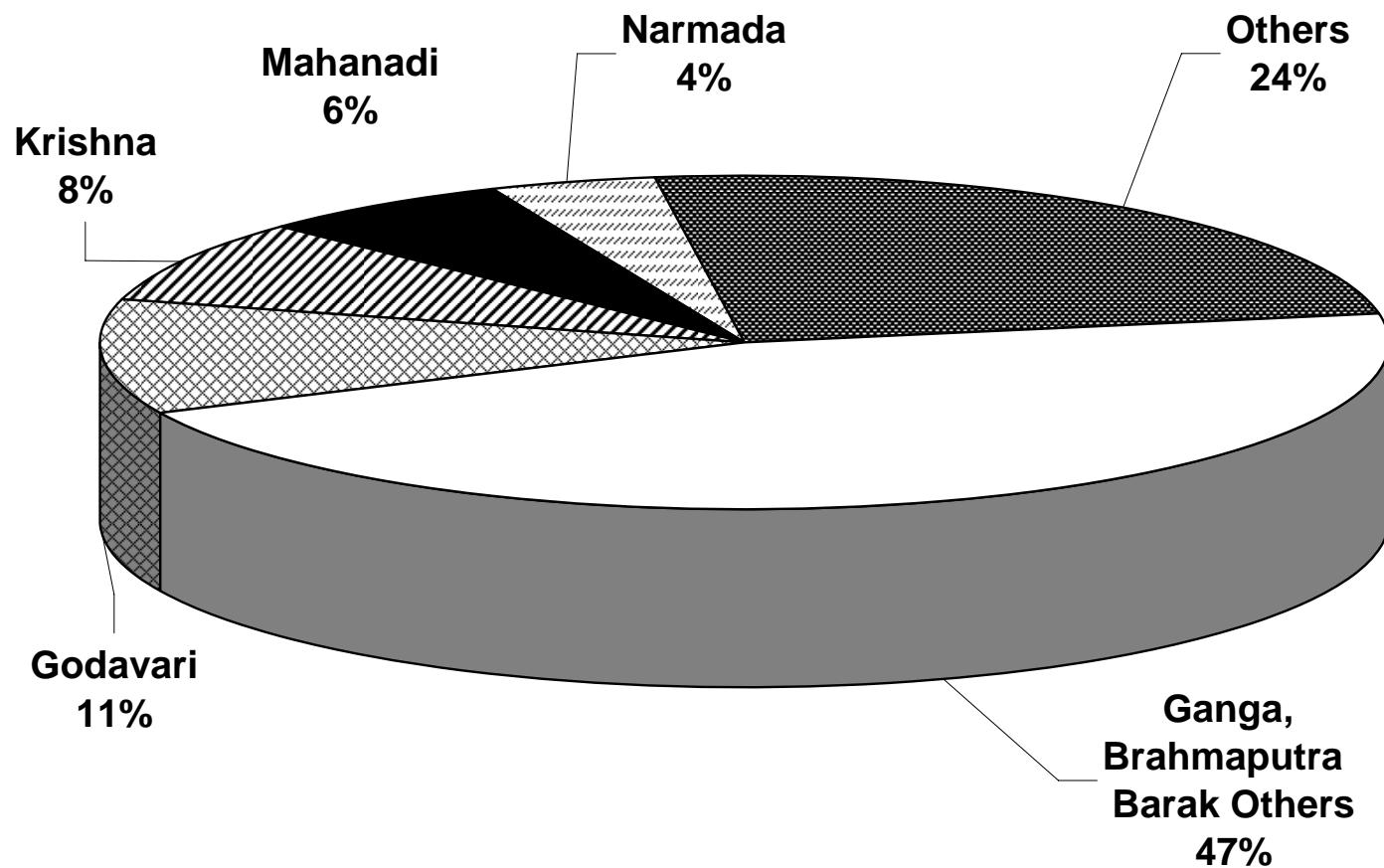
SI No.	State/UT	E	N	D	S	ND	Total
1	2	3	4	5	6	7	8
1	Andhra Pradesh	6	14	3	0	0	23
2	Arunachal Pradesh	4	3	2	1	3	13
3	Assam	2	16	3	0	1	22
4	Bihar	4	19	3	0	3	29
5	Chhattisgarh	6	9	0	0	0	15
6	Goa	0	1	0	0	0	1
7	Gujarat	15	9	0	0	1	25
8	Haryana	8	7	4	0	0	19
9	Himachal Pradesh	2	5	4	1	0	12
10	Jammu & Kashmir	1	5	2	2	1	11
11	Jharkhand	9	19	0	0	0	28
12	Karnataka	0	6	18	3	0	27
13	Kerala	0	2	12	0	0	14
14	Madhya Pradesh	15	24	5	0	1	45
15	Maharashtra	4	22	6	0	1	33
16	Manipur	1	0	0	0	2	3
17	Meghalaya	1	0	0	1	1	3
18	Mizoram	1	0	0	0	1	2
19	Nagaland	0	1	1	1	1	4
20	Orissa	9	19	0	0	0	28
21	Punjab	1	5	9	1	0	16
22	Rajasthan	8	18	6	0	0	32
23	Sikkim	0	1	0	0	0	1
24	Tamil Nadu	8	12	8	1	0	29
25	Tripura	1	2	0	0	0	3
26	Uttar Pradesh	30	28	6	0	0	64
27	Uttaranchal	8	2	2	0	0	12
28	West Bengal	0	7	10	0	0	17
29	A & N Island	0	0	2	0	0	2
30	Chandigarh (UT)	0	1	0	0	0	1
31	D & N Haveli	0	1	0	0	0	1
32	Damman & Diu (UT)	0	0	0	0	1	1
33	Delhi (UT)	1	0	0	0	0	1
34	Lakshadweep (UT)	0	1	0	0	0	1
35	Pondicherry	1	0	0	0	0	1
	Total	137	247	109	11	19	523
	Percentage	26.2	47.2	20.8	2.1	3.6	100

Source : India Meteorological Department.

E : Excess D : Deficient N : Normal ND: No Data S : Scanty

Chart 2

BASINWISE DISTRIBUTION OF ESTIMATED UTILISABLE WATER



1.3 WATER RESOURCES POTENTIAL IN THE RIVER BASINS OF INDIA
 (BCM per year)

Sl No.	Name of the River Basin	Average Annual Surface Water Potential 3	Estimated Utilisable Surface Water 4	Estimated Replenishable Ground Water Resources 5	Total Utilisable Water (4) +(5) 6
1	2	3	4	5	6
1	Indus (up to Border)	73.31	46.00	26.49	72.49
2	a) Ganga	525.02	250.00	170.99	420.99
	b) Brahmaputra, Barak Others	585.60	24.00	35.07	59.07
3	Godavari	110.54	76.30	40.65	116.95
4	Krishna	78.12	58.00	26.41	84.41
5	Cauvery	21.36	19.00	12.30	31.30
6	Subernarekha	12.37	6.81	1.82	8.63
7	Brahamani & Baitarni	28.48	18.30	4.05	22.35
8	Mahanadi	66.88	49.99	16.46	66.45
9	Pennar	6.32	6.86	4.93	11.79
10	Mahi	11.02	3.10	4.20	7.30
11	Sabarmati	3.81	1.93	3.00	4.93
12	Narmada	45.64	34.50	10.83	45.33
13	Tapi	14.88	14.50	8.27	22.77
14	West Flowing Rivers From Tapi to Tadri	87.41	11.94	8.70	20.64
15	West Flowing Rivers From Tadri to Kanyakumari	113.53	24.27	9.00	33.27
16	East Flowing Rivers Between Mahanadi & Pennar	22.52	13.11	9.00	22.11
17	East Flowing Rivers Between Pennar And Kanyakumari	16.46	16.73	9.20	25.93
18	West Flowing Rivers Of Kutch, Saurashtra including Luni	15.10	14.98	11.23	26.21
19	Area of Inland drainage in Rajasthan desert	Neg.	N.A	N.A	N.A
20	Minor River Basins Draining into Bangladesh & Myanmar	31.00	N.A	18.80	18.80
TOTAL		1869.35	690.31	431.42	1121.73

Source : Central Water Commission (WM Dte.) for Col. 3 & 4 and Central Ground Water Board/ Report of the standing sub-committee for assessment of availability and requirement of water, Aug - 2000 for Col.5.

Note : Total may not tally due to rounding off. N.A. : Not Available.

TABLE : 1.4 CATCHMENT AREA OF MAJOR RIVER BASINS

Sl. No.	Name of the River	Length (Km.)	Catchment Area(Sq.Km.)
1	2	3	4
1.	Indus	1114 (2880)	321289 (1165500)
2.	a) Ganga	2525	861452 (1186000)
	b) Brahmaputra	916 (2900)	194413 (580000)
	c) Barak & other rivers flowing into Meghna like Gomti, Muhari, Fenny etc.		41723
3.	Sabarmati	371	21674
4.	Mahi	583	34842
5.	Narmada	1312	98796
6.	Tapi	724	65145
7.	Brahmani	799	39033
8.	Mahanadi	851	141589
9.	Godavari	1465	312812
10.	Krishna	1401	258948
11.	Pennar	597	55213
12.	Cauvery	800	81155
TOTAL			2528084

Source : Central Water Commission, W.M.Directorate (Reassessment of Water Resources Potential of India, 1993).

Note : Figures within bracket also include the total river basin in neighbouring countries

**TABLE : 1.5 GROUNDWATER POTENTIAL IN THE RIVER
BASINS OF INDIA (PRO RATA BASIS)**

(Unit : BCM per Year)

S. No.	Name of Basin	Total Reple- nishable Ground Water Resources	Available Ground Water Resources for Irrigation	Net Draft
1	2	3	4	5
1.	Brahmani with Baitarni	4.05	3.45	0.29
2.	Brahmaputra	26.55	22.56	0.76
3.	Cambai Composite	7.19	6.11	2.45
4.	Cauvery	12.30	10.45	5.78
5.	Ganga	170.99	144.96	48.59
6.	Godavari	40.65	30.99	6.05
7.	Indus	26.45	23.43	18.21
8.	Krishna	26.41	20.83	6.33
9.	Kutch & Saurashtra Composite	11.23	9.49	4.85
10.	Madras and South Tamilnadu	18.22	15.49	8.93
11.	Mahanadi	16.46	13.99	0.97
12.	Meghna	8.52	7.24	0.29
13.	Narmada	10.83	9.17	1.99
14.	Northeast Composite	18.84	16.02	2.75
15.	Pennar	4.93	4.19	1.53
16.	Subarnrekha	1.82	1.55	0.15
17.	Tapi	8.27	5.93	1.96
18.	Western Ghat	17.69	14.50	3.32
Total		431.42	360.35	115.22

Source : Ground Water Statistics, 1996 (Central Ground Water Board)

Note : Totals may not tally due to rounding off.

**TABLE : 1.6 GROUND WATER POTENTIAL IN THE
STATES AND UNION TERRITORIES**

(Unit : BCM per Year)

S.No.	Name of the States/UTs.	Total Replenishable Ground Water Resource	Available Ground Water Resources for Irrigation	Net Draft
1	2	3	4	5
1	Andhra Pradesh	35.29	30.00	7.09
2	Arunachal Pradesh	1.44	1.22	0.00
3	Assam	24.72	21.01	0.94
4	Bihar	33.52	28.49	5.47
5	Chattishgarh	0.00	0.00	0.00
6	Goa	0.22	0.19	0.02
7	Gujarat	20.38	17.32	7.17
8	Haryana	8.53	7.25	6.08
9	Himachal Pradesh	0.37	0.29	0.05
10	Jammu & Kashmir	4.43	3.76	0.05
11	Jharkhand	0.00	0.00	0.00
12	Karnataka	16.19	13.76	4.30
13	Kerala	7.90	6.59	1.01
14	Madhya Pradesh	50.89	43.26	7.13
15	Maharashtra	37.87	25.47	7.74
16	Manipur	3.15	2.68	neg
17	Meghalaya	0.54	0.46	0.02
18	Mizoram	neg	neg	neg
19	Nagaland	0.72	0.62	neg
20	Orissa	20.00	17.00	1.43
21	Punjab	18.66	16.79	15.76
22	Rajasthan	12.71	10.71	5.42
23	Sikkim	neg	neg	neg
24	Tamil Nadu	26.39	22.43	13.56

Contd..

**TABLE : 1.6 GROUND WATER POTENTIAL IN THE
STATES AND UNION TERRITORIES**

(Unit : BCM per Year)

S.No.	Name of the States/UTs.	Total Replenishable Ground Water Resource	Available Ground Water Resources for Irrigation	Net Draft
1	2	3	4	5
25	Tripura	0.66	0.56	0.19
26	Uttar Pradesh	83.82	71.25	26.84
27	Uttaranchal	0.00	0.00	0.00
28	West Bengal	23.09	19.63	4.75
ALL STATES		431.48	360.74	115.01
UNION TERRITORIES				
1	Andaman & Nicobar	neg	neg	neg
2	Chandigarh	0.03	0.03	0.02
3	Dadar & Nagar Haveli	0.04	0.03	0.00
4	Daman & Diu	0.01	0.01	0.01
5	NCT Delhi	0.29	0.11	0.12
6	Lakshadweep	0.00	-	0.00
7	Pondicherry	0.03	0.02	0.01
ALL UTs.		0.40	0.21	0.17
ALL INDIA		431.89	360.95	115.17

Sources : Ground Water Statistics, 1996 (Central Ground Water Board)

Note : Totals may not tally due to rounding off

**TABLE : 1.7 STATEWISE DETAILS OF INLAND FISHERY WATER RESOURCES
OF VARIOUS TYPES**

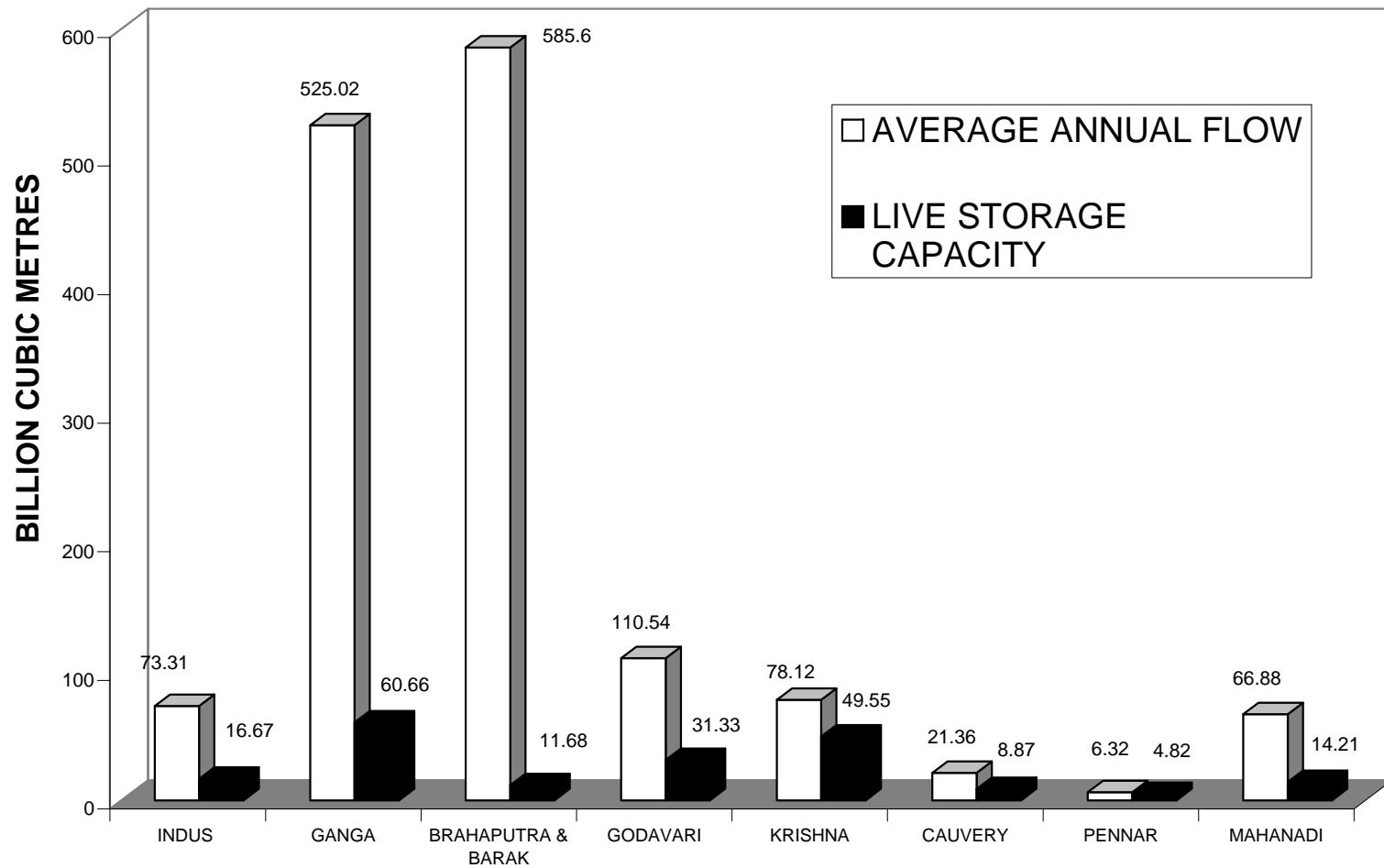
(Unit : Lakh Hactares)

SI No.	Name of the State/UT.	Rivers & Canals (Length in Kms.)	Reservoirs	Tanks, & Ponds	Beels, Oxbow Lakes & Derelict Water Bodies	Brackish Water
1	2	3	4	5	6	7
1	Andhra Pradesh	13891	2.34	4.63	-	1.50
2	Arunachal Pradesh	2000	-	2.50	2.00	-
3	Assam	4820	0.02	0.26	1.27	-
4	Bihar	2000	0.06	0.64	0.40	-
5	Chhattishgarh	3573	0.84	0.63		1.47
6	Goa	250	0.03	0.03	-	-
7	Gujarat	3865	2.43	0.71	0.12	3.76
8	Haryana	5000	0.09	0.10		0.30
9	Himachal Pradesh	3000	0.42	0.01	-	-
10	Jammu & Kashmir	27781	0.07	0.24	0.06	-
11	Jharkhand	1200	0.94	0.29	-	-
12	Karnataka	9000	2.11	2.90	-	0.08
13	Kerala	3092	0.30	0.30	2.43	2.43
14	Madhya Pradesh	17088	2.27	0.60	-	-
15	Maharashtra	16000	2.79	0.59	-	0.10
16	Manipur	3360	0.01	0.05	0.04	-
17	Meghalaya	3194	0.08	0.02	NEG	-
18	Mizoram	1750	-	0.02	-	-
19	Nagaland	1600	0.03	0.50	NEG	-
20	Orissa	7219	1.96	1.16	1.80	4.18
21	Punjab	15270	NEG	0.07	-	-
22	Rajasthan	6802	1.20	1.80	-	-
23	Sikkim	900	1.20	-	0.03	-
24	Tamil Nadu	7420	0.52	2.56	0.07	0.56
25	Tripura	1200	0.05	0.13		-
26	Uttar Pradesh	28500	1.38	1.61	1.33	-
27	Uttaranchal	2686	0.20	NEG	NEG	-
28	West Bengal	2526	0.17	2.76	0.42	2.10
29	Andaman & Nicobar	115	0.01	0.03	-	0.37
30	Chandigarh	2	-	NEG	NEG	-
31	D & N Haveli	54	0.05	0.00	-	0.00
32	Daman & Diu	12	-	NEG	-	NEG
33	Delhi	150	0.04	0.00	-	-
34	Lakshaweepl	-	-	-	-	-
35	Pondicherry	247	-	NEG	0.01	0.01
	TOTAL	195567	21.61	25.14	9.98	16.86

Source : Department of Animal Husbandry and Dairying. Ministry of Agriculture.

NEG : Negligible

**Chart: 3 BASINWISE FLOW & STORAGE POTENTIAL IN INDIA
(UPTO IX PLAN)**



**Chart : 4 LIVE STORAGE CAPACITY OF RESERVOIRS IN
INDIA (BILLION CUBIC METRES)
(UPTO IX PLAN)**

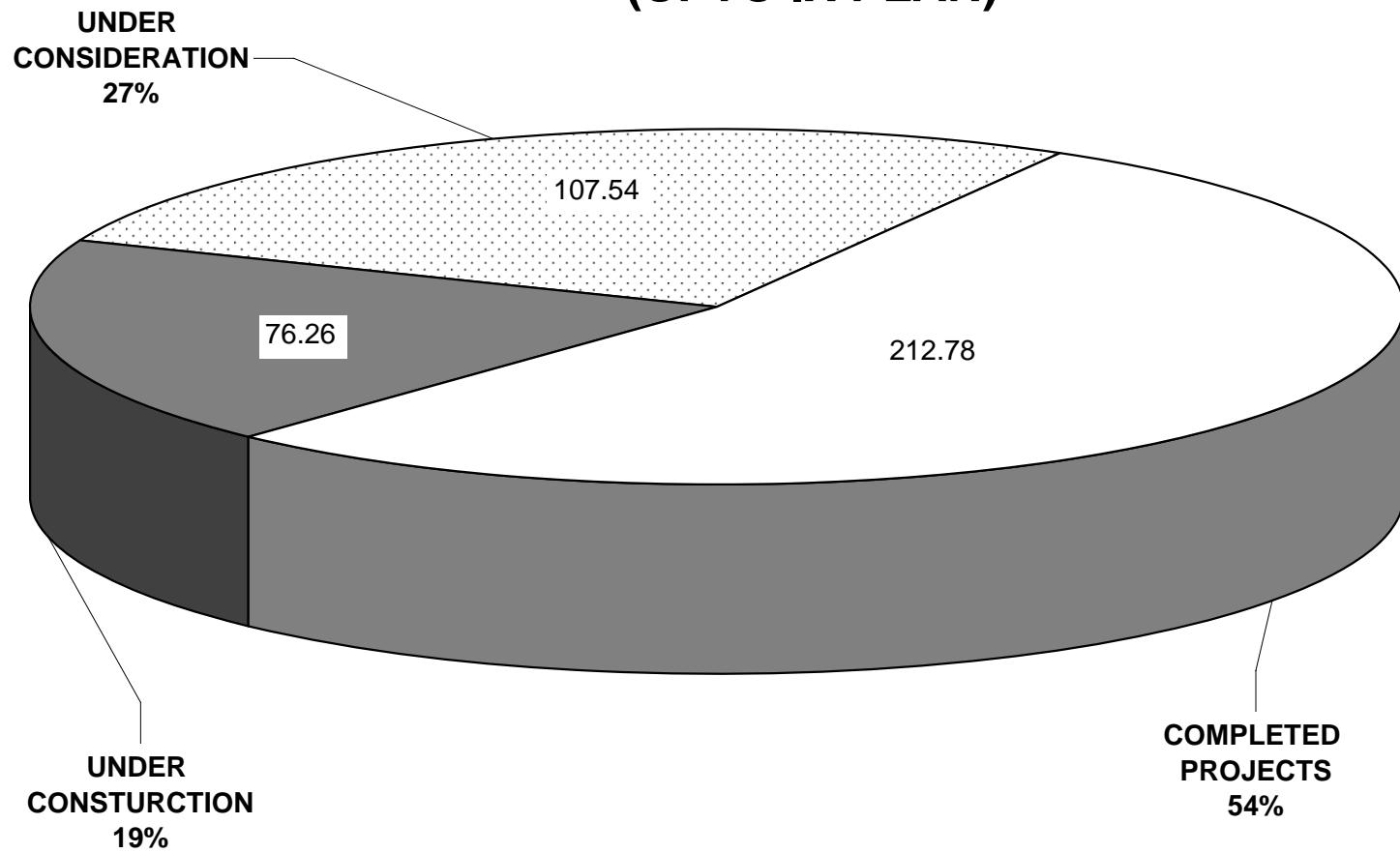


TABLE : 1.8 BASIN-WISE STORAGE CAPACITY IN INDIA

(Up to IX Plan)

(Unit : BCM)

Sl. No.	Name of the Basin	LIVE STORAGE CAPACITIES			
		Completed Projects	Projects Under Construction	Total	Projects Under Consideration
1	2	3	4	5	6
A: Project Having Storage Capacity of 10 Mcu M & Above					
1	Indus	16.29	0.28	16.57	2.58
2	a) Ganga	39.45	21.22	60.66	30.08
	b) Brahmaputra & Barak	2.33	9.35	11.68	41.26
3	Godavari	25.12	6.21	31.33	5.84
4	Krishna	41.80	7.74	49.55	1.13
5	Cauvery	8.60	0.27	8.87	0.26
6	Pennar	2.65	2.17	4.82	0.00
7	East Flowing Rivers From Mahanadi To Godavari & Krishna To Pennar	1.60	1.42	3.03	0.95
8	East Flowing Rivers Between Pennar And Kanyakumari	1.84	0.07	1.91	0.00
9	Mahanadi	12.33	1.87	14.21	10.09
10	Brahmani & Baitarni	4.65	0.88	5.52	8.72
11	Subernarekha	0.67	1.65	2.32	1.38
12	Sabarmati	1.31	0.06	1.37	0.10
13	Mahi	4.72	0.26	4.98	0.01
14	West Flowing Rivers of Kutch Saurashtra including Luni	4.73	0.80	5.52	2.85
15	Narmada	7.23	16.38	23.60	0.47
16	Tapi	9.41	0.85	10.26	0.29
17	West Flowing Rivers From Tapi To Tadri	11.27	3.46	14.73	0.08
18	West Flowing Rivers From Tadri To Kanyakumari	10.24	1.32	11.55	1.45
19	Area of Inland Drainage Of Rajasthan	0.00	-	-	-
20	Minor River Basins Draining into Burma and Bangladesh	0.31	-	0.31	0.00
Total (A)		206.54	76.26	282.80	107.54
B	Medium Project each having Live storage capacity of less than 10 MCM for which basin wise breakup is not available				
	Total (Breakup not available)	6.24		6.24	
	GRAND TOTAL (A+b)	212.78	76.26	289.04	107.54

Source : Central Water Commission. (W.M. Directorate)

Notes: * Above Figures are tentative which are subject to change after vetting of data

MCM - Million Cubic Metres.

WFR : West Flowing Rivers

BCM - Billion Cubic Metres.

EFR : East Flowing Rivers

TABLE 1.9 STATE-WISE STORAGE CAPACITY IN INDIA
(Up to IX Plan) (Unit : BCM)

S.No.	Name of the State	LIVE STORAGE CAPACITIES			
		Completed Projects	Ongoing Projects	Total (3 + 4)	Projects under Consideration
1	2	3	4	5	6
A: Projects Having Storages Capacity of 10 M Cum & above					
1	Andhra Pradesh	27.31	6.15	33.45	1.61
2	Arunachal Pradesh	0	0.24	0.24	37.93
3	Assam	0.01	0	3.01	0.73
4	Bihar	1.84	0.68	2.52	5.82
5	Chattisgarh	6.22	0.79	7	0.52
6	Goa	0.04	0.23	0.27	0
7	Gujarat	16.14	7.41	23.54	3.45
8	Haryana	0	0	0	0.26
9	Himachal Pradesh	13.92	0.19	14.11	0.99
10	Jammu & Kashmir	0	0.09	0.09	1.83
11	Jharkhand	2.47	6.88	9.35	0.48
12	Karnataka	33.63	1.41	35.04	0.07
13	Kerala	5.38	1.34	6.72	1.69
14	Madhya Pradesh	17.16	16.78	33.94	7.34
15	Maharashtra	25.52	13.24	38.76	0.76
16	Manipur	0.4	8.45	8.85	0
17	Meghalaya	0.7	0	0.7	0.52
18	Mizoram	0	0.66	0.66	1.56
19	Nagaland	1.22	0	1.22	0.53
20	Orissa	17.22	2	19.22	21.1
21	Punjab	2.37	0	2.37	0
22	Rajasthan	8.28	1.43	9.71	1.81
23	Sikkim	0	0	0	0
24	Tamil Nadu	6.5	0.07	6.57	0.01
25	Tripura	0.31	0	0.31	0
26	Uttranchal	3.06	5.34	8.4	0.15
27	Uttar Pradesh	15.35	2.71	18.06	18.41
28	West Bengal	1.48	0.18	1.66	0
29	A & N Island	-	-	-	-
30	Chandigarh	-	-	-	-
31	D & N Haveli	-	-	-	-
32	Daman & Diu	-	-	-	-
33	Delhi	-	-	-	-
34	Lakshadweep	-	-	-	-
35	Pondicherry	0.01	0	0.01	0
TOTAL		206.54	76.26	282.8	107.54
B; Medium Projects having Storage Capacity of less than 10 M.Cum					
	Total (State -wise breakup not available	6.24	-	6.24	-
	Grand Total (A+B)	212.78	76.26	289.04	107.54

Source : Central Water Commission (WM Directorate).

**TABLE : 1.10 STORAGE POSITION OF IMPORTANT RESERVOIRS OF INDIA AT THE END OF
SEPTEMBER 2003 & MAY 2004**

Sl. No.	Name of Reservoir	Location	Live Capacity at F R L in BCM	September,2003		May 2004	
				L S	P	L S	P
1	2	3	4	5	6	7	8
1*	Srisailam	A.P.	8.288	2.949	45	0.506	58
2*	Nagarjuna Sagar	A.P.	6.841	0.575	13	0.333	31
3	Sriram Sagar	A.P.	2.300	1.302	76	-0.580	134
4	Somasila	A.P.	1.994	-0.127	-34	-0.152	-101
5	Lower Manair	A.P.	0.680	0.173	56	0.080	37
6	Tenughat	Jharkhad	0.821	0.342	111	0.273	113
7	Maithon	Jharkhad	0.471	0.471	100	0.252	177
8*	Panchet Hill	Jharkhad	0.223	0.116	64	0.056	431
9	Konar	Jharkhad	0.170	0.157	95	0.050	65
10	Tilaiya	Jharkhad	0.142	0.035	28	-0.004	-50
11*	Ukai	Gujarat	6.615	6.407	118	1.608	130
12	Sabarmati	Gujarat	0.778	0.338	109	0.008	36
13*	Kadana	Gujarat	1.472	1.176	153	0.846	208
14	Shetrunji	Gujarat	0.300	0.085	64	0.006	32
15	Bhadar	Gujarat	0.188	0.119	157	0.037	740
16	Daman Ganga	Gujarat	0.502	0.463	103	0.205	164
17	Danti Wada	Gujarat	0.399	0.115	100	0.005	250
18	Panam	Gujarat	0.697	0.586	144	0.295	120
19*	Gobind Sagar	H.P	6.299	5.756	106	0.198	23
20*	Pong Dam	H.P	6.157	4.466	89	0.535	42
21	Krishna Raja Sagar	Karnataka	1.163	0.127	13	0.039	63
22*	Tungabhadra	Karnataka	3.276	1.770	60	0.034	45
23	Ghatprabha	Karnataka	1.391	1.011	84	0.012	13
24	Bhadra	Karnataka	1.785	0.673	43	0.101	28
25	Linganamakki	Karnataka	4.294	2.275	72	0.506	110
26	Naryanapur	Karnataka	0.863	0.617	83	0.177	92
27	Malaprabha	Karnataka	0.972	0.288	57	0.011	44
28	Kabini	Karnataka	0.275	0.605	29	0.000	0
29	Hemavathy	Karnataka	0.927	0.044	6	0.000	0
30	Harangi	Karnataka	0.220	0.161	90	0.015	750
31	Supa	Karnataka	4.120	1.524	65	0.434	68
32	Vanivilas Sagar	Karnataka	0.802	0.139	67	0.106	52
33*	Almatti	Karnataka	3.105	2.984	101	0.000	0
34	Kallada	Kerala	0.507	0.241	72	0.178	144
35*	Idamalayar	Kerala	1.018	0.479	61	0.194	121
36*	Idukki	Kerala	1.460	0.472	50	0.283	110
37*	Kakki	Kerala	0.447	0.184	60	0.076	107
38*	Periyar	Kerala	0.173	0.031	39	0.036	71
39*	Gandhi Sagar	M.P.	6.827	1.303	35	-0.158	-15
40	Tawa	M.P.	1.944	1.944	106	0.541	118
41*	Bargi	M.P.	3.180	3.180	110	0.168	37
42*	Minimata Banga	Chhatisgarh	3.046	3.033	132	1.870	227
43	Mahanadi	Chhatisgarh	0.767	0.765	158	0.682	421
44	Jayakawadi	Maharashtra	2.171	0.361	35	-0.091	-32
45*	Koyna	Maharashtra	2.652	2.538	104	0.536	90
46	Bhima	Maharashtra	1.517	-0.090	-9	-0.725	522
47	Isapur	Maharashtra	0.965	0.536	77	0.114	36

Contd..

**TABLE : 1.10 STORAGE POSITION OF IMPORTANT RESERVOIRS OF INDIA AT THE END OF
SEPTEMBER 2003 & MAY 2004**

Sl. No.	Name of Reservoir	Location	Live Capacity at F R L in BCM	September,2003		May 2004	
				L S	P	L S	P
1	2	3	4	5	6	7	8
48	Mula	Maharashtra	0.608	0.254	52	0.022	37
49	Yeldari	Maharashtra	0.809	0.410	98	0.015	23
50	Girna	Maharashtra	0.524	0.206	98	0.059	236
51	Khadkwasla	Maharashtra	0.056	0.031	103	0.007	70
52*	Upper Vaitarna	Maharashtra	0.331	0.331	109	0.092	103
53	Upper Tapi	Maharashtra	0.255	0.177	73	0.043	81
54*	Hirakud	Orissa	5.378	5.274	103	0.337	49
55*	Balimela	Orissa	2.676	1.653	176	0.353	350
56	Salandi	Orissa	0.558	0.309	89	0.293	244
57*	Rengali	Orissa	3.432	3.432	111	0.389	158
58*	Machkund	Orissa	0.893	0.847	138	0.319	193
59*	Upper Kolab	Orissa	0.935	0.815	153	0.215	197
60*	Upper Indravati	Orissa	1.456	1.391	119	0.264	83
61*	Thein Dam	Punjab	2.344	0.999	95	0.000	0
62*	Mahi Bajaj Sagar	Rajasthan	1.711	1.711	142	0.509	401
63	Jhakam	Rajasthan	0.132	0.063	71	0.006	55
64*	Rana Pratap Sagar	Rajasthan	1.436	0.524	57	0.089	21
65	Lower Bhawani	Tamilnadu	0.792	0.147	40	0.157	93
66*	Mettur	Tamilnadu	2.647	0.871	89	0.220	18
67	Vaigai	Tamilnadu	0.172	0.004	4	0.007	11
68	Parambikulam	Tamilnadu	0.380	0.074	25	0.023	20
69	Aliyar	Tamilnadu	0.095	0.005	11	0.006	27
70*	Sholayar	Tamilnadu	0.143	0.022	17	0.021	131
71	Gumti	Tripura	0.312	0.282	117	0.091	132
72	Matatila	U.P	0.707	0.707	100	0.508	627
73*	Rihand	U.P	8.967	4.518	93	0.382	37
74*	Ramganga	Uttaranchal	2.196	1.181	83	0.047	19
75	Mayurakshi	W.B.	0.487	0.127	31	0.022	16
76	Kangsabati	W.B.	0.914	0.177	27	0.068	85
Total			131.280	78.701		14.260	
PERCENTAGE				59	81	11	73

Source: Central Water Commission (W.M. Directorate)

FRL : Full Reservoir Level, BCM : Billion Cubic Metre.

L S : Live Storage in BCM

P : Percentage of this year's live storage to average of the last ten year's storage

Note : Position at the 'End of the month' refers to the position as onlast Day of the month.

* Hydel Power Project having capacity more than 60 M. Watt.

**TABLE : 1.11 BASINWISE DETAILS OF HYDROLOGICAL
OBSERVATION STATION OF CWC**

S. No.	River/Basin	States	G	GD	GDS	GDQ	GDSQ	TOTAL
1	2		3	4	5	6	7	8
1	Indus	Himachal Jammu & Kashmir	- 1	1 12	1 1	- 3	2 5	4 22
2	Ganga Brhmaputra Meghna/Barak	Uttar Pradesh	35	27	4	17	35	118
		Uttaranchal	5	12	1	3	4	25
		Himachal Pradesh	-	4	-	1	-	5
		Haryana	1	6	-	-	1	8
		Delhi	-	-	-	-	1	1
		Madhya Pradesh	1	10	-	2	8	21
		Rajasthan	1	9	-	1	5	16
		Bihar	26	13	-	6	17	62
		Jarkhand	4	13	-	-	3	20
		West Bengal	15	23	7	2	15	62
		Meghalaya	-	1	1	-	-	2
		Mizoram	1	4	2	-	-	7
		Arunachal Pradesh	15	8	6	-	-	29
		Assam	31	33	6	2	9	81
3	Godavari	Tripura	2	6	5	-	-	13
		Sikkim	2	10	7	-	-	19
		Madhya Pradesh	4	8	-	-	5	17
		Orissa	-	4	-	-	1	5
		Andhra Pradesh	10	4	-	1	4	19
4	Krishna	Maharashtra	13	12	-	2	14	41
		Karnataka	-	-	-	-	1	1
		Andhra Pradesh	3	4	-	5	8	20
5	Cauvery	Maharashtra	3	11	-	3	5	22
		Karnataka	5	9	-	5	12	31
		Karnataka	-	-	-	2	12	14
6	Subernrekha	Tamil Nadu	-	-	-	10	9	19
		Pondicherry	-	-	-	1	-	1
		Jharkhand	1	-	-	1	3	5
7	Brahmani & Batarni	West Bengal	-	-	1	-	-	1
		Orissa	2	-	-	-	-	2
		Jharkhand	-	-	-	-	-	1
8	Mahanadi	Orissa	4	1	-	-	7	12
		Chhattisgarh	6	3	-	1	11	21
		Orissa	7	1	-	-	5	13
9	Pennar	Andhra Pradesh	-	-	-	6	2	8
		Madhya Pradesh	-	-	-	-	1	1
		Rajasthan	4	1	-	1	1	7
10	Mahi	Gujarat	3	1	-	-	1	5

Contd..

**TABLE : 1.11 BASINWISE DETAILS OF HYDROLOGICAL
OBSERVATION STATION OF CWC**

S. No.	River/Basin	States	G	GD	GDS	GDQ	GDSQ	TOTAL
1	2		3	4	5	6	7	8
11	Sabarmati	Gujarat	6	4	-	1	1	12
12	Narmada	Madhya Pradesh	4	7	-	6	9	26
		Gujarat	3	-	-	-	2	5
13	Tapi	Madhya Pradesh	-	-	-	-	2	2
		Gujarat	3	-	-	1	-	4
14	West Flowing river from Tapi to Tadri	Maharashtra	6	5	-	4	7	22
		Karnataka	-	-	-	6	1	7
		Goa	-	2	-	-	-	2
		Gujarat	5	2	-	2	2	11
		Tamil Nadu	-	-	-	2	1	3
15	West Flowing river from Tadri to Kanyakumari	Kerala	-	-	-	4	17	21
16	East Flowing River between Mahanadi and Pennar	Orissa	10	3	-	-	2	15
		Andhra Pradesh	1	2	-	-	1	4
		Tamil Nadu	-	-	-	7	-	7
17	East Flowing River Pennar to Kanyakumari	Tamil Nadu	-	-	-	5	5	10
18	West Flowing rivers of Kutch & Surashtra including Luni	Rajasthan	1	2	-	1	-	4
		Gujarat	2	3	-	1	3	9
19	Area of Inland Drainage in Rajasthan desert		-	-	-	-	-	-
20	Minor river drainage into Myanmar (Burma) and Bangladesh		-	-	-	-	-	-
TOTAL			246	282	41	115	261	945

Source : Central Water Commission, R.D.Directorate

G - Gauge, **GD** - Gauge & Discharge **GDS** - Gauge, Discharge & Silt

GDQ - Gauge, Discharge & Water Quality

GDSQ - Gauge, Discharge, Silt & Water Quality

TABLE : 1.12 STATUS OF GROUND WATER HYDROGRAPH NETWORK STATIONS

Unit : Number

Sl. No.	Name of the State/U.T.	As On		31.3.02	31.3.03
		31.3.95	31.3.98		
1	2	3	4	5	6
1.	Andhra Pradesh	1042	1028	1013	970
2.	Arunachal Pradesh	17	18	19	19
3.	Assam	371	365	379	379
4.	Bihar	599	569	365	373
5.	Chhattisgarh			484	477
6.	Gujarat	974	1045	1116	986
7.	Goa	53	53	53	53
8.	Haryana	521	550	552	539
9.	Himachal Pradesh	78	79	81	86
10.	Jammu & Kashmir	162	203	217	201
11.	Jharkhand			208	208
12.	Karnataka	1349	1311	1132	1132
13.	Kerala	651	731	864	864
14.	Madhya Pradesh	1350	1343	1323	1307
15.	Maharashtra	1409	1289	1456	1456
16.	Manipur	25	25	25	25
17.	Meghalaya	37	35	38	38
18.	Nagaland	8	8	17	17
19.	Orissa	1122	1122	1068	1068
20.	Punjab	497	485	413	399
21.	Rajasthan	1414	1456	1337	1337
22.	Tamil Nadu	766	765	1039	1010
23.	Tripura	37	37	37	42
24.	Uttar Pradesh	1514	1477	1210	1232
25.	West Bengal	836	831	721	726
TOTAL STATES		14832	14825	15167	14944
UNION TERRITORIES					
1.	Andaman & Nicobar Island	29	29	NA	
2.	Chandigarh	14	14	21	22
3.	Dadra & Nagar Haveli	7	7	10	10
4.	Delhi	61	82	87	100
5.	Daman & Diu	6	5	6	4
6.	Lakshadweep	30	30	NA	NA
7.	Pondicherry	16	19	22	21
8.	Mahe	-	1	NA	NA
TOTAL U.Ts.		163	187	146	157
TOTAL ALL INDIA		14995	15012	15313	15156

Source: Ground Water Statistics,2003 (Central Ground Water Board)

**TABLE : 1.13 STATE-WISE CATEGORISATION OF BLOCKS/ TALUKAS
WATERSHEDS/MANDALS AS OVER EXPLOITED AND DARK**

SI. No.	State	No. of Distt.	No. of Blocks/ Talukas/ Watersheds/ Mandals	NUMBER OF BLOCKS		
				Over exploited Nos.	Dark Nos.	Others Nos.
1	2	3	4	5	6	7
1	Andhra Pradesh	22	1157	118	79	960
2	Arunachal Pradesh	3	59	0	0	59
3	Assam	23	219	0	0	219
4	Bihar	42	394	6	14	374
5	Goa	3	12	0	0	12
6	Gujarat	19	180	41	19	120
7	Haryana	17	111	30	13	68
8	Himachal Pradesh	12	69	0	0	69
9	Jammu & Kashmir	14	69	0	0	69
10	Karnataka	19	175	7	9	159
11	Kerala	14	151	3	6	142
12	Madhya Pradesh	45	312	2	1	309
13	Maharashtra	29	2316	154	72	2090
14	Manipur	6	29	0	0	29
15	Meghalaya	5	39	0	0	39
16	Mizoram	3	12	0	0	12
17	Nagaland	7	52	0	0	52
18	Orissa	30	314	0	0	314
19	Punjab	17	138	81	12	45
20	Rajasthan	32	237	86	80	71
21	Sikkim	4	4	0	0	4
22	Tamil Nadu	27	385	138	37	210
23	Tripura	3	38	0	0	38
24	Uttar Pradesh/Uttrancha	58	819	2	20	797
25	West Bengal	16	275	0	61	214
Total		470	7566	668	423	6475

Source : Ground Water Statistics, 2003 (Central Ground Water Board)

Note: Andhra Pradesh - Mandals, Gujarat, Karnataka, Maharashtra - Taluka/Tehsils

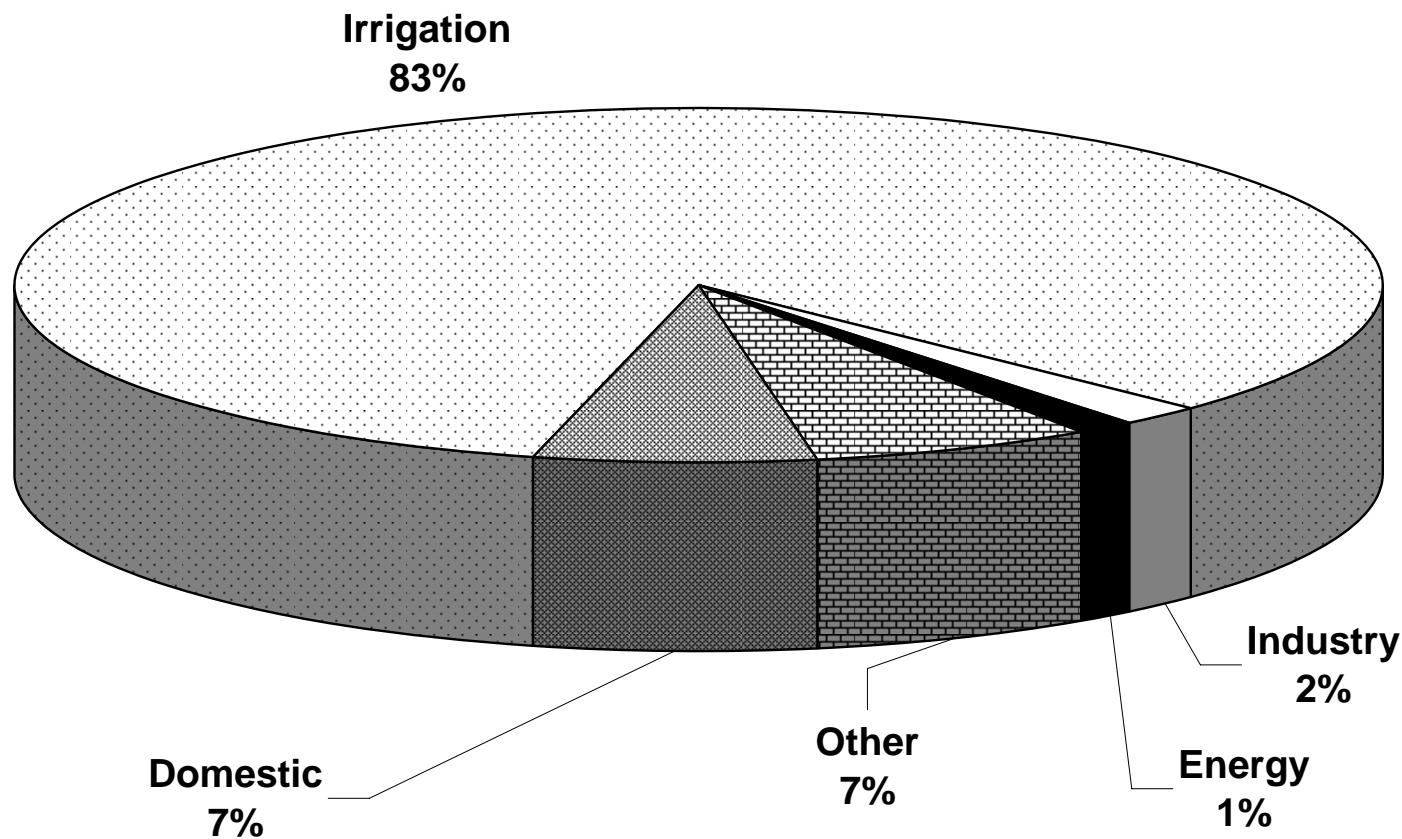
**TABLE : 1.14 STATEWISE DISTRIBUTION OF LARGE DAMS
ABSTRACT**

Sl. No.	State/U.T.	(As on April, 2002)		
		Completed	Under Cons- truction	Total
1	2	3	4	5
1	Andaman & Nicobar Islands	0	1	1
2	Andhra Pradesh	161	24	185
3	Arunachal Pradesh	0	1	1
4	Assam	2	1	3
5	Bihar	24	5	29
6	Chhattishgarh	247	7	254
7	Goa	5	2	7
8	Gujarat	470	97	567
9	Haryana	0	0	0
10	Himachal Pradesh	5	1	6
11	Jammu & Kashmir	8	2	10
12	Jharkhand	48	28	76
13	Karnataka	203	28	231
14	Kerala	50	4	54
15	Madhya Pradesh	793	10	803
16	Maharashtra	1453	198	1651
17	Manipur	2	3	5
18	Meghalaya	6	0	6
1	Mizoram	0	0	0
20	Nagaland	0	0	0
21	Orissa	143	16	159
22	Punjab	11	1	12
23	Rajasthan	180	8	188
24	Sikkim	0	1	1
25	Tamil Nadu	92	8	100
26	Tripura	1	0	1
27	Uttar Pradesh	113	17	130
28	Uttranchal	11	6	17
29	West Bengal	22	6	28
Total		4050	475	4525

Source :- Central Water Commission, (Dam Safety Directorate)

Chart : 5

ESTIMATED SECTORWISE REQUIREMENT OF WATER IN INDIA DURING 2025



**TABLE 1.15 ESTIMATED ANNUAL REQUIREMENT
OF WATER IN INDIA (BY DIFFERENT USES)**
(Unit : BCM)

SI No.	Sector	2000	2025	2050
1	2	3	4	5
1	Domestic	42	73	102
2	Irrigation	541	910	1072
3	Industry	8	23	63
4	Energy	2	15	130
5	Other	41	72	80
TOTAL		634	1093	1447

BCM : Billion Cubic Meters

Source : Central Water Commission (BP Directorate) - Report of the Standing Sub-Committee for Assessment of availability and requirement of water for Diverse Uses in the Country August, 2000

**TABLE 1.16 AGGREGATE GROUND WATER RESOURCE ESTIMATES
IN TRIBAL DISTRICTS IN EACH STATE AS PER NORMS OF
GROUND WATER ESTIMATION COMMITTEE**

(Unit: MCM/Yr)

S.No	Name of the State	Total No of Tribal Districts	Total replenishable Ground Water Resources	Utilisable Ground Water Resources for irrigation	Net Draft
1	2	3	4	5	6
1	Andhra Pradesh	8	12873.06	10942.10	1974.31
2	Assam	8	6709.00	5702.65	183.88
3	Bihar	4	2139.16	1818.29	35.00
4	Gujarat	8	9290.22	7896.69	2712.82
5	Himachal Pradesh	3	NOT ESTIMATED		
6	Karnataka	4	2814.12	2392.00	637.00
7	Kerala	9	5222.08	4310.33	616.19
8	Madhya Pradesh	21	33209.38	28227.98	3295.68
9	Maharashtra	10	14607.23	9825.12	3513.26
10	Manipur	8	3153.67	2680.61	N.E.
11	Orissa	9	9538.91	8108.07	753.56
12	Rajasthan	5	2411.96	2050.12	798.91
13	Sikkim	1	NOT ESTIMATED		
14	Tamil Nadu	5	10841.33	9215.13	6417.68
15	Tripura	3	2512.03	2135.22	96.60
16	Uttar Pradesh	1	2754.00	2341.00	935.00
17	West Bengal	13	21295.56	18101.22	3978.42
Grand Total		120	139371.71	115746.53	25948.31

Source : Ground Water Statistics, 1996 (Central Ground Water Board).

MCM/Yr : Million Cubic Metre per year.

**Table 1.17 Average Observed (Monsoon) Run off At
CWC Sites in Rivers of India**

Sl. No.	Name of the Site	Name of the Stream	Catchment Area (Sq.Km.)	Run Off (Cu.Km.) June-Nov
1	2	3	4	5
GODAVARI BASIN (1996 - 2001)				
1	Polavaram	Godavari	307800	64.09
2	Koida	Godavari	305460	78.72
3	Konta	Sabari	19550	11.25
4	Injaram	Sabari	12925	8.73
5	Potteru	Potteruvagu	1120	1.34
6	Saradput	Sabari	4800	3.52
7	Sangam	Murredu	1565	0.26
8	Perur	Godavari	260200	53.78
9	Pathagudem	Indravati	40000	17.71
10	Tummar	Dantiwara	1700	1.04
11	Cherribeda	Indravati	17270	4.31
12	Medapalli	Nibra	890	0.22
13	Amabal	Narangi	1968	0.63
14	Sonarpal	Markandi	1523	0.55
15	Jagdalpur	Indravati	7680	1.97
16	Kosagumda	Baskel	1635	0.49
17	Murthahandi	Journala	N.A.	1.05
18	Nowrangpur	Indravati	3545	1.31
19	Tekra	Pranhita	108780	27.08
20	Bhatpalli	Peddavagu	3100	1.14
21	Sirpur	Wardha	47500	9.23
22	Bamni	Wardha	46020	19.52
23	Penganga Bridge	Penganga	18441	3.27
24	Mangrul	Aran	2500	0.27
25	Marlegaon	Penganga	7410	1.05
26	Kanhargaon	Penganga	3515	0.63
27	Ghugus	Pranhita	21429	2.98
28	Nandgaon	Wunna	4580	0.40
29	Hivra	Wardha	10240	1.22
30	Bhisnur	Wardha	5000	0.62
31	Ashti	Pranhita	50990	17.21
32	Rajoli	Mul	1900	0.65
33	Wairagarh	Khobragarthi	2600	0.72
34	Salebardi	Chulband	1800	0.54
35	Pauni	Pranhita	35520	9.53

Contd..

**Table 1.17 Average Observed (Monsoon) Run off At
CWC Sites in Rivers of India**

Sl. No.	Name of the Site	Name of the Stream	Catchment Area (Sq.Km.)	Run Off (Cu.Km.) June-Nov
1	2	3	4	5
36	Satrapur	Kanhan	11100	2.23
37	Ramkona	Kanhan	2500	0.83
38	Rajagaon	Bagh	5380	2.27
39	Kumhari	Wainganga	8070	3.12
40	Keolari	Wainganga	2960	0.97
41	Somanpally	Maneru	12991	1.33
42	Mancherial	Godavari	102900	9.37
43	Gandlapet	Peddavagu	1360	0.12
44	Betmogra	Manar	2100	0.29
45	Degloor	Lendi	1900	0.41
46	Saigaon	Manjira	9960	1.72
47	Bhatkheda	Manjira	4650	0.60
48	Yelli	Godavari	53630	4.55
49	Purna	Purna	15000	1.72
50	Zari	Dudhna	5550	0.54
51	G R Bridge	Godavari	33934	1.81
52	Dhalegaon	Godavari	30840	1.25
53	Pachegaon	Pravara	5800	0.29
54	Ghargaon	Mula	626	0.68
EAST FLOWING RIVERS(1998 - 2003)				
(a) Mahanadi Basin				
1	Baronda	Pairi	3225	0.05
2	Rajim	Mahanadi	8760	0.11
3	Sworinryon	Mahanadi	48050	0.57
4	Basantpur	Mahanadi	57780	0.98
5	Kotni	Seonath	6990	0.09
6	Patherdhi	Kharun	2511	0.07
7	Simga	Seonath	16060	0.23
8	Andhiyar Kore	Hamp	2210	0.02
9	Ghatora	Arpa	3035	0.05
10	Jondhra	Seonath	29645	0.36
11	Rampur	Jonk	2920	0.05
12	Manendragarh	Hasdeo	1110	0.02
13	Bamnidhi	Hasdeo	9730	0.24
14	Kurubhata	Mand	4625	0.16
15	Sundergarh	Ib	5870	0.23
16	Salebhata	Ong	4650	0.08

Contd..

**Table 1.17 Average Observed (Monsoon) Run off At
CWC Sites in Rivers of India**

Sl. No.	Name of the Site	Name of the Stream	Catchment Area (Sq.Km.)	Run Off (Cu.Km.) June-Nov
1	2	3	4	5
17	Kesinga	Tel	11960	0.33
18	Kantamal	Tel	19600	0.49
19	Sukma	Tel	1365	0.02
20	Tikarpara	Mahanadi	41000	1.88
(b) BRAHAMANI BASIN				
1	Tilga	Sankh	3160	0.13
2	Jaraikela	Koel	9160	0.28
3	Panposh	Brahmani	19448	0.64
4	Gomlai	Brahmani	19820	0.68
5	Jenapur	Brahmani	33955	0.94
(C) SUBARNAREKHA / BURHABALANGA & BAITARANI BASIN				
1	Muri	Subarnarekha		
2	Adityapur	Kharkai	6309	0.13
3	Ghatsila	Subarnarekha	14176	0.31
4	N.H.5 Govindpur	Burhabalang	4495	0.16
5	Champua	Baitarani	1710	0.05
6	Anadpur	Baitarani	8570	0.23
(d) RUSHIKULYA / VAMSADHARA / SARDA & NAGAVALI BASIN				
1	Purushottampur	Rushikulya	7112	0.10
2	Gunupur	Vamsadhara	6740	0.08
3	Kashinagar	Vamsadhara	7820	0.08
4	Ankapalli	Sarda	2090	0.03
5	Srikakulam	Nagavali	9500	0.09
CAUVERY BASIN (1995 - 2000)				
1	Musiri	Cauvery	66243	5.7
2	Nallamaranpatti	Amaravathi	9080	0.2
3	Kodumudi	Cauvery	53233	5.7
4	Savandapur	Bhawani	5776	0.4
5	Thengumarahada	Moyer	1370	0.2
6	Nellithurai	Bhawani	1475	1.0
7	Urachikottai	Cauvery	44100	5.2
8	Biligundulu	Cauvery	36682	4.4
9	Kanakapura	Akravati	3425	0.2
10	T.K.Halli	Shimsha	7890	0.7
11	Kollegal	Cauvery	21082	4.8
12	T.Narsipur	Kalini	7000	2.2
13	Muthankera	Hemavathi	1260	426.7

Contd..

**Table 1.17 Average Observed (Monsoon) Run off At
CWC Sites in Rivers of India**

Sl. No.	Name of the Site	Name of the Stream	Catchment Area (Sq.Km.)	Run Off (Cu.Km.) June-Nov
1	2	3	4	5
14	Kattemalvadi	Lakshmanathirth	1330	0.3
15	M.Hosahalli	Hemavathi	3050	0.4
16	Kudige	Cauvery	1934	2.5
NARMADA BASIN (1994 - 1999)				
1	Chandwada	Orsang	3846	2.0
2	Garudeshwar	Narmada	87892	32.7
3	Rajghat	Narmada	77674	33.2
4	Mandleshwar	Narmada	72809	32.2
5	Kogaon	Kundi	3919	1.5
6	Ginnore	Chhota Tawa	4816	2.5
7	Handia	Narmada	54027	24.6
8	Chhidgaon	Ganjal	1729	1.2
9	Hoshangabad	Narmada	44548	20.7
10	Sandia	Narmada	33954	15.1
11	Gadarwara	Shakkar	2270	1.3
12	Barmanghat	Narmada	26453	11.3
13	Belkheri	Sher	1508	0.7
14	Patan	Hiran	3950	1.6
15	Jamtara	Narmada	17157	8.3
16	Hirdayanagar	Banjar	3133	2.1
17	Mohgaon	Burhner	4090	2.5
18	Manot	Narmada	4667	3.3
19	Dindori	Narmada	2292	1.4
20	Bijora	Narmada	14561	4.1
21	Mortakka	Narmada	67184	21.2
TAPI BASIN (1995 - 1999)				
1	Dedtalai	Tapi	3860	4.2
2	Burhanpur	Tapi	8487	6.2
3	Lakhpuri	Purna	3560	0.6
4	Gopalkheda	Purna	9500	1.1
5	Yerli	Purna	16517	1.8
6	Dapuri	Girna	8901	0.5
7	Savkheda	Tapi	48136	7.8
8	Malkheda	Bori	1830	0.1
9	Morane	Panjhra	1933	0.2
10	Gidhada	Tapi	54750	7.0
11	Sarangkheda	Tapi	58400	8.9
12	Ghala	Tapi	63325	5.3

Source : CWC, ISO (Hydrology Data Directorate)

**Table 1.18 Average Observed Suspended Load
(Monsoon) At CWC Sites in Rivers of India**

Sl. No.	Name of the Site	Name of Tributary/ Stream	Monsoon (000' M.T)
1	2	3	4
GODAVARI BASIN (1995 - 2000)			
1	Polavaram	Godavari	39149.16
2	Konta	Sabri	4338.25
3	Perur	Godavari	25367.22
4	Pathagudam	Indravati	11091.57
5	Jagdalpur	Indravati	1646.13
6	Nowrangpur	Indravati	867.48
7	Tekra	Pranhita	27823.97
8	Bhatpalli	Peddavagu	9969.30
9	Bamni	Wardha	10050.96
10	P.G.Bridge	Penganga	3827.75
11	Nandagaon	Wunna	204.58
12	Hivra	Wardha	562.02
13	Bishnur	Wardha	78.48
14	Ashti	Wainganga	7694.33
15	Pauni	Wainganga	6052.33
16	Satrapur	Kanhan	1847.55
17	Rajegaon	Bagh	3441.86
18	Kumhari	Wainganga	1496.00
19	Mancharial	Godavari	1426.76
20	Degloor	Lendi	116.24
21	Saigaon	Manjira	1231.07
22	Yelli	Godavari	5802.71
23	Purna	Purna	1295.98
24	G.R.Bridge	Godavari	230.44
25	Dhalegaon	Godavari	518.26

Contd..

**Table 1.18 Average Observed Suspended Load
(Monsoon) At CWC Sites in Rivers of India**

Sl. No.	Name of the Site	Name of Tributary/ Stream	Monsoon (000' M.T)
1	2	3	4
EASTERN RIVER BASIN (1998 - 2003)			
1	Jenapur	Brahmani	5372.8
2	Gomlai	Brahmani	6527.0
3	Panposh	Brahmani	7160.6
4	Tilga	Sankh	1825.7
5	Jaraikela	Koel	3030.9
6	Anandapur	Baitarani	1989.9
7	Ghatsila	Subernarekha	1667.4
8	Adityapur	Kharkai	804.8
9	Kashinagar	Vamsadhara	1059.1
10	Pursushotapur	Rushikulya	1174.3
11	Srikakulam	Nagavali	1060.3
NARAMADA BASIN (1994 - 1999)			
1	Chandwada	Orsang	1525.2
2	Garudeshwar	Narmada	11735.8
3	Rajghat	Narmada	36965.0
4	Mandleshwar	Narmada	42138.9
5	Handia	Narmada	32561.7
6	Hosangabad	Narmada	15294.1
7	Sandia	Narmada	13808.2
8	Gadarwara	Shakkar	1950.7
9	Burmanghat	Narmada	16003.7
10	Jamtara	Narmada	5011.9
11	Hridaynagar	Banjar	858.1
12	Mohegaon	Burhner	4674.4
13	Manot	Narmada	4761.3

Contd..

**Table 1.18 Average Observed Suspended Load
(Monsoon) At CWC Sites in Rivers of India**

Sl. No.	Name of the Site	Name of Tributary/ Stream	Monsoon (000' M.T)
1	2	3	4
REAMAINING EAST & WEST FLOWING RIVERS (1993 - 1998)			
East Flowing			
1	Thamavaram	Gundlakamma	75.5
2	Chennur	Pennar	2100.4
3	Alladupalli	Kunderu	1413.7
4	Gummanur	Ponniyar	29.2
5	Theni	Suruliyar	60.1
6	Murappanadu	Tambraparani	25.7
West Flowing			
7	Bantwal	Netravati	1507.1
8	Erinjipuzha	Payaswani	224.6
9	Perumannu	Valapatanam	299.0
10	Kuniyil	Chaliyar	344.3
11	Karathodu	Kadalundi	84.2
12	Kumbidi	Bharathapuzh	355.8
13	Pulamanthole	Pulathode	101.8
14	Arangaly	Chalakudy	51.2
15	Neeleswaram	Periyar	336.1
16	Ramamangalam	Muvatthupuzh	498.8
17	Kalampur	Kaliyar	42.1
18	Kidangoor	Meenachil	36.2
19	Kallooppara	Manimala	75.6
20	Malakkara	Pamba	110.2
21	Thumpamon	Achankovil	78.9
22	Pattazhy	Kallada	56.7
23	Ayilam	Vamanapuram	33.8

Contd..

**Table 1.18 Average Observed Suspended Load
(Monsoon) At CWC Sites in Rivers of India**

Sl. No.	Name of the Site	Name of Tributary/ Stream	Monsoon (000' M.T)
1	2	3	4
MAHANADI BASIN (1998 - 2003)			
1	Tikarpura	Mahanadi	5889.3
2	Kantamal	Tel	6951.1
3	Salebhata	Ong	581.7
4	Sungargarh	Ib	3421.9
5	Kurubhata	Mand	2261.6
6	Basantpur	Manahadi	4429.9
7	Mamnidhi	Hasdeo	490.8
8	Mahendragarh	Hasdeo	68.9
9	Rampur	Jonk	1343.0
10	Jondhara	Seonath	1992.4
11	Andhiyarkore	Hamp	478.9
12	Simga	Seonath	53046.8
13	Rajim	Mahanadi	646.06
14	Baronda	Pairi	7759.9
CAUVERY BASIN (1994 - 1999)			
1	Musiri	Cauvery	206.9
2	Nallamaranpatty	Amaravathi	7.1
3	Kudumudi	Cauvery	191.3
4	Savandapur	Bhawani	6.9
5	Billigundulu	Cauvery	658.1
6	T.K. Halli	Shimsha	8.0
7	Kollegal	Cauvery	282.1
8	T.Narsipur	Kabini	127.2
9	Muthankera	Kabini	200.3
10	Mukundur Hosahalli	Hemavathy	26.9
11	Kudige	Cauvery	161.8

Source : CWC, ISO, (Hydrology Data Directorate).

**2. LAND USE, AGRICULTURE
AND
IRRIGATION**

**TABLE: 2.1 STATEWISE AREA SOWN AND IRRIGATION STATISTICS,
(2001-02 Provisional) (Thousand Hectare)**

SI No.	NAME OF THE STATE/UTs.	GEOGRA-PHICAL AREA	NET SOWN AREA	GROSS SOWN AREA	NET IRRIGATED AREA	GROSS IRRIGATED AREA
1	2	3	4	5	6	7
1	Andhra Pradesh	27507	10410	12756	4238	5549
2	Arunachal Pradesh	8374	164	268	42	43
3	Assam	7844	2734	3957	170	216
4	Bihar	9416	5664	7897	3462	4539
5	Chattisgarh	13519	4800	5595	1151	1227
6	Goa	370	141	168	23	38
7	Gujarat	19602	9622	10734	2994	3572
8	Haryana	4421	3566	6318	2938	5311
9	Himachal Pradesh	5567	550	956	102	181
10	Jammu & Kashmir	22224	748	1106	310	449
11	JharKhand(x)	7972	1769	2088	164	222
12	Karnataka	19179	10031	11670	2565	3089
13	Kerala	3886	2191	2992	377	432
14	Madhya Pradesh	30825	14859	19044	4735	4899
15	Maharashtra	30771	17619	22381	2975	3938
16	Manipur	2233	140	216	65	75
17	Meghalaya	2243	230	277	59	76
18	Mizoram	2108	118	118	16	17
19	Nagaland	1658	333	378	65	80
20	Orissa	15571	5845	8799	1938	2546
21	Punjab	5036	4250	7985	4038	7710
22	Rajasthan	34224	16765	20798	5420	6744
23	Sikkim	710	95	132	17	18
24	Tamil nadu	13006	5172	6226	2801	3412
25	Tripura	1049	280	423	37	59
26	Uttaranchal	5348	793	1223	347	542
27	Uttar Pradesh	24093	16812	25816	12391	17713
28	West Bengal	8875	5522	9779	2376	3661
29	Andaman & Nicobar	825	38	44	-	-
30	Chandigarh	11	2	3	1	2
31	D & N Haveli	49	23	30	8	8
32	Delhi	148	29	52	29	39
33	Daman & Diu	11	4	5	1	1
34	Lakshadweep	3	3	3	1	1
35	Pondicherry	48	24	39	21	34
ALL INDIA TOTAL		328726 *	141346	190276	55877	76443

**Source : Ministry of Agriculture, Directorate of Economics & Statistics.
Dept. Of Agriculture & Co-operation**

(*) Includes Geographical area under illegal occupation by China and Pakistan.
Totals may not tally due to rounding off. (x) Relates to the year 1999-2000

**TABLE: 2.2 PER CAPITA STATE- WISE AREA SOWN AND
IRRIGATION STATISTICS 2001-02**

Unit: Hectare

SI No.	NAME OF THE STATE/UTs.	ESTIMATED POPULATION 2002 (000)	NET SOWN AREA PER (000) PERSONS	GROSS SOWN AREA PER (000) PERSONS	NET IRRIGATED AREA PER (000) PERSONS	GROSS IRRIGATED AREA PER (000) PERSONS
1	2	3	4	5	6	7
1	Andhra Pradesh	76601	135.90	151.49	59.41	77.83
2	Arunachal Pradesh	1109	147.88	239.53	38.25	39.16
3	Assam	27090	100.92	152.50	6.38	8.48
4	Bihar	84631	87.88	121.08	43.68	57.93
5	Chattisgarh	21167	225.02	255.69	47.23	50.06
6	Goa	1376	102.47	126.85	17.06	26.71
7	Gujarat	51504	183.34	210.97	58.79	71.56
8	Haryana	21511	163.92	289.19	139.89	247.01
9	Himachal Pradesh	6154	90.19	155.97	20.73	29.78
10	Jammu & Kashmir	10345	72.31	109.92	30.66	44.26
11	Jharkhand	27389	0.00	0.00	0.00	0.00
12	Karnataka	53451	194.76	232.43	50.01	61.89
13	Kerala	32155	68.61	94.91	11.97	14.38
14	Madhya Pradesh	61646	237.87	296.12	68.52	70.00
15	Maharashtra	98330	179.36	226.17	30.54	39.28
16	Manipur	2431	57.59	91.11	28.33	32.69
17	Meghalaya	2346	98.04	119.45	23.29	26.74
18	Mizoram	906	103.75	105.74	10.12	12.37
19	Nagaland	2037	147.28	157.79	36.18	39.20
20	Orissa	37184	156.76	214.05	52.52	57.76
21	Punjab	24656	172.94	34.18	147.87	330.35
22	Rajasthan	57723	274.85	340.31	86.84	108.57
23	Sikkim	551	172.41	232.90	131.42	33.27
24	Tamil nadu	62730	84.54	101.56	46.28	55.92
25	Tripura	3232	86.63	133.79	11.57	18.44
26	Uttar Pradesh	169629	103.83	162.80	77.11	109.59
27	Uttranchal	8627	0.00	0.00	0.00	0.00
28	West Bengal	81334	66.60	113.71	29.36	42.02
29	A & N Island	363	104.68	129.21	0.00	0.00
30	Chandigarh	925	2.16	4.40	2.22	2.22
31	D & N Haveli	227	101.32	136.36	31.82	31.82
32	Delhi	14236	2.39	3.83	2.45	3.03
33	Daman & Diu	163	24.54	31.65	6.33	6.33
34	Lakshadweep	62	48.39	49.18	16.39	16.39
35	Pondicherry	987	24.32	44.15	21.56	34.91
ALL INDIA TOTAL		1044808	137.12	179.80	53.16	73.04

Source : Ministry of Agriculture, Directorate of Economics & Statistics.

Dept. Of Agriculture & Co-operation.

Chart : 6

CROPPING PATTERN ACCORDING TO LAND USE STATISTICS

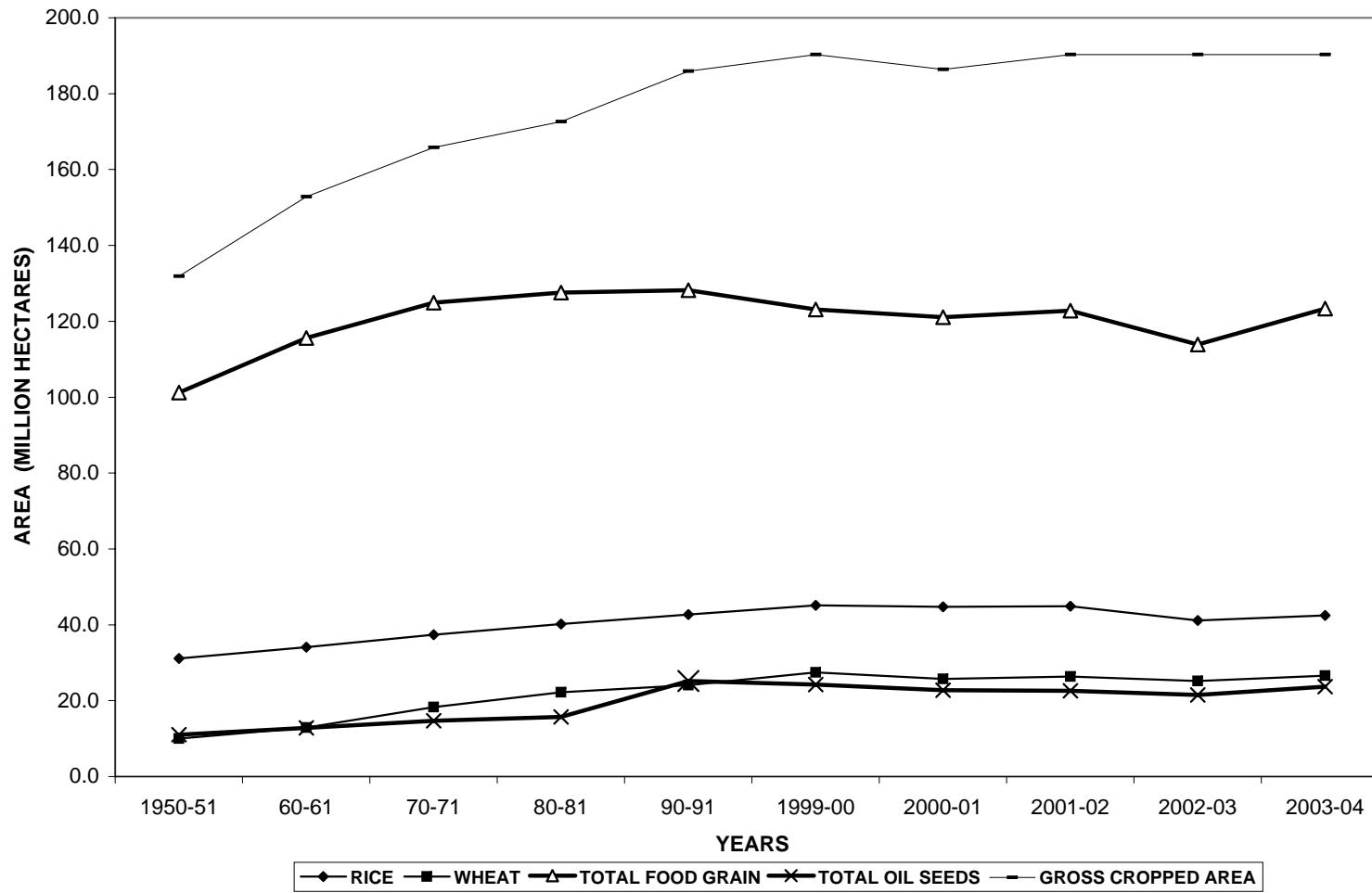


Table: 2.3 CROPPING PATTERN ACCORDING TO LAND USE STATISTICS

(*Thousand Hectare*)

Sl. No.	Name of Crop	1999-2000	2000-01	2001-02	2002-03	2003-04 *
1	2	3	4	5	6	7
1	Rice	45162	44712	44904	41176	42496
2	Wheat	27486	25731	26345	25196	26581
3	Jowar	10251	9856	9795	9300	9384
4	Bajra	8897	9829	9529	7740	10584
5	Maize	6422	6611	6582	6635	7322
6	Gram	6146	5185	6416	5906	7122
7	Tur or arhar	3427	3632	3328	3359	3520
8	Total Pulses	21116	20348	22008	20496	23443
9	Total Foodgrains	123104	121048	122780	113860	123325
10	Sugarcane	4220	4316	4412	4520	4023
11	Ground Nut	6867	6559	6238	5936	5998
12	Total Oilseeds	24282	22770	22636	21489	23700
13	Cotton	8710	8535	9132	7670	7630
14	Jute	847	828	837	865	848
15	Total Fibres	10156	9923	N.A	N.A	N.A
TOTAL CROPPED AREA		190321	186356	190278	N.A	N.A
AREA SOWN MORE THAN ONCE		49217	45277	48932	N.A	N.A
NET AREA SOWN		141104	141079	141345	N.A	N.A

Source: Ministry of Agriculture, Directorate of Economics & Statistics

* Advance estimate

N.A : Not available.

**TABLE :2.4 ALL INDIA AREA, PRODUCTION AND
YIELD OF SELECTED CROPS**

Sl. No.	Crops	Unit	2000-01	2001-02	2002-03	2003-04 Prerevised
1	2	3	4	5	6	7
1	Foodgrains	Area (M.Hactares)	121.04	122.78	113.86	123.33
		Production (M.tonnes)	196.81	212.85	174.77	213.45
		Yield (Kgs / Hectare)	1626	1734	1535	1731
2	Rice	Area (M.Hactares)	44.71	44.90	41.18	42.50
		Production (M.tonnes)	84.98	93.34	71.82	88.28
		Yield (Kgs / Hectare)	1901	2079	1744	2077
3	Wheat	Area (M.Hactares)	25.73	26.34	25.20	26.58
		Production (M.tonnes)	69.68	72.77	65.76	72.11
		Yield (Kgs / Hectare)	2708	2762	2610	2713
4	Coarse Cereals	Area (M.Hactares)	30.26	29.52	26.99	30.81
		Production (M.tonnes)	31.08	33.77	26.07	38.12
		Yield (Kgs / Hectare)	1027	1131	966	1238
5	Jowar	Area (M.Hactares)	9.86	9.80	9.30	9.38
		Production (M.tonnes)	7.53	7.56	7.01	7.16
		Yield (Kgs / Hectare)	764	771	754	763
6	Bajra	Area (M.Hactares)	9.83	9.53	7.74	10.58
		Production (M.tonnes)	6.76	8.28	4.72	12.12
		Yield (Kgs / Hectare)	688	869	610	1145
7	Pulses	Area (M.Hactares)	20.35	22.01	20.50	23.44
		Production (M.tonnes)	11.08	13.37	11.13	14.94
		Yield (Kgs / Hectare)	544	607	543	637
8	Nine Oilseeds	Area (M.Hactares)	22.77	22.64	21.49	23.70
		Production (M.tonnes)	18.44	20.66	14.84	25.29
		Yield (Kgs / Hectare)	810	913	691	1067
9	Cotton	Area (M.Hactares)	8.53	9.13	7.67	7.63
		Production (Million bales of 170 Kg. each)	9.52	10.00	8.62	13.87
		Yield (Kgs / Hectare)	190.00	186.00	191	309
10	Sugarcane	Area (M.Hactares)	4.32	4.41	4.52	4.02
		Production (M.tonnes)	295.96	297.21	287.38	237.31
		Yield (Kgs / Hectare)	68577.00	67370	63576	58986

Source: Directorate of Economics & Statistics, Ministry of Agriculture.

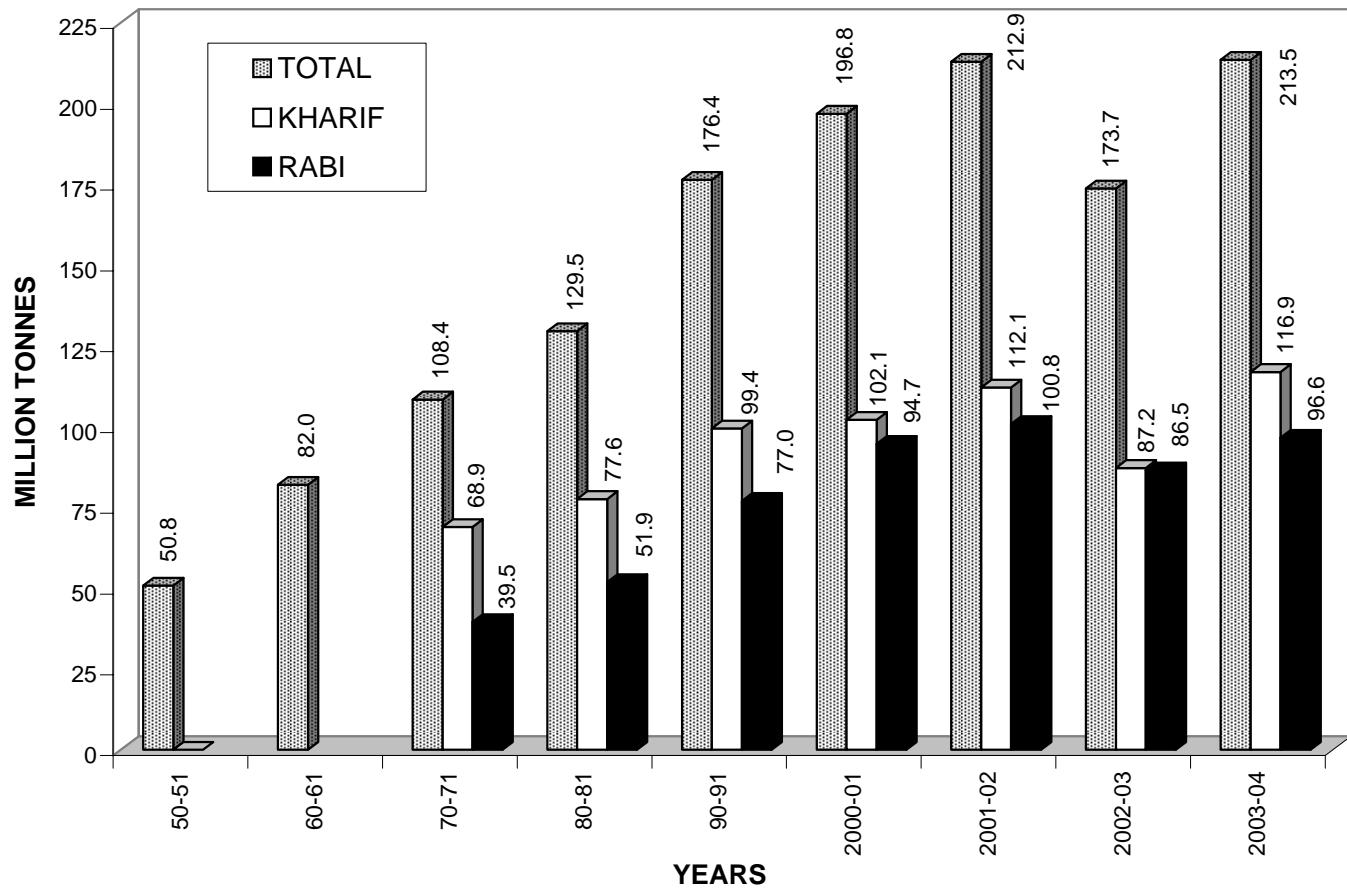
**TABLE NO : 2.5 STATEWISE FOODGRAIN ; PRODUCTION, AND
YIELD (2002-03 and 2003 - 2004)**

Sl. No.	Name of the State	2002-03			2003 - 2004 (Prerevised)		
		Area 000 Ha.	Production 000 Tonnes	Yield Kg per Ha.	Area 000 Ha.	Production 000 Tonnes	Yield Kg per Ha.
1	2	3	4	5	6	7	8
1	Andhra Pradesh	6289	10654	1694	6807	13697	2012
2	Arunachal Pradesh	198	242	1226	192	245	1276
3	Assam	2749	3894	1417	2742	4036	1472
4	Bihar	7069	11065	1568	7012	11217	1600
5	Chhattisgarh	5030	3275	651	5068	6226	1228
6	Goa	60	143	2382	63	181	2866
7	Gujarat	3201	3566	1114	4034	6571	1629
8	Haryana	3973	12329	3103	4286	13224	3085
9	Himachal Pradesh	813	1123	1381	807	1399	1733
10	Jammu & Kashmir	877	1322	1508	902	1375	1524
11	Jharkhand	1797	1893	1053	1950	2905	1490
12	Karnataka	7024	6665	949	6906	6639	961
13	Kerala	325	700	2151	309	636	2060
14	Madhya Pradesh	11394	943	10749	12677	15872	1252
15	Maharashtra	12809	10834	846	12179	10929	897
16	Manipur	155	344	2217	168	383	2282
17	Meghalaya	135	227	1686	135	234	1733
18	Mizoram	69	129	1866	75	138	1849
19	Nagaland	248	388	1565	233	312	1341
20	Orissa	4992	3574	716	5388	7225	1341
21	Punjab	6137	23491	3828	6294	24729	3929
22	Rajasthan	8629	7536	873	13964	17986	1288
23	Sikkim	72	97	1334	72	100	1395
24	Tamil Nadu	2756	4442	1612	2879	4459	1549
25	Tripura	267	612	2289	249	529	2122
26	Uttar Pradesh	19116	38142	1995	20197	44247	2191
27	Uttaranchal	1034	1559	1508	1031	1724	1672
28	West Bengal	6839	15522	2374	6597	15980	2422
29	A & N Islands	12	33	2680	12	33	2826
30	D & N Haveli	23	33	1431	22	30	1356
31	Delhi	38	107	2840	47	124	2621
32	Daman & Diu	3	4	1517	3	5	1613
33	Pondicherry	26	59	2231	27	65	2407
ALL INDIA		113860	174771	1535	123325	213455	1731

Source : Directorate of Economics & Statistics, Ministry of Agriculture.
Totals may not tally due to rounding off.

Chart : 7

FOODGRAIN PRODUCTION (INDIA)



**TABLE : 2.6 ALL INDIA ESTIMATED SEASON-WISE
FOODGRAIN PRODUCTION (1950-51 TO 2003-04)**
(Unit: Million Tonne)

S. No.	Year	Food Grain Production		
		Kharif	Rabi	Total
1	2	3	4	5
1	1950-51	NA	NA	50.8
2	1955-56	NA	NA	66.8
3	1960-61	NA	NA	82.0
4	1965-66	NA	NA	72.3
5	1970-71	68.9	39.5	108.4
6	1975-76	73.9	47.1	121.0
7	1980-81	77.6	51.9	129.6
8	1985-86	85.2	65.2	150.4
9	1990-91	99.4	77.0	176.4
10	1991-92	91.6	76.8	168.4
11	1992-93	101.5	78.0	179.5
12	1993-94	100.4	83.9	184.3
13	1994-95	101.1	90.4	191.5
14	1995-96	95.1	85.3	180.4
15	1996-97	103.9	95.5	199.4
16	1997-98	101.6	90.7	192.3
17	1998-99	102.9	100.7	203.6
18	1999-00	105.5	104.3	209.8
19	2000-01	102.1	94.7	196.8
20	2001-02	112.1	100.8	212.9
21	2002-03	87.2	86.5	174.8
22	2003-04	116.9	96.6	213.5

Sources : Directorate of Economics & Statistics, Deptt. Of Agriculture & Co-operation Ministry of Agri.

NA : Not Available

Totals may not tally due to rounding off.

Chart : 8

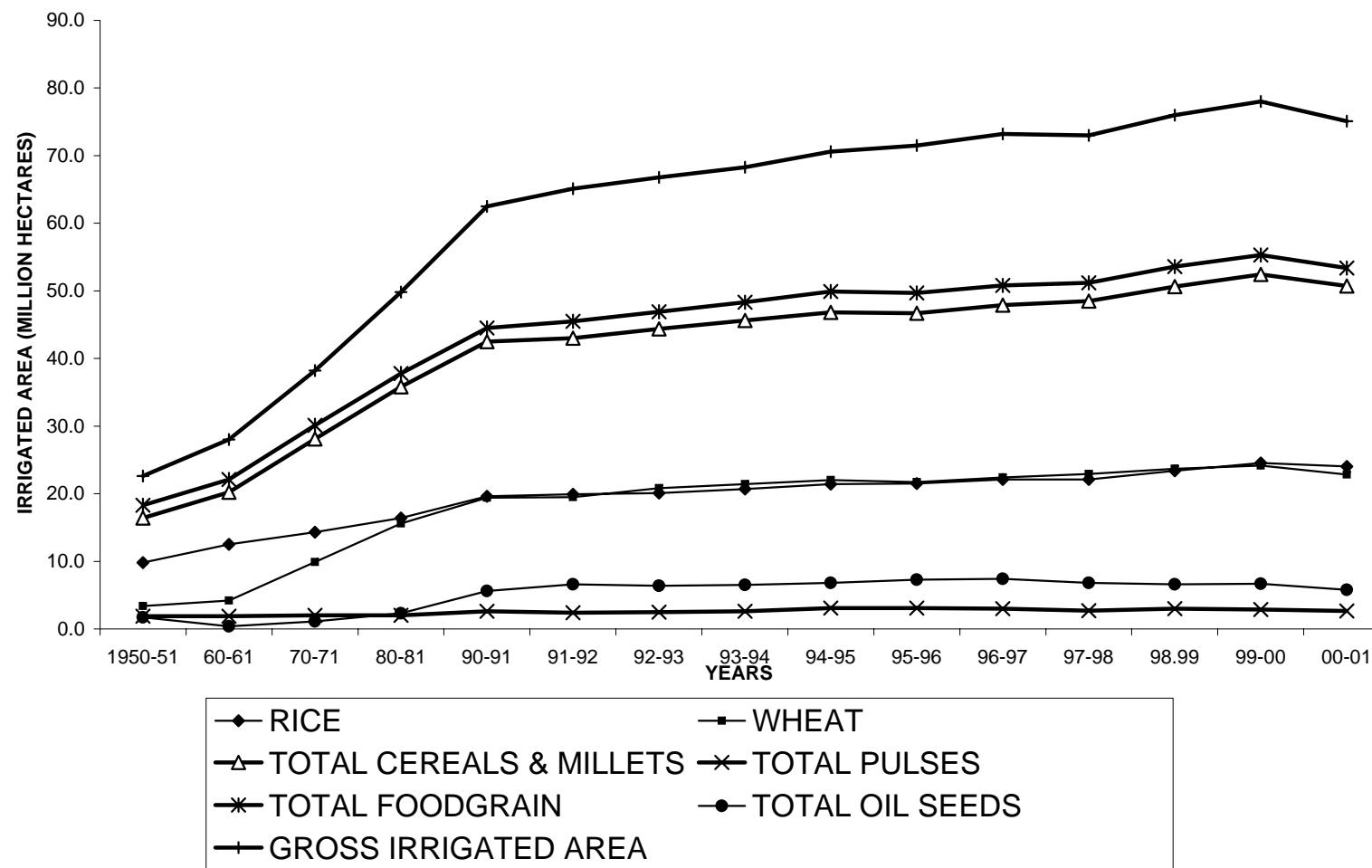
IRRIGATED AREA UNDER PRINCIPAL CROPS

Table: 2.7 AREA IRRIGATED UNDER PRINCIPAL CROPS - ALL INDIA

(Thousand Hectare)

Sl. No.	Name of Crop	1997-98 (P)	1998-99 (P)	1999-00 (P)	2000-01 (P)
1	2	5	6	5	6
1	Rice	22116	23405	24525	24010
2	Wheat	22922	23686	24159	22835
3	Jowar	793	791	812	787
4	Bajara	585	656	740	802
5	Maize	1319	1362	1485	1515
6	Total Cereals and Millets	48486	50636	52419	50713
7	Gram	1631	1797	1821	1627
8	Tur	184	147	153	155
9	Total Pulses	2690	2960	2877	2652
10	Total Foodgrains	51175	53596	55295	53365
11	Sugarcane	3835	4097	4126	4217
12	Ground Nut	1388	1480	1293	1188
13	Total Oilseeds	6788	6632	6749	5826
14	Cotton	3284	3348	3130	3013
GROSS IRRIGATED AREA		73007	75954	77992	75142

Source: Ministry of Agriculture, Directorate of E & S,
Dept. of Agri. & Cooperation

P : Provisional

**TABLE: 2.8 STATE-WISE IRRIGATED AREA UNDER SELECTED CROPS
During 2000-01 (P)**

(Thousand Hectare)

Sl. No.	State/UTs	Rice	Wheat	Total Food- grains	Sugar- cane	Cotton	Total Irrigated area under all crops
1	2	3	4	5	6	7	8
1	Andhra Pradesh	4041	11	4317	360	192	5916
2	Arunachal Pradesh	43		43	-	-	43
3	Assam	217		218	-	-	226
4	Bihar	2092	1919	4407	33		4808
5	Chhattisgarh	925	46	979	6	(a)	1043
6	Goa	16	-	19	1	-	36
7	Gujarat	425	423	1190	255	631	3626
8	Haryana	1052	2334	3704	140	554	5223
9	Himachal Pradesh	52	67	155	1	(a)	181
10	Jammu & Kashmir	219	72	341	(a)	(a)	449
11	Karnataka	1069	114	1826	417	73	3271
12	Kerala	208	-	208	3	-	458
13	Madhya Pradesh	251	2322	3551	74	144	4285
14	Maharashtra	430	657	1985	595	131	3805
15	Manipur	75	-	75	-	-	75
16	Meghalaya	47	4	51	-	-	62
17	Mizoram	8	-	9	(a)	-	13
18	Nagaland	65	5	70	-	-	78
19	Orissa	1676	16	1777	31	-	2126
20	Punjab	2591	3324	6191	116	721	8047
21	Rajasthan	100	2283	3282	13	496	6135
22	Sikkim	15	-	18	-	-	18
23	Tamil Nadu	1937	-	2128	315	65	3490
24	Tripura	45	(a)	46	-	-	59
25	Uttar Pradesh	4088	8872	14079	1844	5	18214
26	West Bengal	2288	337	2627	8	-	3369
27	A&N island	-	-	-	-	-	-
28	Chandigarh	(a)	1	1	(a)	-	2
29	D&N Haveli	3	1	4	1	-	7
30	Daman &Diu	(a)	(a)	1	(a)	-	1
31	Delhi	6	28	37	(a)	(a)	42
32	Lakshadweep	-	-	(a)	-	-	1
33	Pondicherry	26	-	27	2	(a)	34
	All INDIA	24010	22835	53365	4217	3013	75142

Source : Ministry of Agriculture, Directorate of Economics and Statistics.

Remarks : (a) Below 500 Hectares. (P) : Provisional

Totals may not tally due to rounding off.

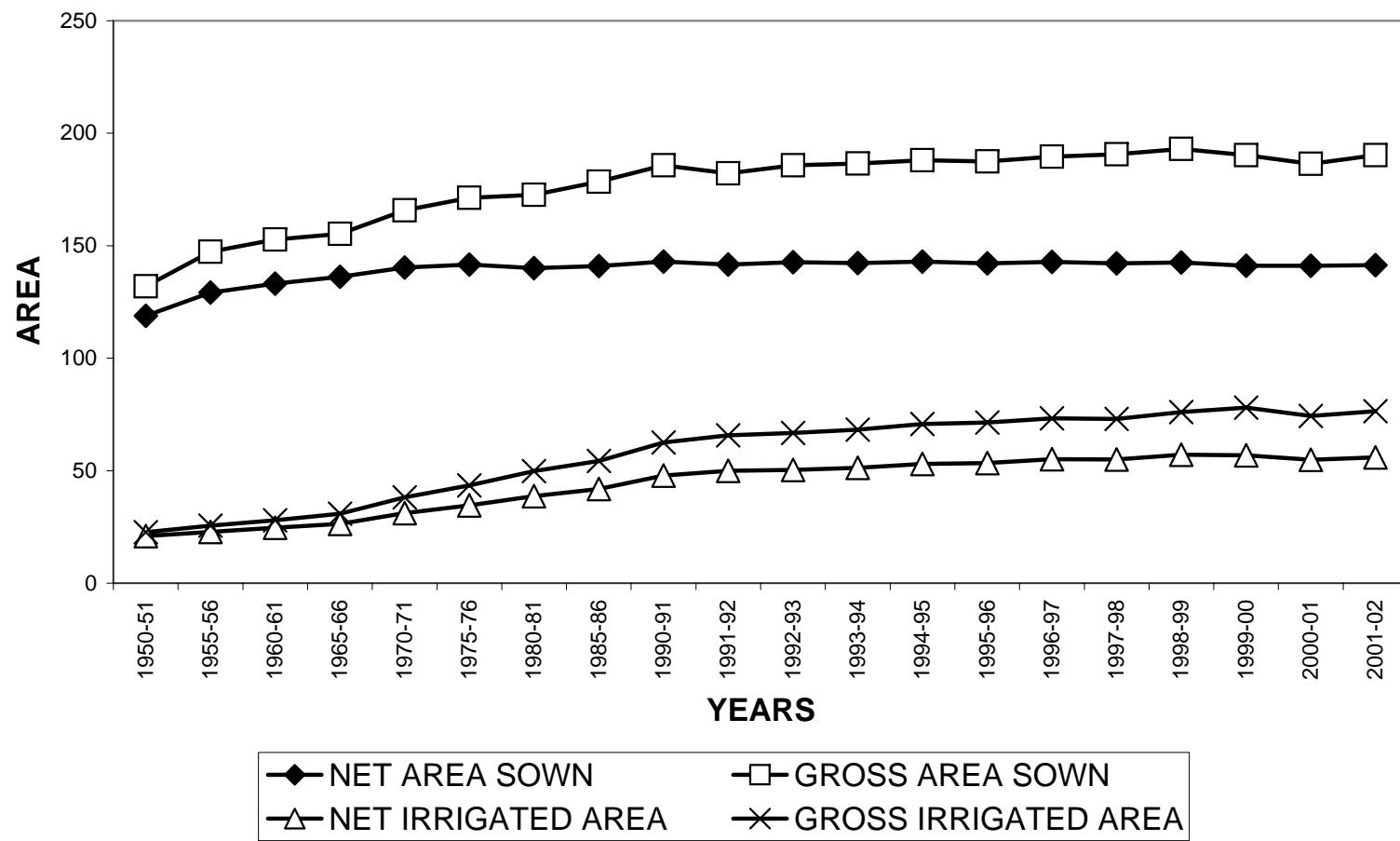
**TABLE: 2.9 STATE-WISE PERCENTAGE OF IRRIGATED AREA
UNDER SELECTED CROPS TO TOTAL AREA 2000-01
(PROVISIONAL)**

(Thousand Hectare)

Sl. No.	State/UTs	Rice	Wheat	Total Food- grains	Sugar- cane	Cotton	All Crpos
1	2	3	4	5	6	7	8
1	Andhra Pradesh	95.2	78.6	56.3	100.0	18.8	43.7
2	Arunachal Pradesh	36.1	0.0	23.0	0.0	0.0	16.3
3	Assam	8.2	0.0	7.6	0.0	0.0	5.6
4	Bihar	57.3	92.8	61.9	35.1	0.0	47.9
5	Chhattisgarh	24.5	59.0	19.9	100.0	0.0	19.6
6	Goa	28.1	0.0	27.9	100.0	0.0	21.1
7	Gujarat	72.8	0.0	38.8	143.3	39.1	33.9
8	Haryana	99.8	99.1	85.2	97.9	99.8	85.4
9	Himachal Pradesh	63.4	18.5	19.0	33.3	0.0	19.1
10	Jammu & Kashmir	89.8	25.6	37.4	0.0	0.0	40.3
11	Jharkhand	0.0	0.0	0.0	0.0	0.0	0.0
12	Karnataka	72.1	42.9	23.5	100.0	13.2	26.6
13	Kerala	59.8	0.0	57.0	100.0	0.0	15.2
14	Madhya Pradesh	14.7	70.1	32.9	98.7	28.9	24.0
15	Maharashtra	28.5	87.1	14.8	100.0	4.3	28.3
16	Manipur	47.8	0.0	44.6	0.0	0.0	35.9
17	Meghalaya	43.9	0.0	37.8	0.0	0.0	22.4
18	Mizoram	15.4	0.0	14.8	0.0	0.0	13.8
19	Nagaland	43.3	0.0	30.4	0.0	0.0	24.8
20	Orissa	37.8	0.0	33.9	100.0	0.0	27.0
21	Punjab	99.2	97.5	98.6	95.9	100.0	96.0
22	Rajasthan	60.2	98.8	28.9	92.9	97.3	31.9
23	Sikkim	100.0	0.0	23.7	0.0	0.0	14.3
24	Tamil Nadu	93.1	0.0	60.8	100.0	38.2	55.1
25	Tripura	18.7	0.0	18.1	0.0	0.0	13.8
26	Uttar Pradesh	69.2	96.0	69.4	95.1	100.0	67.3
27	Uttaranchal	0.0	0.0	0.0	0.0	0.0	0.0
28	West Bengal	42.1	79.1	42.4	36.4	0.0	37.0
29	A&N island	0.0	0.0	0.0	0.0	0.0	0.0
30	Chandigarh	0.0	0.0	0.0	0.0	0.0	50.0
31	D&N Haveli	50.0	0.0	18.2	0.0	0.0	23.3
32	Daman &Diu	0.0	0.0	33.3	0.0	0.0	20.0
33	Delhi	23.1	0.0	78.7	0.0	0.0	79.2
34	Lakshadweep	0.0	0.0	0.0	0.0	0.0	33.3
35	Pondicherry	0.0	0.0	84.4	100.0	0.0	79.1
All INDIA		53.7	88.7	71.0	97.7	35.3	40.2

Source : Ministry of Agriculture, Directorate of Economics and Statistics.

**Chart : 9 AREA SOWN AND IRRIGATED
(MILLION HECTARES)**



**TABLE : 2.10 ALL INDIA AREA SOWN AND IRRIGATED AREA
(1950-51 TO 2001-02)**

(Million Hectare)

SI. No.	Year	AREA SOWN			IRRIGATED AREA	
		Net	Gross		Net	Gross All Crops
			Food Grains	All Crops		
1	2	3	4	5	6	7
1	1950-51	118.8	97.3	131.9	20.9	22.6
2	1955-56	129.2	110.6	147.3	22.8	25.6
3	1960-61	133.2	115.6	152.8	24.7	28.0
4	1965-66	136.2	115.1	155.3	26.3	30.9
5	1970-71	140.3	124.3	165.8	31.1	38.2
6	1975-76	141.6	128.2	171.3	34.6	43.4
7	1980-81	140.0	126.7	172.6	38.7	49.8
8	1981-82	141.9	129.1	176.8	40.5	51.4
9	1982-83	140.2	125.1	172.8	40.7	51.8
10	1983-84	142.8	131.2	179.6	42.0	53.8
11	1984-85	140.9	126.7	176.3	42.2	54.5
12	1985-86	140.9	128.0	178.5	41.9	54.3
13	1986-87	139.6	127.2	176.4	42.6	55.8
14	1987-88	134.1	119.7	170.7	42.9	56.0
15	1988-89	141.9	127.7	182.3	46.2	61.1
16	1989-90	142.3	126.8	182.3	46.7	61.8
17	1990-91	143.0	127.8	185.7	48.0	63.2
18	1991-92	141.6	121.9	182.2	49.9	65.7
19	1992-93	142.7	123.2	185.7	50.3	66.8
20	1993-94 P	142.3	122.8	186.6	51.3	68.2
21	1994-95 P	143.0	123.9	188.0	53.0	70.7
22	1995-96 P	142.2	121.0	187.5	53.4	71.4
23	1996-97 P	142.8	123.6	189.6	55.1	73.3
24	1997-98 P	142.1	125.5	190.6	55.0	73.0
25	1998-99 P	142.6	126.3	193.0	57.1	76.0
26	1999-00 P	141.1	125.5	190.3	56.8	78.0
27	2000-01 P	141.1	126.3	186.4	54.8	74.3
27	2001-02 P	141.3	122.8	190.3	55.9	76.4

Source : Ministry of Agriculture, Directorate of Economics & Statistics

P : Provisional

**TABLE:2.11 STATE-WISE AREA SOWN AND IRRIGATED
(2000-01 Provisional)**

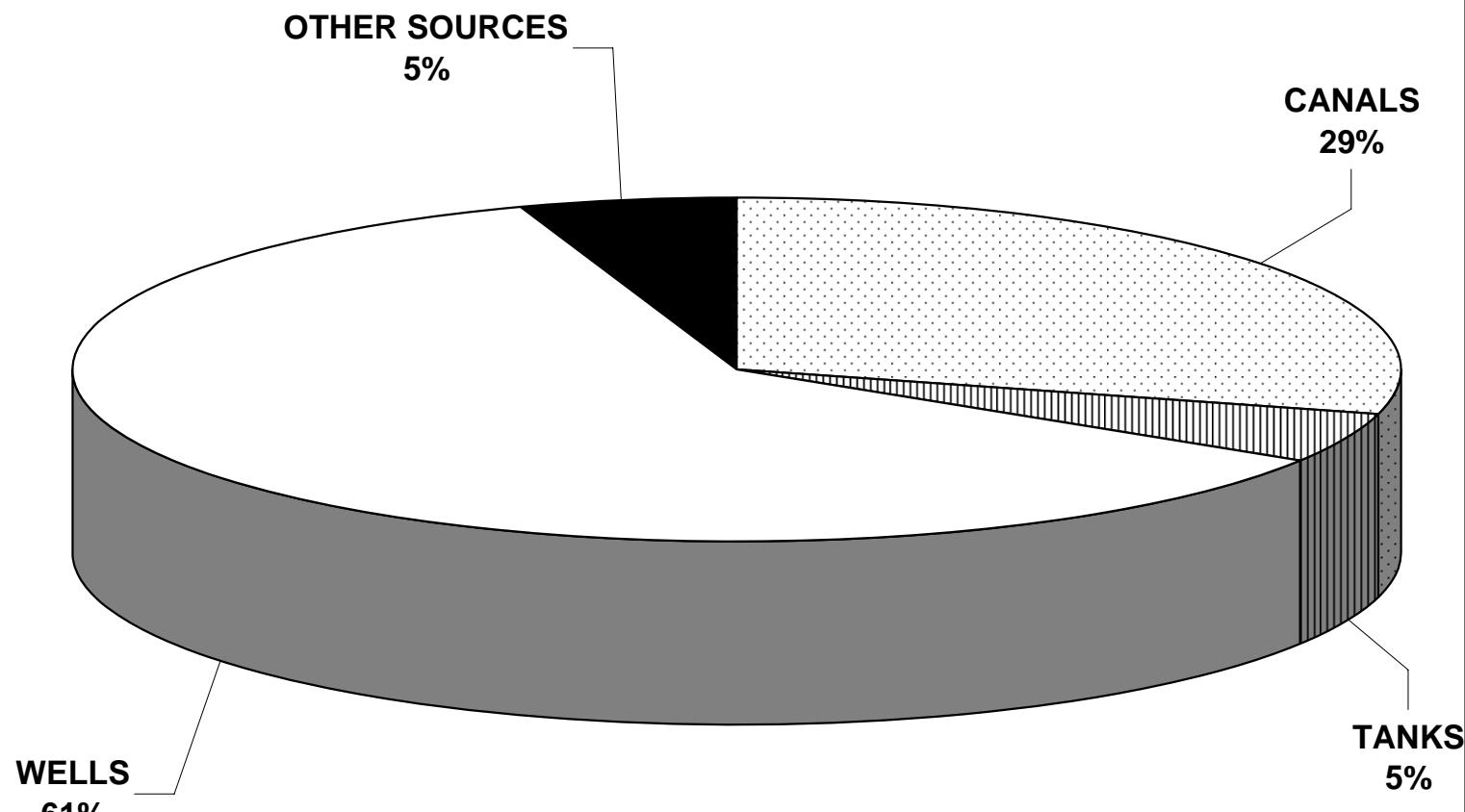
(Thousand Hectares)

Sl. No.	Name of the State/Uts.	Area Sown			Irrigated Area		
		Net	Gross Food Grains	All Crops	Net	Gross Food Grains	All Crops
1	2	3	4	5	6	7	8
1	Andhra Pradesh	11115	7674	13545	4528	4317	5916
2	Arunachal Pradesh	164	188	263	42	43	43
3	Assam	2734	2859	4065	170	218	226
4	Bihar	7437	8975	10048	3625	4407	4808
5	Chhattisgarh	4763	4928	5327	984	979	1043
6	Goa	141	69	171	23	19	36
7	Gujarat	9443	3918	10690	2979	1190	3626
8	Haryana	3526	4343	6115	2958	3704	5223
9	Himachal Pradesh	555	815	948	126	155	181
10	Jammu & Kashmir	748	920	1115	311	341	449
11	Karnataka	10410	7748	12284	2643	1826	3271
12	Kerala	2206	359	3022	381	208	458
13	Madhya Pradesh	14664	10714	17870	4135	3551	4285
14	Maharashtra	17636	13452	21911	2959	1985	3805
15	Manipur	140	168	209	65	75	75
16	Meghalaya	230	134	277	54	51	62
17	Mizoram	94	61	94	9	9	13
18	Nagaland	300	230	314	72	70	78
19	Orissa	5829	6262	7878	1933	1777	2126
20	Punjab	4264	6388	8384	3602	6191	8047
21	Rajasthan	15865	11372	19230	4907	3282	6135
22	Sikkim	95	76	126	17	18	18
23	Tamil Nadu	5303	3501	6338	2888	2128	3490
24	Tripura	280	254	428	37	46	59
25	Uttar Pradesh	17612	21303	27057	12816	14079	18214
26	West Bengal	5417	6193	9117	2354	2627	3369
27	Andaman & Nicobar	38	12	46	-	-	-
28	Chandigarh	2	2	4	2	1	2
29	Dadra & N Haveli	23	25	30	7	4	7
30	Daman & Diu	4	5	5	1	1	1
31	Delhi	34	46	53	34	37	42
32	Lakshadweep	3	-	3	1	(a)	1
33	Pondicherry	24	32	43	21	27	34
ALL INDIA		141101	123026	187009	54682	53365	75142

Source : Ministry of Agriculture, Directorate of Economics & Statistics.

Remark: (a) Below 500 Hectares. Totals may not tally due to rounding off

Chart : 10 NET IRRIGATED AREA BY SOURCE - INDIA (2000-01)
(TOTAL = 54.7 M.Ha.)



**TABLE : 2.12 STATE / SOURCE-WISE NET AREA IRRIGATED
DURING (2000-2001 PROVISIONAL)**

(*Thousand Hectare*)

Sl. No.	Name of the State/UT	Canals	Tank	wells	Other Sources	Total Area (All Sources)
1	2	3	4	5	6	7
1	Andhra Pradesh	1649	727	1954	197	4528
2	Arunachal Pradesh	-	-	-	42	42
3	Assam	148	-	2	20	170
4	Bihar	1136	155	2093	241	3625
5	Chhatigarh	678	55	170	81	984
6	Goa	4	-	19	-	23
7	Gujarat	492	18	2452	18	2980
8	Haryana	1476	1	1467	14	2958
9	Himachal Pradesh	3	(a)	14	107	124
10	Jammu & Kashmir	284	3	2	22	311
11	Karnataka	966	261	1018	397	2642
12	Kerala	105	50	116	110	381
13	Madhya Pradesh	808	85	2651	591	4135
14	Maharashtra	1047	-	1912	-	2959
15	Manipur	-	-	-	65	65
16	Meghalaya	54	-	-	-	54
17	Mizoram	9	-	-	-	9
18	Nagaland	-	-	-	72	72
19	Orissa	878	282	774	-	1934
20	Punjab	676	(a)	2880	46	3602
21	Rajasthan	1354	38	3473	42	4907
22	Sikkim	-	-	-	17	17
23	Tamilnadu	833	589	1449	16	2887
24	Tripura	22	5	4	5	36
25	Uttar Pradesh	3091	82	9384	259	12816
26	West Bengal	261	173	1397	523	2354
27	A & N Islands	-	-	-	-	-
28	Chandigarh	1	-	1	-	2
29	Dadra & Nagar Haveli	2	-	2	3	7
30	Daman & Diu	-	-	1	-	1
31	Delhi	2	-	30	2	34
32	Lakshadweep	-	(a)	1	-	1
33	Pondicherry	8	-	13	(a)	21
ALL INDIA		15989	2524	33277	2892	54682

Source : Minstry of Agriculture, Directorate of Economics & Statistics

Note : (a) : Below 500 hectares Total may not tally due to rounding off.

**TABLE: 2.13 STATE / SOURCE-WISE GROSS IRRIGATED AREA
(2000-2001 PROVISIONAL)**

(Thousand Hectare)

Sl. No.	Name of the State/UT	Canals	Tanks	Wells	Other Source	Total Area (All Sources)
1	2	3	4	5	6	7
1	Andhra Pradesh	2202	798	2693	223	5916
2	Bihar	1480	197	2815	316	4808
3	Chhattisgarh	684	56	215	87	1043
4	Goa	7	-	29	-	36
5	Gujarat	583	20	2999	24	3626
6	Jammu & Kashmir	402	4	3	41	449
7	Karnataka	1254	304	1254	459	3271
8	Madhya Pradesh	856	90	2741	596	4285
9	Maharashtra	1266	-	-	2381	3647
10	Meghalaya	62	-	-	-	62
11	Mizoram	13	-	-	-	13
12	Rajasthan	1976	41	4072	45	6135
13	Tamil Nadu	1017	656	1798	18	3490
14	D & N Haveli	2	-	2	3	7
15	Delhi	3	-	36	3	42
16	Pondicherry	9	-	25	-	34

Source : Ministry of Agriculture, Directorate of Economics & Statistics
 Note : Similar Information has not been received from other States.

**TABLE : 2.14 STATE-WISE NUMBER OF PROJECTS COMPLETED UPTO IX PLAN
AND ON GOING PROJECTS DURING X PLAN (MAJOR, MEDIUM AND
TERM IRRIGATION PROJECTS AS ON 01-04-2004)**

Sl. No.	Name of the State/UTs.	Major Project		Medium Project		E.R.M.	
		Compl- ted	On- going	Compl- ted	On- going	Compl- ted	On- going
1	2	3	4	5	6	7	8
1	Andhra Pradesh	16	15	114	9	0	8
2	Arunachal Pradesh	0	Nil	0	Nil	0	0
3	Assam	2	5	8	5	1	2
4	Bihar	16	9	19	3	2	4
5	Chhattisgarh	7	3	26	5	2	0
6	Goa	1	1	1	0	0	1
7	Gujarat	5	3	114	18	12	12
8	Haryana	5	4	0	0	9	2
9	Himachal Pradesh	1	1	4	2	0	0
10	Jammu & Kashmir	1	0	16	7	4	6
11	Jharkhand	1	5	34	19	1	0
12	Karnataka	8	16	40	18	0	5
13	Kerala	10	4	7	4	1	2
14	Madhya Pradesh	11	16	101	5	1	4
15	Maharashtra	21	56	187	95	1	5
16	Manipur	1	2	4	1	0	4
17	Meghalaya	0	0	0	1	0	0
18	Mizoram	0	Nil	0	Nil	0	0
19	Nagaland	0	Nil	0	Nil	0	0
20	Orissa	9	10	40	10	7	7
21	Punjab	8	1	2	0	8	6
22	Rajasthan	6	4	97	4	7	3
23	Sikkim	0	Nil	0	Nil	0	0
24	Tamil Nadu	22	0	46	2	11	1
25	Tripura	0	0	0	3	0	0
26	Uttar Pradesh	57	9	40	0	20	5
27	Uttaranchal	0	3	0	0	0	0
28	W.Bengal	6	2	17	8	0	6
TOTAL STATES		214	169	917	219	87	83
TOTAL UTs		0	Nil	0	Nil	-	-
NORTH EASTERN COUNCIL		0	-	0	-	-	-
TOTAL ALL INDIA		228	169	917	219	87	83

Source: Central Water Commission (P & P Directorate)

E.R.M. : Extention, Renovation and Modernisation Projects.

**TABLE : 2.15 STATEWISE STATUS OF EXPLORATORY
WELLS / BORE HOLES DRILLED BY CENTRAL GROUND WATER BOARD**
Unit : Nos.

Sl. No.	States/U.Ts	Upto March 2003				
		EW	OW	SH	PZ	Total
1	2	3	4	5	6	7
1	Andhra Pradesh	980	697	280	14	1971
2	Arunachal Pradesh	25	5	-	1	31
3	Assam	240	106	55	16	417
4	Bihar	207	125	4	9	345
5	Chhattisgarh	390	115	25	-	530
6	Goa	58	18	14		90
7	Gujarat	738	371	304	20	1433
8	Haryana	357	238	153	23	771
9	Himachal Pradesh	109	7	-	1	117
10	Jammu & Kashmir	223	68	29	8	328
11	Jharkhand	218	109	12	4	343
12	Karnataka	931	502	344	7	1784
13	Kerala	283	91	119	16	509
14	Madhya Pradesh	625	472	41	8	1146
15	Maharashtra	812	344	131	1	1288
16	Manipur	25	11	-	-	36
17	Meghalaya	60	15	1	2	78
18	Mizoram	3	3	-	-	6
19	Nagaland	11	3	-	-	14
20	Orissa	801	198	94	21	1114
21	Punjab	133	159	79	19	390
22	Rajasthan	888	366	309	93	1656
23	Sikkim	31	9	-	-	40
24	Tamil Nadu	675	268	72	13	1028
25	Tripura	49	19	-	4	72
26	Uttar Pradesh	591	418	104	39	1152
27	Uttarakhand	45	5	-	1	51
28	West Bengal	282	147	154	12	595
Total States		9790	4889	2324	332	17335
Total UTs		198	83	114	19	414
Grand Total		9988	4972	2438	351	17749

Source : Ground Water Statistics-2003 (Central Ground Water Board)

EW- Exploratory Well, **OW-** Observation Well.

SH- Slim Hole, **PZ-** Pizo Metre

TABLE 2.16 STATEWISE ULTIMATE IRRIGATION POTENTIAL

(Unit : '000 Hectares)

Sl. No.	State/U.T.	Major & Medium Surface Water	Minor Irrigation		Total (Major, Medium & Minor)
			Surface Water	Ground Water	
1	2	3	4	5	6
1.	Andhra Pradesh	5000	2300	3960	11260
2.	Arunachal Pradesh	0	150	18	168
3.	Assam	970	1000	900	2870
4.	Bihar	6500	1900	4947	13347
5.	Goa	62	25	29	116
6.	Gujarat	3000	347	2756	6103
7.	Haryana	3000	50	1462	4512
8.	Himachal Pradesh	50	235	68	353
9.	Jammu & Kashmir	250	400	708	1358
10.	Karnataka	2500	900	2574	5974
11.	Kerala	1000	800	879	2679
12.	Madhya Pradesh	6000	2200	9732	17932
13.	Maharashtra	4100	1200	3652	8952
14.	Manipur	135	100	369	604
15.	Meghalaya	20	85	63	168
16.	Mizoram	@	70	5	75
17.	Nagaland	10	75	5	90
18.	Orissa	3600	1000	4203	8803
19.	Punjab	3000	50	2917	5967
20.	Rajasthan	2750	600	1778	5128
21.	Sikkim	20	50	\$	70
22.	Tamil Nadu	1500	1200	2832	5532
23.	Tripura	100	100	81	281
24.	Uttar Pradesh	12500	1200	16799	30499
25.	West Bengal	2300	1300	3318	6918
Total States		58367	17337	64055	139759
Total U.Ts.		98	35	116	249
Grand Total		58465	17372	64171	140008

Source : Central Water Commission, P & P Directorate and
Ministry of Water Resources (Minor Irrigation Division)

@ Inculded under UTs

\$: Not Assessed

**TABLE : 2.17 PLAN-WISE IRRIGATION POTENTIAL CREATED
AND UTILISED IN INDIA**

(Unit : 000 Hactare)

Sl. No.	Period	Major & Medium Irrigation		Minor Irrigation Surface & Ground Water		Total (Major,Medium & Minor)	
		Surface Water		P	U	P	U
		P	U	P	U	P	U
1	2	3	4	5	6	7	8
1.	Pre-plan (upto 1951)	9705	9705	12901	12901	22606	22606
2.	First Plan(1951-56)	2486	1280	1159	1159	3645	2439
3.	Second Plan(1956-61)	2143	2067	671	671	2814	2738
4.	Third Plan(1961-66)	2231	2123	2269	2269	4500	4392
5.	Annual Plans(1966-69)	1530	1576	2020	2020	3550	3596
6.	Fourth Plan (1969-74)	2608	1937	4380	4380	6988	6317
7.	Fifth Plan(1974-78)	4014	2475	3900	3900	7914	6375
8.	Annual Plans(1978-80)	1895	1482	2700	2700	4595	4182
9.	Sixth Plan(1980-85)	3401	2685	7521	5249	10922	7934
10.	Seventh Plan (1985-90)	2225	1893	9086	7871	11311	9764
11.	Annual Plans(1990-92)	821	847	3743	3418	4564	4265
12.	Eighth Plan(1992-97)	2213	2095	7545	6252	9758	8347
13.	Ninth Plan(1997-02)	4092	2600	5792	4606	9884	7206
14.	Xth Plan(2002-07) Target	9926	6188	5228	N.A	15154	N.A

Source : Central Water Commission (P&P Directorate), Ministry of Water Resources (Minor Irrigation Division)
& Planning Commission.

P : Potential Created

U : Potential Utilised

Note : Irrigation potential created and utilised pertaining to Major & Medium Irrigation upto VI Plan have been reappraised and are 27695 Thousand ha. and 23574 Th. Ha. Respectively and pertaining to minor irrigation upto VIII Plan have also been reappraised and are 95347 Th. Ha. and 75717 Th. Ha respectively.

Torals may not tally due to rounding off.

Chart : 11

IRRIGATION POTENTIAL CREATED (M.Ha.)

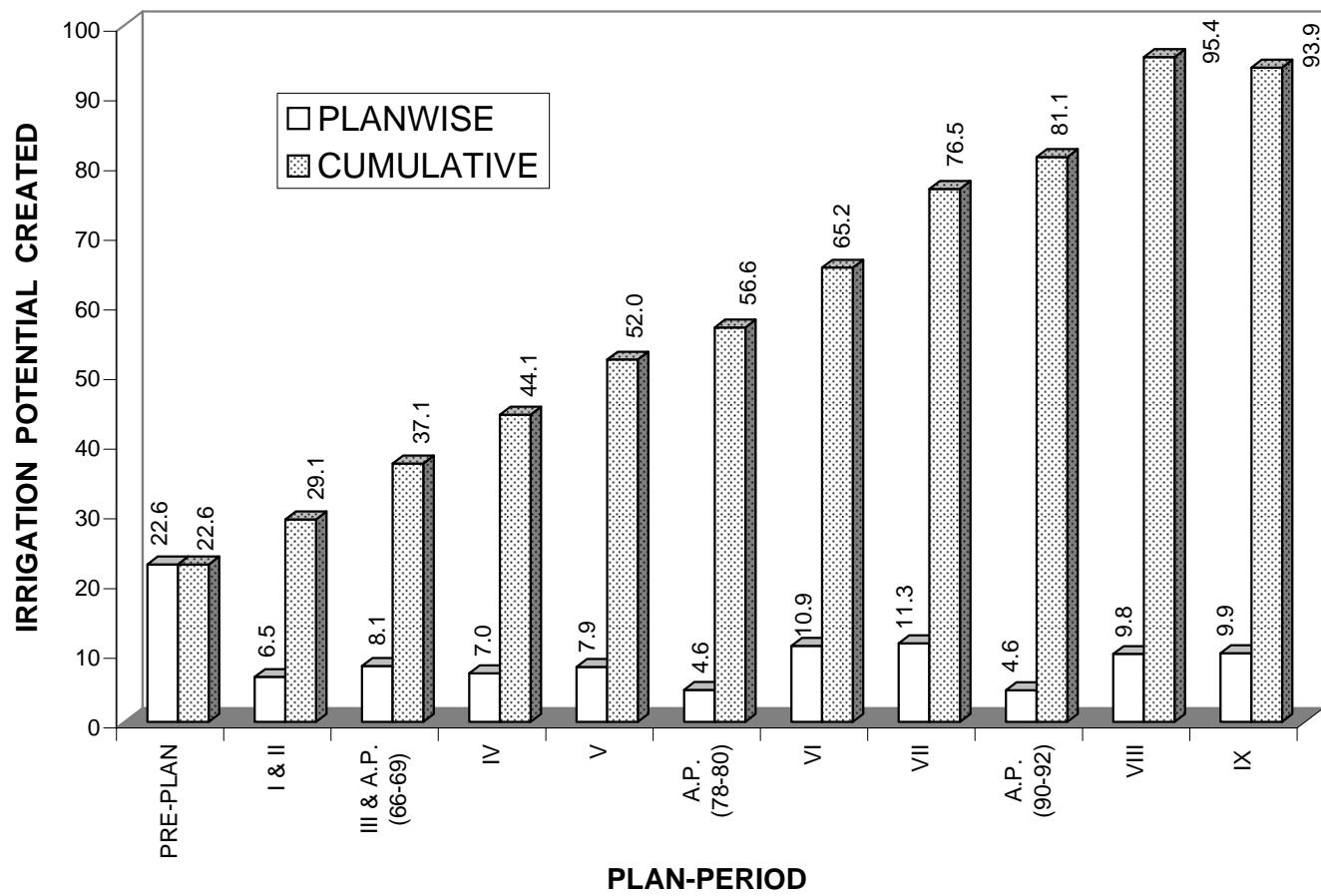


Chart : 12

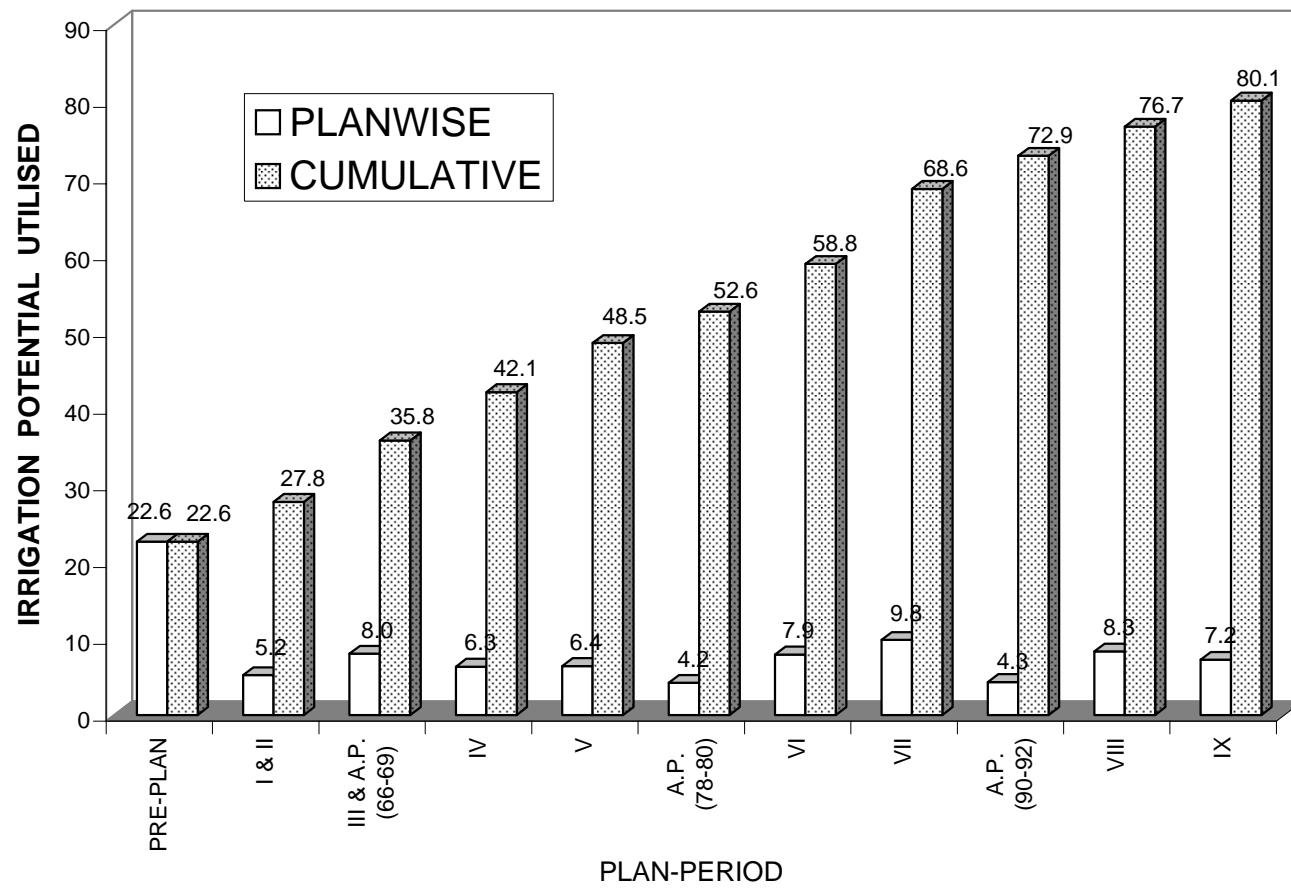
IRRIGATION POTENTIAL UTILISED (M.Ha.)

Chart :13

PLANWISE AND SCHEMewise IRRIGATION POTENTIAL UTILISED (CUMULATIVE)

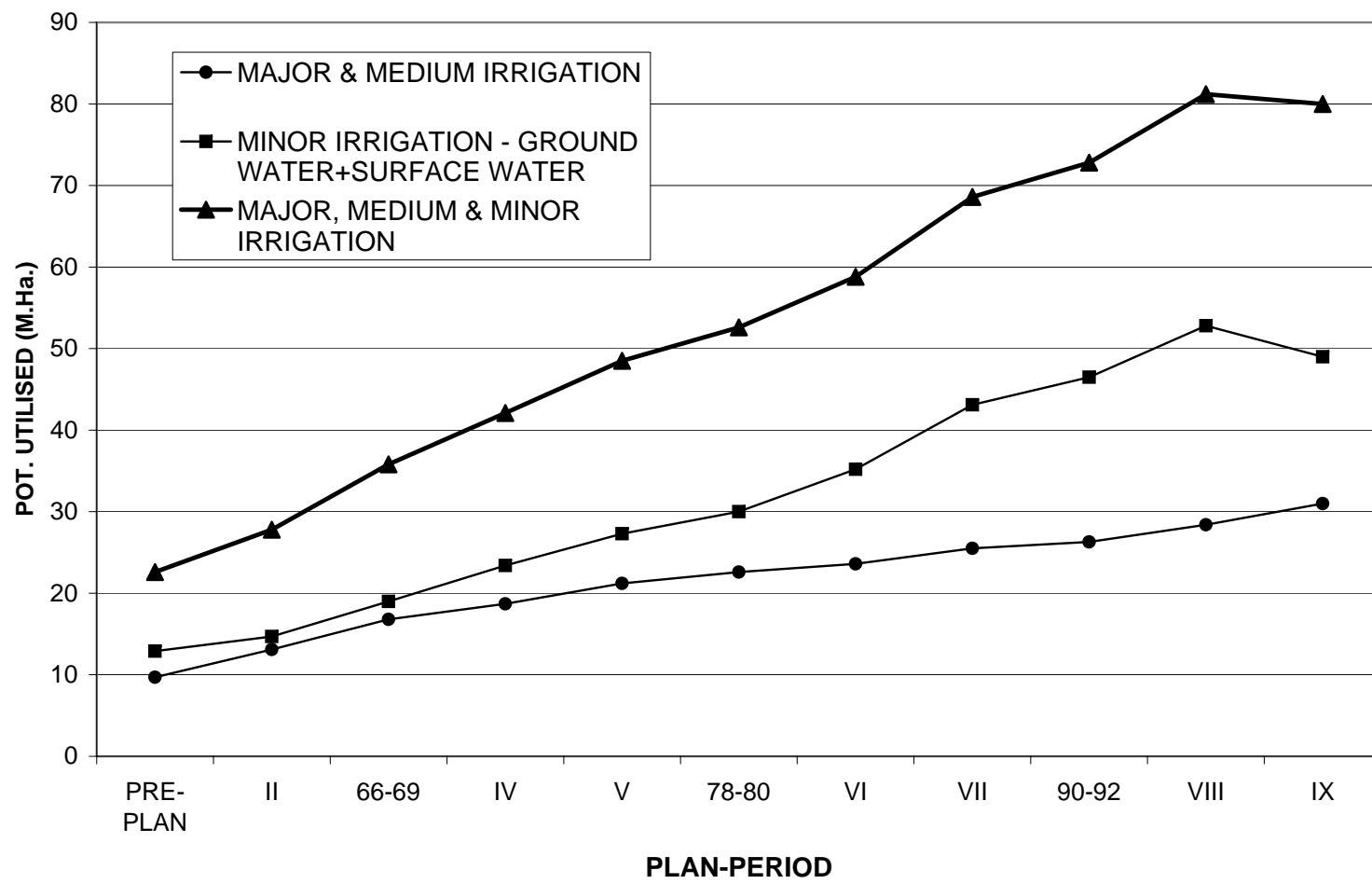


Chart : 14

IRRIGATION POTENTIAL - ULTIMATE, CREATED AND UTILISED UPTO MARCH 2002

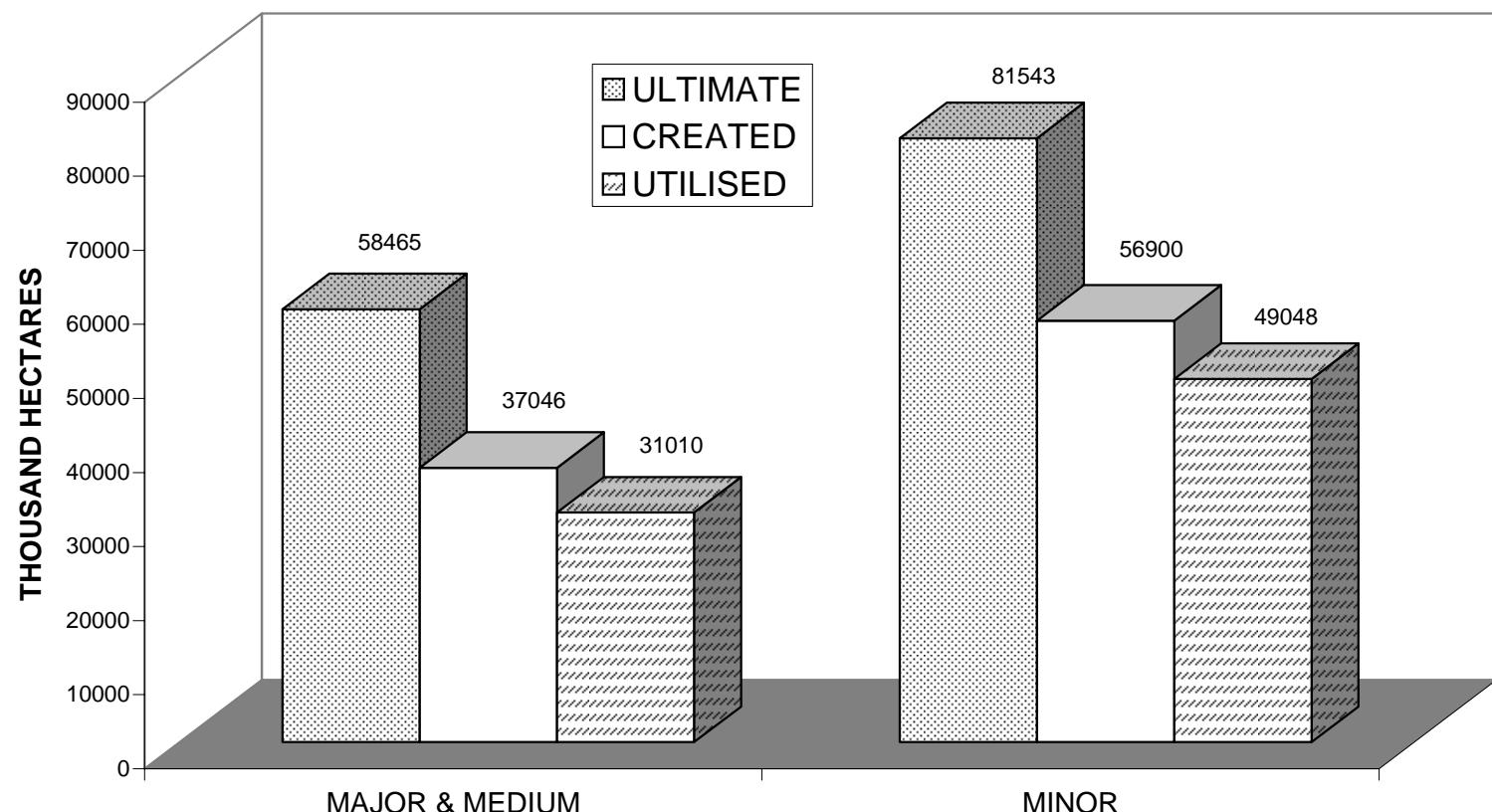


TABLE :2.18 PLANWISE IRRIGATION POTENTIAL CREATED AND UTILISED IN INDIA (CUMULATIVE)

(Unit : 000 Hactare)

Sl. No.	Period	Major & Medium Irrigation		Minor Irrigation Surface & Ground Water		Total (Major, Medium & Minor)	
		Surface Water		P	U	P	U
		3	4	5	6	7	8
1	2	3	4	5	6	7	8
1.	Pre-plan (Upto 1951)	9705	9705	12901	12901	22606	22606
2.	First Plan(Upto 1951-56)	12191	10985	14060	14060	26251	25045
3.	Second Plan(Upto 1956-61)	14334	13052	14731	14731	29065	27783
4.	Third Plan(Upto 1961-66)	16565	15175	17000	17000	33565	32175
5.	Annual Plans(Upto 1966-69)	18095	16751	19020	19020	37115	35771
6.	Fourth Plan (Upto 1969-74)	20703	18688	23400	23400	44103	42088
7.	Fifth Plan(Upto 1974-78)	24717	21163	27300	27300	52017	48463
8.	Annual Plans(Upto 1978-80)	26612	22645	30000	30000	56612	52645
9a.	Sixth Plan(Upto 1980-85)-Original	30013	25330	37520	35248	67533	60578
9b.	Sixth Plan(Upto 1980-85) Reappraised	27695	23574	37520	35248	65215	58822
10.	Seventh Plan (Upto 1985-90) \$	29920	25467	46605	43120	76525	68587
11.	Annual Plans (Upto 1990-92)	30741	26315	50348	46538	81089	72853
12a	Eighth Plan (Upto 1992-97) Original	32954	28410	57893	52790	90847	81200
12b.	Eighth Plan (Upto 1992-97) Reappraised @	32954	28410	62479	48289	95433	76699
13.	Ninth Plan (Upto 1997-02)	37046	31010	56900	49048	93946	80058
14	Tenth Plan(Upto 2002-07) (Target)	46972	37198	76271	N.A	123243	N.A

Source : Central Water Commission (P&P Directorate), Ministry of Water Resources

P - Potential Created U - Potential Utilised (Minor Irrigation Division) and Planning Commission.

Note : \$ Cumulative achievement for VII Plan and onward for Major & Medium Irrigation

are based on reappraised figures at the end of VI Plan. Minor Irrigation for Annual

Plan 1997-98 and onwards are based on reappraised figures at the end of VIII Plan.

@ Figures in Col. 5 and Col.6 for Minor Irrigation based on 2nd Minor Irrigation Census (1993-1994) hence revised. Totals may not tally due to rounding off .

** Figures from Planning Commission

**TABLE : 2.19 STATE-WISE AND PLAN-WISE ACHIEVEMENTS
OF IRRIGATION POTENTIAL CREATED/UTILISED -
MAJOR & MEDIUM IRRIGATION (SURFACE WATER) (CUMMULATIVE)**
(Unit : '000 Hactare)

SI. No.	State/UTs.	Ultimate Potential	Eighth Plan 1992-97		IX Plan 1997-2002	
			P	U	P	U
1	2	3	4	5	6	7
1	Andhra Pradesh	5000	3045	2884	3303	3052
2	Arunachal Pradesh	0	0	0	0	0
3	Assam	970	197	138	244	174
4	Bihar	6500	2803	2324	2680	1715
5	Chhattisgarh	Included in M.P.			923	761
6	Goa	62	13	12	21	15
7	Gujarat	3000	1350	1200	1430	1301
8	Haryana	3000	2079	1834	2099	1850
9	Himachal Pradesh	50	11	6	13	8
10	Jammu & Kashmir	250	174	148	180	169
11	Jharkhand	Included in Bihar			354	230
12	Karnataka	2500	1666	1472	2121	1845
13	Kerala	1000	513	464	609	559
14	Madhya Pradesh	6000	2318	1621	1387	876
15	Maharashtra	4100	2337	1288	3239	2147
16	Manipur	135	63	52	156	111
17	Meghalaya	20	0	0	0	0
18	Mizoram	0	0	0	0	0
19	Nagaland	10	0	0	0	0
20	Orissa	3600	1558	1443	1827	1794
21	Punjab	3000	2513	2451	2542	2486
22	Rajasthan	2750	2274	2088	2482	2314
23	Sikkim	20	0	0	-	-
24	Tamil Nadu	1500	1546	1545	1549	1549
25	Tripura	100	2	2	5	5
26	Uttar Pradesh	12500	7043	6114	7910	6334
27	Uttranchal	Included in U.P.			280	185
28	West Bengal	2300	1433	1315	1683	1527
Total States		58367	32935	28401	37040	31006
Total U.Ts.		98	19	9	7	4
All India Total		58465	32954	28410	37046	31010

Source : Central water Commission (P&P Dte.) and Planning Commission.

Note : P : Potential Created U : Potential Utilised

Total may not tally due to rounding off.

**TABLE : 2.20 STATE-WISE PHYSICAL ACHIEVEMENTS OF IRRIGATION
POTENTIAL CREATED/UTILISED -
MAJOR & MEDIUM IRRIGATION**

(Thousand Hectare)

Sl. No.	State/UTs.	Ultimate Potential	IX Plan Achievement upto (March 2002)		Target for X Plan	
			PC	PU	PC	PU
1	2	3	4	5	6	7
1	Andhra Pradesh	5000.00	3303.22	3051.59	739.88	480.92
2	Arunachal Pradesh	0.00	0.00	0.00	4.00	2.60
3	Assam	970.00	243.92	174.37	116.10	75.47
4	Bihar	5223.50	2680.00	1714.83	948.42	400.00
5	Chhattisgarh	1146.93	922.50	760.74	305.00	198.25
6	Goa	62.00	21.17	15.33	26.66	14.69
7	Gujarat	3000.00	1430.22	1300.83	1904.00	1237.60
8	Haryana	3000.00	2099.49	1849.97	119.00	77.35
9	Himachal Pradesh	50.00	13.35	7.51	8.00	5.20
10	Jharkhand	1276.50	354.47	230.45	315.00	204.75
11	Jammu & Kashmir	250.00	179.69	168.75	25.00	16.25
12	Karnataka	2500.00	2121.12	1844.82	999.89	649.93
13	Kerala	1000.00	609.49	558.87	90.00	58.50
14	Madhya Pradesh	4853.07	1386.90	875.63	265.30	127.20
15	Maharashtra	4100.00	3239.00	2147.24	1275.43	829.68
16	Manipur	135.00	156.00	111.00	28.15	18.30
17	Meghalaya	20.00	0.00	0.00	-	-
18	Mizoram	0.00	-	-	-	-
19	Nagaland	10.00	0.00	0.00	-	-
20	Orissa	3600.00	1826.56	1794.17	465.07	302.30
21	Punjab	3000.00	2542.48	2485.99	160.30	104.20
22	Rajasthan	2750.00	2482.15	2313.87	413.80	268.97
23	Sikkim	20.00	0.00	0.00	0.00	0.00
24	Tamil Nadu	1500.00	1549.31	1549.29	9.38	6.10
25	Tripura	100.00	4.90	4.50	-	-
26	Uttar Pradesh	12154.00	7910.09	6334.00	1000.76	650.49
27	Uttranchal	346.00	280.30	185.41	6.20	4.03
28	West Bengal	2300.00	1683.29	1527.12	700	455.00
Union Territories		98.00	6.51	3.94	0.00	0.00
All India Total		58465.00	37046.28	31010.22	9926.34	6187.76

Source : Annual Document 2003-04/ Planning Commission.

Note : PC:Potential Created PU:Potential Utilised NF:Not Furnished

- : No Target Fixed Totals may not tally due to rounding off.

**TABLE : 2.21 STATE-WISE PHYSICAL ACHIEVEMENTS OF IRRIGATION
POTENTIAL CREATED AND UTILISED -MINOR IRRIGATION
(SURFACE+GROUND)**

("000 Hactare)

Sl. No.	State/U.T	Ultimate Irrigation Potential	Achievement upto IX Plan March 02		Target for X Plan	
			PC	PU	PC	PU
1	2	3	4	5	6	7
1.	Andhra Pradesh	6260.0	3019.5	2781.2	195.4	156.3
2.	Arunachal Pradesh	168.0	99.5	77.4	20.0	16.0
3.	Assam	1900.0	603.6	494.1	116.1	92.9
4.	Bihar	5663.5	4716.4	3759.5	264.6	211.7
5.	Chhattisgarh	571.0	487.7	322.9	55.0	44.0
6.	Goa	54.0	19.1	20.0	4.5	1.9
7.	Gujarat	3103.0	1998.9	1876.1	66.0	45.0
8.	Haryana	1512.0	1631.0	1578.1	42.5	34.0
9.	Himachal Pradesh	303.0	161.0	138.3	10.0	8.0
10.	Jharkhand	1183.5	588.9	471.1	NF	NF
11.	Jammu & Kashmir	1108.0	382.5	366.8	NF	NF
12.	Karnataka	3474.0	1585.4	1541.7	221.3	177.0
13.	Kerala	1679.0	640.0	603.8	50.0	40.0
14.	Madhya Pradesh	11361.0	2256.1	2149.5	125.0	100.0
15.	Maharashtra	4852.0	2942.6	2557.7	158.0	126.4
16.	Manipur	469.0	75.5	62.3	14.5	11.6
17.	Meghalaya	148.0	51.0	47.3	12.5	10.0
18.	Mizoram	70.0	16.7	14.1	1.7	1.3
19.	Nagaland	75.0	76.6	65.6	9.4	7.5
20.	Orissa	5203.0	1474.1	1337.6	132.4	105.9
21.	Punjab	2967.0	3427.6	3367.8	NF	NF
22.	Rajasthan	2378.0	2447.1	2361.8	50.0	40.0
23.	Sikkim	50.0	29.7	23.6	5.0	4.0
24.	Tamil Nadu	4032.0	2123.4	2119.5	9.0	7.2
25.	Tripura	181.0	109.7	96.1	32.4	25.9
26.	Uttar Pradesh	17481.0	21599.4	17279.6	3616.8	2893.4
27.	Uttranchal	518.0	501.0	400.8	11.8	9.5
28.	West Bengal	4618.0	3792.5	3098.1	NF	NF
Total U.Ts.		46.0	43.7	35.4	4.4	3.5
Grand Total		81428.0	56900.1	49047.9	5228.3	4173.1

Source : Annual Document 2003-04/ Planning Commission

Remarks : PC - Potential Created PU - Potentioal Utilisation

NF : Not Furnished

Totals may not tally due to rounding off.

**TABLE : 2.22 STATE-WISE PHYSICAL ACHIEVEMENTS OF IRRIGATION POTENTIAL
CREATED AND UTILISED -
MAJOR, MEDIUM & MINOR IRRIGATION**

(000 Hectare)

Sl. No.	State/U.T	Ultimate Irrigation Potential	Achievement upto IX Plan March 02		Target for X Plan	
			PC	PU	PC	PU
1	2	3	4	5	6	7
1	Andhra Pradesh	11260.00	6322.68	5832.79	935.28	637.22
2	Arunachal Pradesh	168.00	99.52	77.40	24.00	18.60
3	Assam	2870.00	847.54	668.48	232.20	168.35
4	Bihar	10887.00	7396.44	5474.29	1213.02	611.68
5	Chhattisgarh	1717.93	1410.20	1083.60	360.00	242.25
6	Goa	116.00	40.31	35.33	31.20	16.55
7	Gujarat	6103.00	3429.14	3176.97	1970.00	1282.60
8	Haryana	4512.00	3730.44	3428.09	161.50	111.35
9	Himachal Pradesh	353.00	174.35	145.81	18.00	13.20
10	Jharkhand	2460.00	943.34	701.54	315.00	204.75
11	Jammu & Kashmir	1358.00	562.19	535.55	25.00	16.25
12	Karnataka	5974.00	3706.52	3386.56	1221.18	826.93
13	Kerala	2679.00	1249.51	1162.63	140.00	98.50
14	Madhya Pradesh	16214.07	3643.03	3025.11	390.30	227.20
15	Maharashtra	8952.00	6181.60	4704.96	1433.43	956.08
16	Manipur	604.00	231.49	173.34	42.60	29.86
17	Meghalaya	168.00	50.97	47.31	12.50	10.00
18	Mizoram	70.00	16.69	14.08	1.66	1.33
19	Nagaland	85.00	76.56	65.63	9.43	7.54
20	Orissa	8803.00	3300.68	3131.72	597.44	408.20
21	Punjab	5967.00	5970.04	5853.81	160.30	104.20
22	Rajasthan	5128.00	4929.25	4675.67	463.80	308.97
23	Sikkim	70.00	29.67	23.61	5.00	4.00
24	Tamil Nadu	5532.00	3672.69	3668.81	18.40	13.32
25	Tripura	281.00	114.55	100.59	32.40	25.92
26	Uttar Pradesh	29635.00	29509.49	23613.62	4617.56	3543.93
27	Uttranchal	864.00	781.28	586.21	18.00	13.53
28	West Bengal	6918.00	5475.81	4625.24	700.00	455.00
Union Territories		144.00	50.20	39.40	4.40	3.50
All India Total		139893.00	93946.38	80058.10	15154.60	10360.90

Source : Annual Document 2003-04/ Planning Commission

Remarks : PC - Potential Created PU - Potentioal Utilisation
Totals may not tally due to rounding off.

**TABLE 2.23 STATE-WISE VARIATION IN IRRIGATION
POTENTIAL UTILISATION AND GROSS
IRRIGATED AREA UPTO 2001-02**

(Unit : '000 Hactare)

Sl. No.	Name of the State/UTs.	Potential Utilised Upto 2001-02	Gross Irrigated Area (GIA) 2001-02 (Agr.Deptt.)	Variation (absolute) (3-4)	% Variation to GIA
1	2	3	4	5	6
1.	Andhra Pradesh	5833	5549	284	5.1
2.	Arunachal Pradesh	77	43	34	80
3.	Assam	668	216	452	209
4.	Bihar	5474	4539	935	21
5.	Chattishgarh	1084	1227	-143	-12
6.	Goa	35	38	-3	-7
7.	Gujarat	3177	3572	-395	-11
8.	Haryana	3428	5311	-1883	-35
9.	Himachal Pradesh	146	181	-35	-19
10.	Jammu & Kashmir	536	449	87	19
11.	Jharkhand	702	222.00	480	216
12.	Karnataka	3387	3089	298	10
13.	Kerala	1163	432	731	169
14.	Madhya Pradesh	3025	4899	-1874	-38
15.	Maharashtra	4705	3938	767	19
16.	Manipur	173	75	98	131
17.	Meghalaya	47	76	-29	-38
18.	Mizoram	14	17	-3	-17
19.	Nagaland	66	80	-14	-18
20.	Orissa	3132	2546	586	23
21.	Punjab	5854	7710	-1856	-24
22.	Rajasthan	4676	6744	-2068	-31
23.	Sikkim	24	18	6	31
24.	Tamil Nadu	3669	3412	257	8
25.	Tripura	101	59	42	70
26.	Uttar Pradesh	23614	17713	5901	33
27.	Uttaranchal	586	542	44	8
28.	West Bengal	4625	3661	964	26
Total States		80020	76358	3662	4.8
Total U.Ts.		39	85	-46	-53.6
Grand Total		80058	76443	3615	4.7

Source : (i) Annual document 2003-04(Planning Commission)
(ii) Ministry of Agriculture (DE & S

Note : Totals may not tally due to rounding off.

**TABLE 2.24 STATEWISE ACHIEVEMENTS UNDER ACCELERATED
IRRIGATION BENEFIT PROGRAMME (AIBP) (AS ON 31.03.05)**

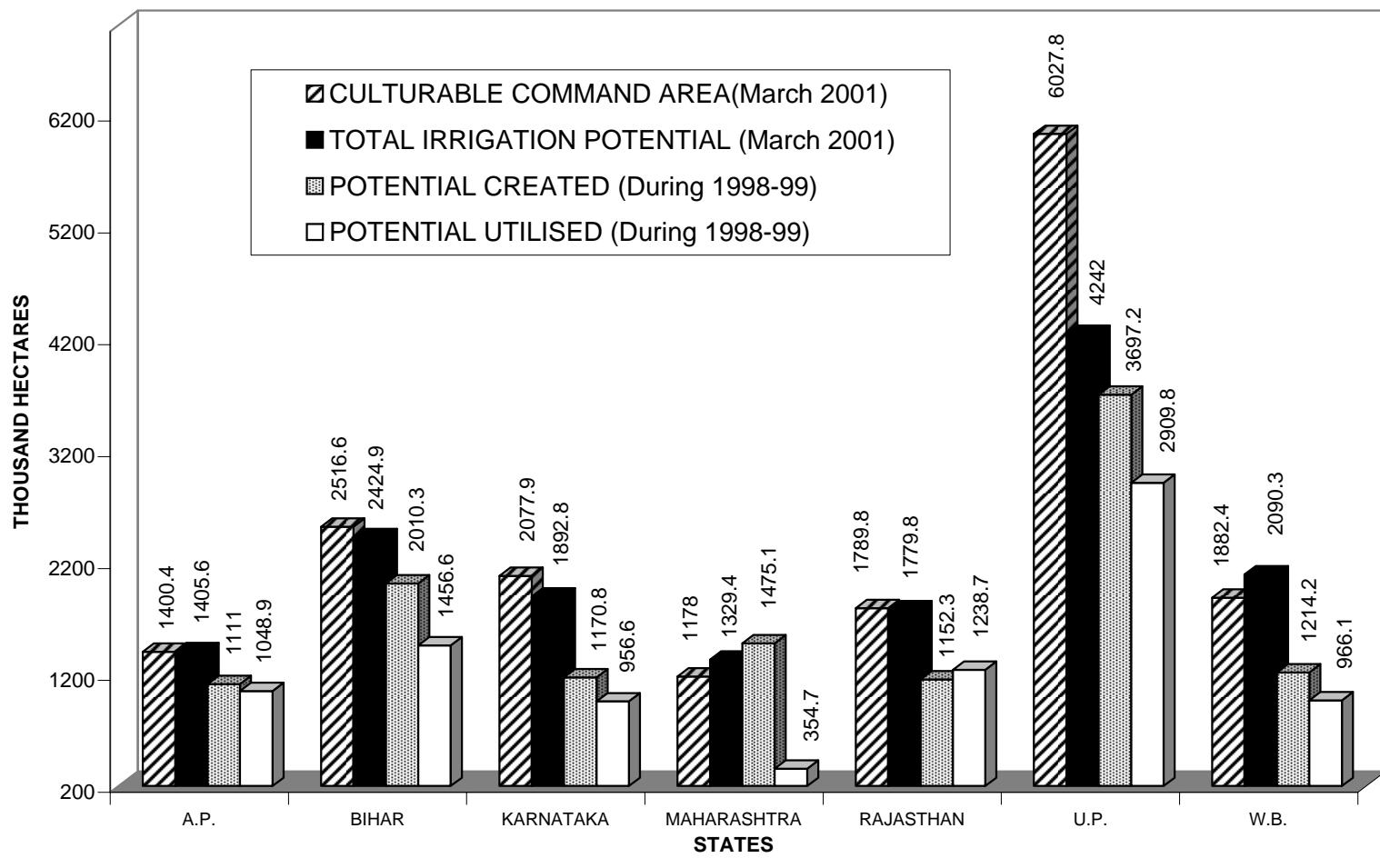
S.No.	Name of the State	CLA RELEASED		Ultimate Irrigation Potential (000 Ha.)	Potential Created	
		Normal (Crore)	Fast Track (Crore)		Normal (000 Ha.)	Fast Track (000 Ha.)
1	2	3	4	5	6	7
1	Andhra Pradesh	616.95	313.66	284.09	139.22	64.47
2	Assam	98.10		166.41	58.91	
3	Bihar	454.90		575.15	182.44	
4	Jharkhand	77.81		49.01	11.62	
5	Goa	130.86		34.14	7.69	
6	Gujarat	3761.92	280.50	275.27	187.02	100.77
7	Haryana	78.03		131.97	90.35	
8	Himachal Pradesh	61.17		33.15	1.10	
9	Jammu & Kashmir	80.18		31.54	12.70	
10	Karnataka	2142.66	126.35	618.03	262.58	8.25
11	Kerala	123.70		44.01	29.26	
12	Madhya Pradesh	1703.66	163.03	355.35	52.37	0.00
13	Chattisgarh	126.84	140.49	65.58	49.94	23.57
14	Maharashtra	926.95	56.52	291.07	136.31	2.00
15	Manipur	109.80		51.95	0.00	
16	Mrghalaya	4.00		4.78	0.00	
17	Orissa	759.31	110.82	303.63	79.28	18.46
18	Punjab	415.47		93.91	93.91	
19	Rajasthan	1228.96	179.41	325.49	257.55	18.00
20	Tamil Nadu	20.00		0.00	0.00	
21	Tripura	32.72		22.25	3.24	
22	U.P. / Uttranchal	1827.47	84.05	1527.00	672.75	21.56
23	West Bengal	166.13		678.07	68.58	
Grand Total		14947.59	1454.83	5961.86	2396.82	257.08

Source : Central Water Commission (PMO)

3. COMMAND AREA DEVELOPMENT AND TRIBAL SUB – PLAN AREA

Chart : 15

STATEWISE CULTURABLE COMMAND AREA, IRRIGATION POTENTIAL CREATED AND UTILISED UNDER CAD PROGRAMME



**TABLE:3.1 STATE-WISE IRRIGATION POTENTIAL CREATED
& UTILISED IN THE PROJECTS UNDER CAD PROGRAMME**

(Unit : '000 Hactare)

Sl. No.	Name of the State/ Uts.	As on 31-3-2001			During	
		No. of Projects	Culturable Command Area	Total Irrigation Potential	(1998-99)	
			P	U		
1	2	3	4	5	6	7
1	Andhra Pradesh	5	1400.4	1405.6	1111.0	1048.9
2	Arunachal Pradesh	8	8.2	8.2	0.7	0.7
3	Assam	7	105.5	148.4	124.4	66.7
4	Bihar	7	2516.6	2424.9	2010.3	1456.6
5	Chhatisgarh	10	711.9	672.7	-	-
6	Goa	2	16.5	25.9	6.4	4.1
7	Gujarat	32	984.4	1099.8	936.7	617.8
8	Haryana	7	646.4	469.5	267.7	161.7
9	Himachal Pradesh	9	16.0	21.3	13.2	9.3
10	Jammu & Kashmir	10	67.6	101.1	74.2	46.2
11	Karnataka	15	2077.9	1892.8	1170.8	956.6
12	Kerala	16	197.7	379.0	303.8	279.5
13	Madhya Pradesh	13	945.8	1121.9	1506.4	1048.2
4	Maharashtra	16	1178.0	1329.4	1475.1	354.7
15	Manipur	9	58.3	92.5	57.2	34.3
16	Meghalaya	3	3.6	5.6	1.4	1.1
17	Mizoram	3	1.1	1.1	-	-
18	Nagaland	1	0.4	0.5	0.5	0.3
19	Orissa	13	782.4	1159.4	1045.2	901.8
20	Punjab	2	207.1	310.2	577.0	492.0
21	Rajasthan	5	1789.8	1779.8	1152.3	1238.7
22	Sikkim	2	2.2	2.2	-	-
23	Tamil Nadu	12	1068.4	1104.2	969.1	847.4
24	Tripura	1	4.5	4.5	0.0	0.0
25	Uttar Pradesh	21	6027.8	4242.0	3697.2	2909.8
26	West Bengal	4	1882.4	2090.3	1214.2	966.1
27	Dadra & N.Haveli	*	8.3	8.3	0.0	0.0
28	Daman & Diu	*	3.4	3.4	0.0	0.0
Total		233	22712.5	21904.5	17714.5	13442.3

Source : Ministry of Water Resources (CAD Wing).

P : Potential Created, **U**: Potential Utilised.

Note : Totals may not tally due to rounding off.

* : Damanganga Project falls under Gujarat, Daman & Diu and Dadra & Haveli. It is being counted once under Gujarat, though CCA etc., falling under the respective State/U.T. have been indicated against them.

**TABLE:3.2 STATE WISE CUMULATIVE PHYSICAL ACHIEVEMENTS
OF VARIOUS ACTIVITIES UNDER CAD PROGRAMME
UPTO MARCH 2004 (PROVISIONAL)**

(Thousand Hectare)

Sl. No.	Name of the State/Uts.	F.C	L L	W B	F D
1	2	3	4	5	6
1	Andhra Pradesh	686.6	369.6	440.1	9.1
2	Arunachal Pradesh	5.5	0.1	2.0	4.1
3	Assam	56.6	0.1	79.4	22.1
4	Bihar	1303.1	1.3	90.2	0.1
5	Chattishgarh	13.8	0.0	0.6	0.0
6	Goa	10.4	0.8	20.1	0.0
7	Gujarat	889.9	177.2	695.2	2.9
8	Haryana	467.4	37.3	298.3	0.0
9	Himachal Pradesh	18.6	0.0	18.9	4.6
10	Jammu & Kashmir	87.4	40.6	344.6	19.2
11	Jharkhand	0.0	0.0	0.0	0.0
12	Karnataka	1215.4	772.1	321.8	55.5
13	Kerala	176.7	1.4	148.1	117.7
14	Madhya Pradesh	1049.1	44.2	417.8	37.8
15	Maharashtra	1230.0	586.0	482.9	432.9
16	Manipur	55.2	9.8	23.2	13.2
17	Meghalaya	1.5	0.7	3.3	0.0
18	Mizoram	0.4	0.1	0.1	0.3
19	Nagaland	2.8	0.0	3.9	9.6
20	Orissa	427.8	16.4	628.8	131.0
21	Punjab	257.4	0.0	8.3	0.0
22	Rajasthan	1252.9	121.5	661.6	39.2
23	Sikkim	0.2	0.0	0.2	0.1
24	Tamil Nadu	963.2	0.3	858.2	43.8
25	Tripura	0.3	0.0	0.2	0.1
26	Uttar Pradseh	6327.1	8.5	5113.0	393.4
27	Uttranchal	1.4	0.0	0.4	0.0
28	West Bengal	125.6	3.1	0.2	0.0
TOTAL		16626.3	2191.1	10661.4	1336.7

Source : Ministry of Water Resources (CAD Wing)

Remarks: F.C- Field Channels,L.L -Land Levelling W.B - Warabandi

F.D - Field Drains

**TABLE :3.3 STATEWISE EXPENDITURE (STATE SECTOR)
UNDER CAD PROGRAMME**

(Rs. Lakh)

Sl. No.	Name of the State/UTs.	EXPENDITURE		
		Upto IX Plan	X Plan 2002-2007 Approved Outlay	Approved outlay 2003-04
1	2	3	4	5
1	Andhra Pradesh	25192	6622	797
2	Arunachal Pradesh	749	1700	200
3	Assam	6472	4764	341
4	Bihar	17921	15005	2270
5	Goa	2534	1250	244
6	Chhattisgarh	157	676	158
7	Gujarat	19512	3405	612
8	Haryana	29281	10285	1200
9	Himachal Pradesh	1103	950	211
10	Jammu & Kashmir	4891	4219	856
11	Jharkhand	0	0	100
12	Karnataka	34281	13707	2210
13	Kerala	13017	7500	1150
14	Madhya Pradesh	32864	3740	667
15	Maharashtra	108215	105675	1800
16	Manipur	2384	2189	520
17	Meghalaya	381	165	20
18	Mizoram	47	140	15
19	Nagaland	89	300	933
20	Orissa	8005	3575	360
21	Punjab	22500	15000	2400
22	Rajasthan	93030	19351	3539
23	Sikkim	11	1500	5
24	Tamil Nadu	20778	17500	1384
25	Tripura	65	0	0
26	Uttar Pradesh	56487	40000	4000
27	Uttaranchal	0	0	0
28	West Bengal	5263	5205	244
29	Dadra & Nagar Haveli	345	140	18
30	Daman & Diu	60	100	0
TOTAL		505641	284663	26254

Source : Ministry of Water Resources (CAD Wing)

Planning Commission (WR Division) / Annual Plan Document

Note : Totals may not tally due to rounding off.

Chart : 16

STATE WISE EXPENDITURE UNDER CAD PROGRAMME (STATE SECTOR UPTO IX PLAN)

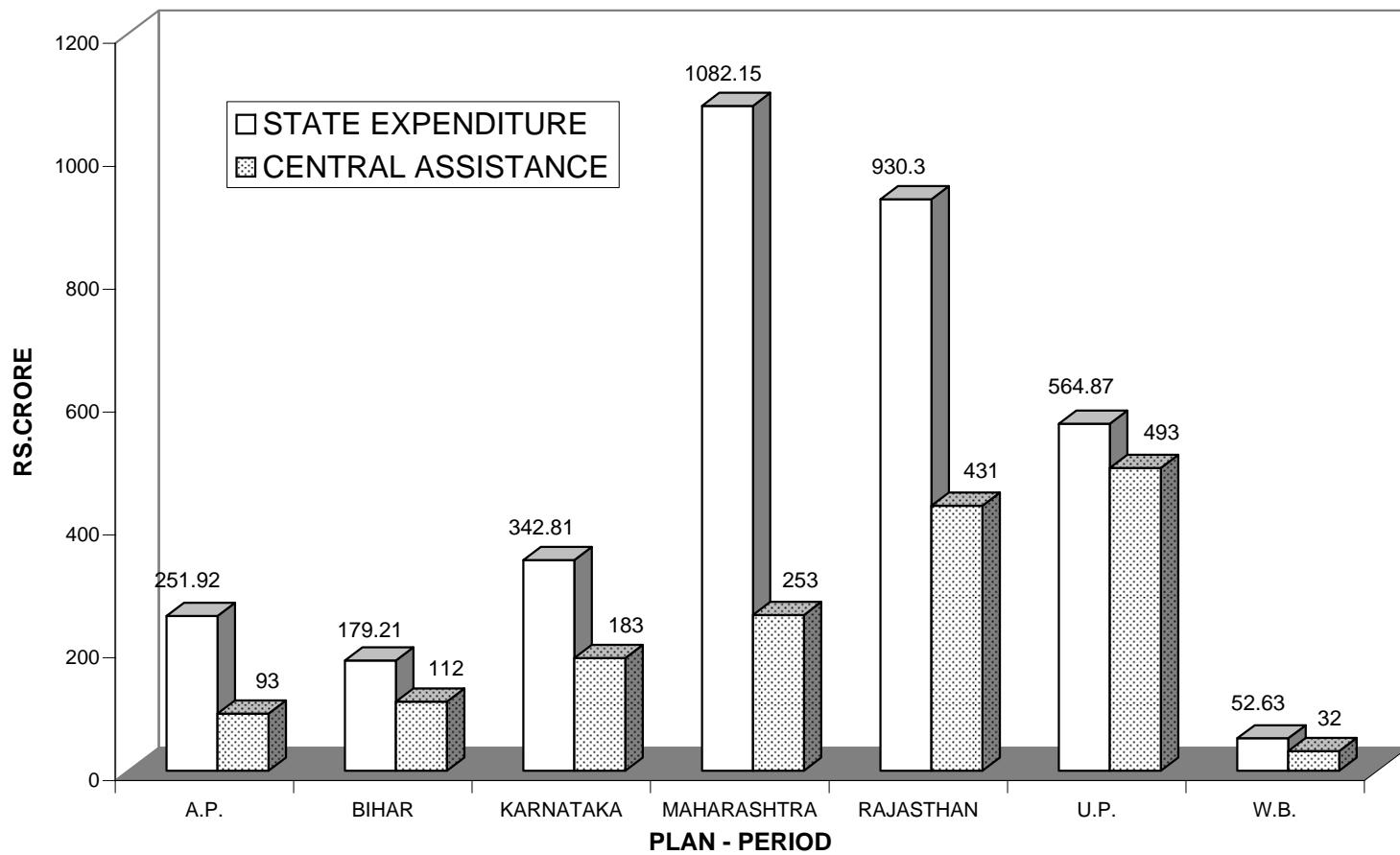


TABLE :3.4 STATE-WISE RELEASE OF CENTRAL ASSISTANCE TO STATES UNDER CAD PROGRAMME

(Rs. Crore)

SI No	Name of the States/ U.Ts.	Upto VIII Plan (1992-97)	During			Total Upto 31-01-05
			IX Plan 1997-02	2003-04	2004-05*	
1	2	3	4	5	6	7
1	Andhra Pradesh	54.6	38.4	0.0	0.0	93.0
2	Arunachal Pradesh	0.0	0.5	0.0	0.0	1.7
3	Assam	18.7	1.9	0.0	0.0	20.7
4	Bihar	109.2	3.0	0.0	6.3	118.5
5	Chhattisgarh	0.0	0.5	1.7	0.3	4.0
6	Goa	9.0	0.2	0.0	0.0	9.2
7	Gujarat	98.4	10.9	0.0	0.0	109.3
8	Haryana	83.7	60.8	0.0	17.0	167.7
9	Himachal Pradesh	4.1	3.7	1.2	0.4	11.2
10	Jammu & Kashmir	18.8	10.1	4.2	0.0	36.5
11	Jharkhand	0.0	0.0	0.0	0.0	0.0
12	Karnataka	110.3	72.8	26.5	20.3	256.5
13	Kerala	64.8	30.5	1.1	0.7	97.0
14	Madhya Pradesh	82.6	5.6	2.0	4.4	100.8
15	Maharashtra	214.4	38.8	2.1	0.0	258.7
16	Manipur	8.1	4.6	1.2	0.0	16.1
17	Meghalaya	0.6	0.2	0.2	0.0	1.0
18	Mizoram	0.0	0.0	0.1	0.0	0.3
19	Nagaland	0.1	1.5	0.0	0.0	1.6
20	Orissa	46.8	29.1	3.0	0.6	82.2
21	Punjab	0.0	59.9	10.0	0.0	86.1
22	Rajasthan	301.1	130.1	20.4	0.0	480.9
23	Sikkim	0.0	0.0	0.0	0.0	0.1
24	Tamilnadu	95.0	84.1	20.3	19.5	241.9
25	Tripura	0.1	0.0	0.0	0.0	0.1
26	Uttar Pradesh	339.4	153.4	47.4	14.6	577.7
27	Uttranchal	0.0	0.0	0.0	0.0	0.8
28	West Bengal	20.8	11.0	0.0	0.0	34.6
29	Dadra & Nagar haveli	0.0	0.0	0.0	0.0	0.0
30	Daman Diu	0.0	0.0	0.0	0.0	0.0
Grant for Studies		7.4	11.2	0.0	0.0	18.6
TOTAL		1688.0	762.8	141.4	84.1	2826.8

Source : Ministry of Water Resources (CAD Wing) & Planning Commission (WR Division)

Note : Total May not tally due to rounding off. * : Up to 31 January 2005.

**TABLE : 3.5 MAJOR AND MEDIUM IRRIGATION PROJECTS
COVERED UNDER TRIBAL SUB-PLAN (TSP) AREA
(ALL INDIA FINANCIAL PROGRESS)**

Unit: (Rs.Crore)

Sl. No.	Stage	Number of Projects			Latest Estimated Completed Cost	Expenditure	
		Major	Medium	ERM		Up to end of IX Plan	X Plan 2002-07 Outlay
1	2	3	4	5	6	7	8
1	Completed Pre-Tribal Sub Plan Benefiting TSP Area Project	32	118	5	303.2	303.2	-
2	Projects Under TSP Area Completed During V Plan	3	22	0	55.2	55.2	-
3	Projects Under TSP Area Completed during 1978-80	1	4	0	13.1	13.1	-
4	Project Under TSP Area Completed during VI plan	11	58	2	642.8	642.8	-
5	Project under TSP area Completed during VII Plan	2	59	4	407.7	407.7	-
6	Project under TSP Completed during 1990-93	0	8	1	164.3	164.3	-
7	Project under TSP Completed during VIII Plan	3	21	1	671.7	671.7	-
8	Project Under TSP Completed during IX Plan	15	31	3	3219.7	3219.7	-
9	Ongoing Projects	79	130	23	75171.7	44894.0	26481.5
10	New Projects in X Plan	13	29	4	15599.0	3.2	646.0
TOTAL		159	480	43	96248.4	50374.7	27127.5

Source: Central Water Commission (NWP Directorate)

ERM: Extension, Renovation and Management

**TABLE: 3.6 MAJOR AND MEDIUM IRRIGATION PROJECTS
COVERED UNDER TRIBAL SUB-PLAN (TSP) AREA
(ALL INDIA PHYSICAL BENEFITS)**

(Unit : '000 Hectare)

Sl. No.	Stage	Irrigation Potential		Benefit upto the end of IX Plan		Benefit during 2002-03 (Target)	
		Ultimate	TSP * Area	P	U	P	U
1	2	3	4	5	6	7	8
1	Completed Pre-Tribal Sub Plan Benefiting TSP Area	2,253.0	29.1	2,253.0	-	-	-
2	Projects Under TSP Area Completed During V Plan	228.6	4.2	228.6	-	-	-
3	Projects Under TSP Area Completed during 1978-80	11.1		11.1	-	-	-
4	Project Under TSP Area Completed during VI plan	1,264.4	201.9	1,264.4	-	-	-
5	Project under TSP area Completed during VII Plan	297.6	26.2	297.6	-	-	-
6	Project under TSP Completed during 1990-93	59.1	38.4	59.1	-	-	-
7	Project under TSP Completed during VIII Plan	493.5	25.9	493.5	-	-	-
8	Project Under TSP Area Completed During IX Plan	1,593.8	289.9	1,593.8	-	-	-
9	On going Project	10,617.2	759.2	3,085.5	1156.7	134.9	39.1
10	New Projects in X Plan	1,533.4	74.5	0.0	0.0	0.0	0.0
TOTAL		18,351.8	1,449.3	9,286.6	1156.7	134.9	39.1

Source : Central Water Commission, (NWP Directorate)

P = Potential Created

U = Potential Utilised

Note: Totals May not tally due to rounding off.

* : This Column contains data of Gujarat, Orissa, Rajasthan and Madhya Pradesh

**TABLE : 3.7 MAJOR AND MEDIUM IRRIGATION PROJECTS UNDER
TRIBAL SUB-PLAN (ON-GOING) FINANCIAL PROGRESS**

(Rs. in Crore)

Sl. No.	Name of The State	No. of Projects			Latest Esti- mated Compl- eted Cost	Expenditure	
		Maj.	Med.	ERM		Up to end of IX Plan	During X Plan 2002-07 Outlay
1	2	3	4	5	6	7	8
1	Andhra Pradesh	5	10	2	5577	2656	1498
2	Assam	4	5	2	897	409	167
3	Jharkhand	5	17	0	8026	1342	932
4	Gujarat	3	24	0	14730	16393	11718
5	Kerala	3	5	2	2317	518	606
6	Karnataka	4	2	3	2926	1465	955
7	Madhya Pradesh	11	3	2	12237	3094	2263
8	Maharashtra	27	40	1	15337	9019	3947
9	Manipur	2	1	1	703	360	340
10	Orissa	8	6	3	7042	2884	2819
11	Rajasthan	1	1	1	841	517	157
12	Tamil Nadu	1	0	0	11	996	66
13	West Bengal	2	9	6	2513	3985	264
14	Chattisgarh	3	7	0	2017	1255	750
TOTAL		79	130	23	75172	44894	26482

Source: Central Water Commission (NWP Directorate)

**TABLE : 3.8 MAJOR AND MEDIUM & ERM IRRIGATION PROJECTS UNDER
TRIBAL SUB-PLAN (TSP) Area (ON - GOING) PHYSICAL BENEFITS
('000 Hactare)**

Sl. No.	Name of State	Ultimate Potential		Benefits up to end of IX Plan		Benefit During 2002-03 (Target)	
		Total	T.S.P Area	P	U	P	U
1	2	3	4	5	6	7	8
1	Andhra Pradesh	1408.96	NA	1121.46	944.63	NA	NA
2	Assam	231.15	NA	89.50	-	17.80	-
3	Jharkhand	550.93	NA	67.14	-	70.15	-
4	Gujarat	1975.15	168.63	0.15	-	3.22	2.50
5	Kerala	148.97	NA	-	-	-	-
6	Karnataka	301.53	NA	103.42	-	-	-
7	Madhya Pradesh	1464.27	22.10	118.70	1.10	39.40	0.10
8	Maharashtra	1862.86	NA	841.32	-	-	-
9	Manipur	55.99	NA	4.00	3.20	-	-
10	Orissa	1234.53	444.94	272.80	148.81	1.30	33.44
11	Rajasthan	132.11	123.50	94.44	58.98	3.00	2.10
12	Tamil Nadu	-	NA	-	-	-	-
13	West Bengal	662.26	NA	122.66	-	-	-
14	Chattisgarh	588.52	NA	249.90	-	-	-
TOTAL		10617.23	759.17	3085.49	1156.72	134.87	38.14

Source: Central Water Commission (NWP Directorate)

Note : P - Potential Created, U - Potential Utilised

**TABLE : 3.9 MAJOR MEDIUM & ERM IRRIGATION PROJECTS
UNDER TRIBAL SUB-PLAN AREAS NEW SCHEMES
DURING IX PLAN (FINANCIAL PROGRESS)**

(Rs.Crore)

Sl. No.	Name of The State	No. Of Projects			Latest Esti- mated/ Compl- eted Cost	Expe- nditure upto end of IX Plan	X Plan (2002- 2007) Outlay	Annual plan 2002-03
		Major	Med- ium	ERM				
1	2	3	4	5	6	7	8	9
1	Andhra Pradesh	3	7	2	12524	0.88	231	NA
2	Assam	0	2	0	70	0	61	NA
3	Gujarat	0	5	0	125	0	24	0
4	Madhya Pradesh	2	1	0	659	1.70	165	13
5	Orissa	2	2	0	1367	0	24	0
6	West Bengal	6	12	2	854	0.62	141	3
TOTAL		13	29	4	15599	3.22	646	16

Source : Central Water Commission (NWP Dte.)

**TABLE : 3.10 MAJOR AND MEDIUM & ERM IRRIGATION PROJECTS
UNDER TRIBAL SUB-PLAN (TSP) AREAS NEW
SCHEMES IN IX PLAN (PHYSICAL BENEFITS)**
(000' Ha.)

Sl. No.	Name of The State	Ultimate Potential		Benefits During IX Plan Anticipated	
		Total	TSP Area	P	U
		1	2	3	4
1	Andhra Pradesh	732.00	NA	7.67	7.67
2	Assam	19.50	NA	-	-
3	Gujarat	8.59	8.59	-	-
4	Madhya Pradesh	49.74	NA	-	-
5	Orissa	175.50	65.88	1.50	-
6	West Bengal	552.06	NA	-	-
TOTAL		1533.39	74.47	9.17	7.67

Source : Central Water Commission (NWP Dte.)

P : Potential Created **U** : Potential Utilised

4. RURAL & URBAN WATER SUPPLY

**TABLE : 4.1 * STATUS OF RURAL HABITATIONS OF WATER SUPPLY
PROGRAMME(PROVISIONAL)**

(UNIT:NUMBER)

Sl. No.	Name of the State/UT	Status As On 1-4-2004 (Provisional)			
		NC	PC	FC	Total
1	2	3	4	5	6
1.	Andhra Pradesh	0	732	69000	69732
2.	Arunachal Pradesh	253	686	3359	4298
3.	Assam	305	11625	58625	70555
4.	Bihar	0	0	105340	105340
5.	Chhattisgarh	0	0	50379	50379
6.	Goa	3	29	363	395
7.	Gujarat	1	58	30210	30269
8.	Haryana	0	0	6745	6745
9.	Himachal Pradesh	0	7800	37567	45367
10.	Jammu & Kashmir	777	2774	7633	11184
11.	Jharkhand	0	0	100096	100096
12.	Karnataka	0	8279	48403	56682
13.	Kerala	0	7651	2112	9763
14.	Madhya Pradesh	0	0	109489	109489
15.	Maharashtra	392	23974	61564	85930
16.	Manipur	0	86	2705	2791
17.	Meghalaya	13	419	8204	8636
18.	Mizoram	0	152	655	807
19.	Nagaland	40	726	759	1525
20.	Orissa	0	0	114099	114099
21.	Punjab	927	1324	11198	13449
22.	Rajasthan	2974	0	90972	93946
23.	Sikkim	0	96	1583	1679
24.	Tamil Nadu	0	0	66631	66631
25.	Tripura	0	0	7412	7412
26.	Uttar Pradesh	0	0	243508	243508
27.	Uttranchal	33	294	30657	30984
28.	West Bengal	0	0	79036	79036
29.	A & N Island	0	102	402	504
30.	Dadra & Nagar Haveli	19	41	456	516
31.	Daman & Diu	0	0	32	32
32.	Delhi	0	0	219	219
33.	Lakshadweep	0	10	0	10
34.	Pondicherry	0	108	159	267
35.	Chandigarh	0	0	18	18
All INDIA		5737	66966	1349590	1422293
Percentage		0.40	4.71	94.89	100.00

Source :- Ministry of Rural Areas Development, Deptt. Of Drinking Water Supply

NC : Not Covered, PC: Partially Covered, FC: Fully Covered

* : (As per reports received from States/UTs till 09.08.2004)

**TABLE : 4.2 COVERAGE OF RURAL POPULATION UNDER RURAL
WATER SUPPLY PROGRAMME DURING 2001-02 to 2003-2004**

(Unit : In Lakh)

Sl. No.	Name of the State/UT	Coverage During 2001-2002 Total	Coverage During 2002-2003 Total	Coverage During 2003-2004 * Total
1	2	3	4	5
1	Andhra Pradesh	23.1	28.8	40.8
2	Arunachal Pradesh	0.0	0.0	0.2
3	Assam	14.4	18.0	14.1
4	Bihar	0.0	0.0	0.0
5	Chhattisgarh	18.9	0.0	0.0
6	Goa	0.1	0.1	0.2
7	Gujarat	6.8	6.0	14.1
8	Haryana	12.4	15.1	0.0
9	Himachal Pradesh	3.0	2.7	2.0
10	Jammu & Kashmir	0.0	0.0	0.0
11	Jharkhand	0.0	0.0	0.1
12	Karnataka	11.9	9.0	18.7
13	Kerala	3.5	4.8	3.4
14	Madhya Pradesh	12.6	0.0	0.0
15	Maharashtra	17.3	15.1	16.9
16	Manipur	0.5	0.9	0.2
17	Meghalaya	0.8	0.8	0.7
18	Mizoram	1.1	1.1	1.0
19	Nagaland	0.4	0.9	0.8
20	Orissa	0.5	0.0	0.0
21	Punjab	3.2	3.7	2.5
22	Rajasthan	2.0	5.7	4.7
23	Sikkim	0.2	0.2	0.2
24	Tamil Nadu	42.4	0.0	0.0
25	Tripura	0.6	0.8	0.0
26	Uttar Pradesh	0.1	0.0	0.0
27	Uttarakhand	0.4	0.3	0.1
28	West Bengal	16.8	27.0	21.0
29	A & N Islands	0.1	0.1	0.0
30	D & N Haveli	0.2	0.2	0.3
31	Damam & Diu	0.0	0.0	0.0
32	Delhi	0.0	0.0	0.0
33	Lakshadweep	0.0	0.0	0.0
34	Pondicherry	0.1	0.3	3.2
Total		193.4	141.4	145.1

Source: Ministry of Rural Development, Deptt of Drinking Water Supply.

* : As per information received from States/ UTs till 24-08-2004

**TABLE :4.3 EXPENDITURE UNDER MINIMUM NEEDS PROGRAMME
FOR SUPPLY OF DRINKING WATER IN RURAL AREAS**

(Rs. In Crore)

Sl. No.	Name of the States/Uts	Expenditure During			
		Eighth Plan (1992-97)	Revised IX Plan (1997-02)	2002-03	2003-04
1	2	3	4	5	6
1.	Andhra Pradesh	330.01	541.58	161.18	182.40
2.	Arunachal Pradesh	57.11	114.07	28.96	29.33
3.	Assam	224.35	285.60	25.41	54.67
4.	Bihar	207.25	172.80	38.22	49.89
5.	Chhattisgarh	-	65.48	69.23	63.53
6.	Goa	27.73	57.41	8.59	10.76
7.	Gujarat	242.26	803.43	156.24	121.50
8.	Haryana	101.11	226.18	94.22	108.32
9.	Himachal Pradesh	250.94	316.63	98.56	77.32
10.	Jammu & Kashmir	212.95	286.65	80.85	162.13
11.	Jharkhand	-	21.94	39.42	50.20
12.	Karnataka	311.27	493.51	112.16	111.69
13.	Kerala	248.83	202.79	47.48	42.43
14.	Madhya Pradesh	267.50	563.10	122.75	111.93
15.	Maharashtra	716.73	2128.01	141.15	223.19
16.	Manipur	49.87	68.37	18.96	1.33
17.	Meghalaya	61.38	95.56	23.61	25.97
18.	Mizoram	21.16	45.95	13.97	17.56
19.	Nagaland	14.72	59.51	22.22	10.97
20.	Orissa	143.85	227.37	58.23	29.05
21.	Punjab	80.26	137.49	90.48	59.51
22.	Rajasthan	421.96	815.81	120.02	135.02
23.	Sikkim	26.96	55.63	12.70	10.98
24.	Tamil Nadu	307.88	1228.73	454.95	391.80
25.	Tripura	58.06	96.64	14.71	5.31
26.	Uttar Pradesh	494.47	1070.51	187.49	122.37
27.	Uttaranchal	-	127.62	43.06	105.50
28.	West Bengal	152.66	338.21	80.48	69.37
29.	A & N Islands	17.75	50.58	8.98	6.36
30.	Dadra Nagar Haveli	4.85	14.20	1.65	1.65
31.	Daman & Diu	2.83	5.21	0.00	0.00
32.	Delhi	21.46	38.49	14.06	0.75
33.	Lakshadweep	3.07	7.96	2.44	1.64
34.	Pondicherry	3.21	10.11	3.22	7.41
TOTAL		5084.44	10773.11	2395.65	2401.84

Source:- Ministry of Rural Development/Dept. Of Drinking Water Supply
ates of Chhattisgarh, Jharkhand and Uttaranchal were created during 2000-01

**TABLE : 4.4 EXPENDITURE UNDER ACCELERATED RURAL
WATER SUPPLY PROGRAMME(ARWSP)**

(Rs. Crore)

Sl. No.	Name of the State/UT	Expenditure During			
		VIII Plan 1992-97	IX Plan 1997-02 Revised	X Plan	
				2002-03	2003-04 *
1	2	3	4	5	6
1.	Andhra Pradesh	279.35	583.11	149.85	167.62
2.	Arunachal Pradesh	42.53	112.25	27.49	42.92
3.	Assam	78.03	217.67	48.49	54.62
4.	Bihar	151.38	72.39	33.09	24.28
5	Chhattisgarh	Incl. MP	61.55	26.03	29.97
6	Goa	4.73	18.60	0.24	0.87
7	Gujarat	149.97	603.64	94.92	92.06
8	Haryana	102.43	180.17	33.46	26.62
9	Himachal Pradesh	62.92	197.00	76.77	55.59
10	Jammu & Kashmir	146.45	227.71	61.21	153.29
11	Jharkhand	Incl. Bihar	44.83	33.70	14.20
12	Karnataka	234.85	532.13	130.70	144.63
13	Kerala	98.96	200.80	42.53	49.92
14	Madhya Pradesh	261.53	499.57	85.95	89.40
15	Maharashtra	265.95	1090.63	168.42	139.54
16	Manipur	18.69	18.30	11.93	0.11
17	Meghalaya	20.30	59.38	16.64	21.20
18	Mizoram	12.48	48.11	20.97	17.63
19	Nagaland	8.60	42.67	16.29	16.71
20	Orissa	129.67	241.92	65.32	47.50
21	Punjab	49.94	104.79	32.37	22.69
22	Rajasthan	413.75	789.46	298.81	251.66
23	Sikkim	22.69	30.66	6.39	10.05
24	Tamil Nadu	161.47	544.58	73.58	74.69
25	Tripura	33.53	79.25	13.36	24.38
26	Uttar Pradesh	431.46	689.10	126.83	110.86

Contd..

**TABLE : 4.4 EXPENDITURE UNDER ACCELERATED RURAL
WATER SUPPLY PROGRAMME(ARWSP)**

(Rs. Crore)

Sl. No.	Name of the State/UT	Expenditure During			
		VIII Plan 1992-97	IX Plan 1997-02 Revised	X Plan	
				2002-03	2003-04 *
1	2	3	4	5	6
27	Uttaranchal	Incl. In UP	63.75	31.70	22.45
28	West Bengal	155.83	339.59	79.30	83.62
29	Andman & Nicobar	0.00	0.00	0.00	0.00
30	Dadra & Nagar Haveli	0.00	0.50	0.00	0.00
31	Delhi	0.12	0.00	0.00	0.00
32	Lakshadweep	0.46	0.00	0.00	0.00
33	Pondicherry	1.40	0.28	0.00	0.00
34	Daman & Diu	2.92	0.00	0.00	0.00
STATES/UT's TOTAL		3342.39	7694.39	1806.32	1789.08
35	Mon & Eval	42.27	1.20	0.05	0.24
36	M & I Units (a)	45.62	10.70	2.45	2.49
37	Prof. Services	10.02	19.33	3.63	3.50
38	Mini Missions	20.38	0.00	0.00	0.00
39	SUB MISSIONS	0.09	246.56	0.00	0.00
40	CAPART (b)	38.77	16.70	0.00	0.00
41	Research	166.16	4.81	0.58	0.66
42	HRD/ Training	0.00	26.18	1.48	0.00
43	I.E.C	2.41	10.96	0.00	4.24
44	MIS	38.75	0.00	0.00	0.40
45	PM's Schemes	-	-	-	126.70
46	Sector reform & Other	32.34	2.03	1.08	1.29
GRAND TOTAL (STATES/ UT's TOTAL 1 to 46)		3739.20	8032.88	1815.58	1928.62

Source : Ministry of Rural Areas & Employment.

(a) : M & I Units : Monitoring & Integrating Units

(b) CAPART: Council for Advancement of Peopleaction & Rural technology

Note: Totals may not tally due to rounding off.

* Expenditure as per information received from states till 24-8-2004

**TABLE 4.5 POPULATION COVERED UNDER URBAN
WATER SUPPLY PROGRAMME**

(Unit : In 000)

Sl. No.	Name of the State/UT	Estimated Urban Population As On 31.03.2000	Coverage As On 31.03.2000	
			Popu- lation	%=Col(4)X 100/ Col(3)
1	2	3	4	5
1	Andhra Pradesh	19238	13915	72
2	Arunachal Pradesh	231	142	61
3	Assam	3100	800	26
4	Bihar**	11892	9514	80
5	Delhi	13300	13300	100
6	Goa	557	557	100
7	Gujarat**	16810	16534	98
8	Haryana	3705	2510	68
9	Himachal Pradesh	596	596	100
10	Jammu & Kashmir	1378	1290	94
11	Karnataka	16750	12840	77
12	Kerala	7680	6024	78
13	Madhya Pradesh	25000	25000	100
14	Maharashtra**	34309	33920	99
15	Manipur	969	657	68
16	Meghalaya	457	422	92
17	Mizoram	258	93	36
18	Nagaland	296	232	78
19	Orissa	4877	3080	63
20	Punjab	8496	5529	65
21	Rajasthan	12897	12897	100
22	Sikkim	156	145	93
23	Tamil Nadu	25525	22687	89
24	Tripura	553	463	84
25	Uttar Pradesh	33000	32600	99
26	West Bengal**	18495	15766	85
Total States		260525	231513	89
27	A & Nicobar Island	109	107	98
28	Chandigarh	762	762	100
29	Dadra & Nagar Haveli	15	14	93
30	Damman & Diu	47	7	15
31	Lakshadweep	30	20	67
32	Pondicherry	678	678	100
Total UTs		1641	1588	97
Grand Total- ALL INDIA		262166	233101	89

Source : Central Public Health Eng. & Env. Orgn, Ministry of Urban Dev.

** As on 22-11-2004 since the other States have not furnished the information

5. DOMESTIC PRODUCT

TABLE:5.1 DOMESTIC PRODUCT FROM AGRICULTURE AND ALLIED ACTIVITIES AT CURRENT PRICES

(Rs. Crore)

S. No.	Items	1999-00	2000-01	2001-02	2002-03	2003-04
1	2	3	4	5	6	7
1	Total Output	514718	518693	562024	557035	635104
	(i) Agriculture	384766	378712	412268	397870	470595
	(ii) Livestock	129952	139981	149755	159166	164509
2	Total Inputs	101170	107020	112194	114613	127365
	(I) Seed	9368	8531	10084	10081	11515
	(ii) Organic manure	6318	7257	6758	7469	8531
	(iii) Chemical Fertilisers	20618	20295	20674	20746	23695
	(iv) Current Repairs, maintenance of Fixed assets and other operational Costs	3245	3447	3725	3993	4281
	(v) Feed of livestock	44095	43737	44214	43656	46589
	(vi) Irrigation Charges	547	827	743	861	1339
	(vii) Market Charges	4973	4894	5328	5030	5745
	(viii) Electricity	2573	3114	3386	3988	4555
	(ix) Pesticides & Insecticides	986	1000	1379	1493	1644
	(x) Diesel oil	7436	10457	11930	12934	14773
	(xi) Financial Intermediation Services Indirectly measured	3011	3461	3973	4416	4698
3	Gross Domestic Product due to Agriculture & allied activities (1- 2)	411548	411673	449830	442422	507739
4	Operation of Govt. Irrigation system	10844	11850	13274	13947	13799
5	Gross Domestic Product (3+4)	422392	423523	463104	456369	521538
6	Less Consumption of Fixed Capital	20895	22083	23947	25537	27293
	Net Domestic Product	401497	401440	439157	430832	494245

Source : Central Statistical Organisation.

TABLE : 5.2 DOMESTIC PRODUCT FROM AGRICULTURE AND ALLIED ACTIVITIES AT CONSTANT (1993-94) PRICES

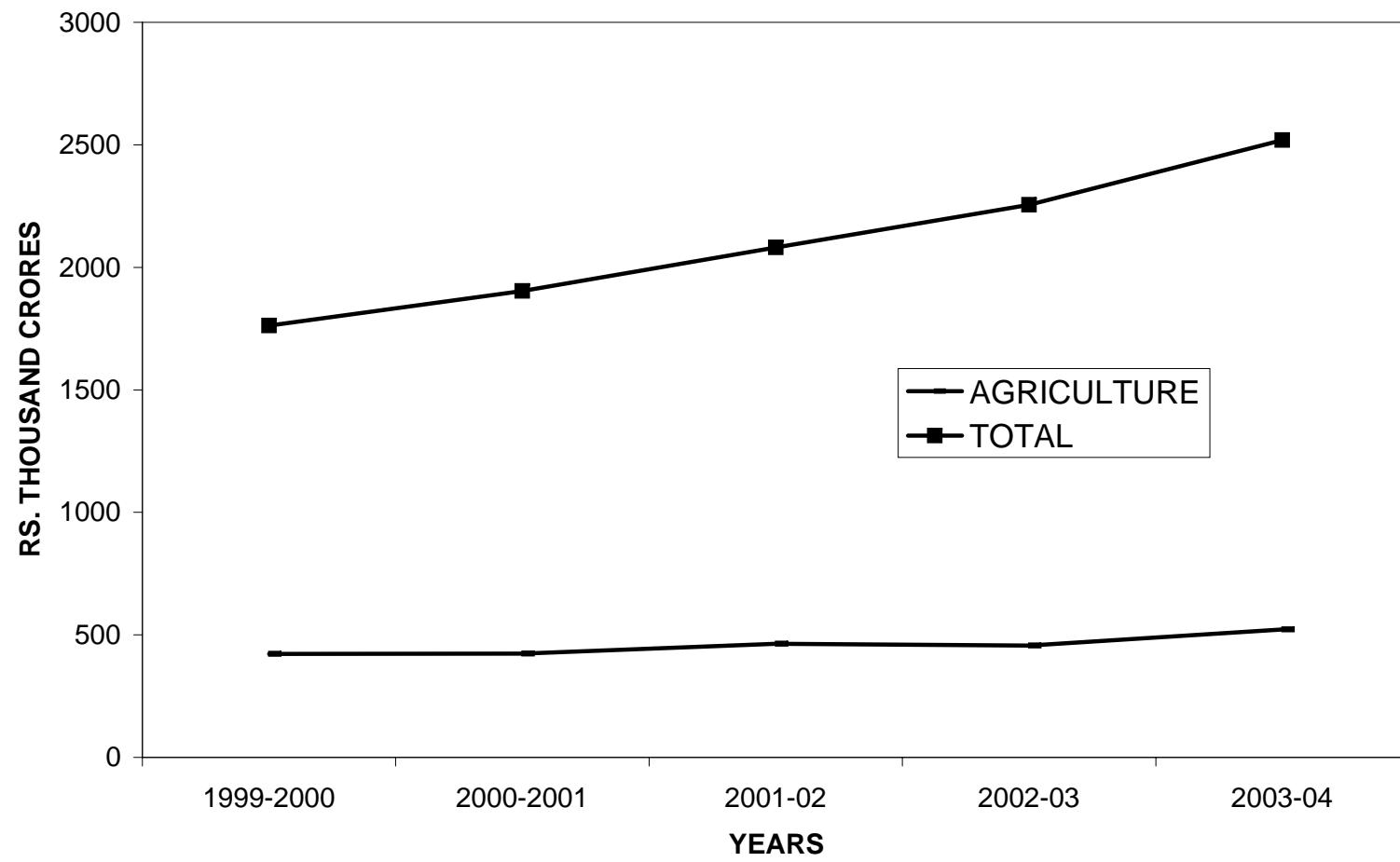
(Unit: Rs Crore)

S. No.	Items	1999-00	2000-01	2001-02	2002-03	2003-04
1	2	3	4	5	6	7
1	Total Output	324298	320920	338976	315921	346538
	I.Agriculture	241970	235469	248287	223044	251230
	ii.Livestock	82328	85451	90689	92877	95308
2	Total Inputs	67026	64815	66183	65401	69602
	I.Seed	6338	5937	6057	5864	6432
	ii.Organic manure	3385	3815	3645	3834	4205
	iii.Chemical Fertilisers	16767	14982	14648	14754	16183
	iv. Current Repairs, Maintenance of Fixed assests and other operational costs	2074	2143	2201	2296	2395
	v.Feed of livestock	25947	25004	25977	24815	25390
	vi.Irrigation Charges	446	553	556	554	561
	vii.Market Charges	3120	3046	3212	2814	3087
	viii.Electricity	1998	1840	1695	1851	2031
	ix.Pesticides & Insecticides	707	713	897	913	1001
	x.Diesel oil	4215	4444	4769	5035	5523
	xi.Financial intermediation Services indirectly Measured	2029	2338	2526	2671	2794
3	Gross Domestic Product due to Agriculture & allied activities (1-2)	257272	256105	272793	250520	276936
4	Operation of Govt.Irrigation System	5986	6091	6336	6316	6387
5	Gross Domestic Product (3+4)	263258	262196	279129	256836	283323
6	Less Consumption of Fixed Capital	13146	13600	13985	14505	14971
	Net Domestic Product (5-6)	250112	248596	265144	242331	268352

Source : Central Statistical Organisation

Chart : 17

GROSS DOMESTIC PRODUCT AT CURRENT PRICES



**TABLE : 5.3 GROSS DOMESTIC PRODUCT BY ECONOMIC ACTIVITY
AT CURRENT PRICES**

S. No.	Industry	1999-00	2000-01	2001-02	2002-03	(Rs.Crore) 2003-04
1	2	3	4	5	6	7
1	Agriculture	422392	423523	463104	456369	521538
2	Forestry & Logging	19555	22422	22621	24401	26719
3	Fishing	20017	22535	24843	27093	27026
4	Mining & Quarrying	41298	45399	47925	62116	63357
5	Manufacturing	266704	301628	320216	351824	392919
6	Electricity, Gas & Water Supply	42299	43024	44678	49883	54113
7	Construction	105297	116238	125520	139754	155834
8	Trade, Hotels & Restaurant	246037	271511	301495	332599	376518
9	Transport, storage & communication	124307	140826	157307	173422	202079
10	Financing, Insurance, Real Estate & Business Services	220559	238860	270225	310075	340102
11	Community, Social & Personal Services	253373	277033	303540	327352	359580
Gross Domestic Product at factor cost (Total 1 to 11)		1761838	1902999	2081474	2254888	2519785

Source : Central Statistical Organisation.

**TABLE : 5.4 GROSS DOMESTIC PRODUCT BY ECONOMIC ACTIVITY
AT CONSTANT (1993-94) PRICES**

(Rs.Crore)

S. No.	Industry	1999-00	2000-01	2001-02	2002-03	2003-04
1	2	3	4	5	6	7
1	Agriculture	263258	262196	279129	256836	283323
2	Forestry & Logging	12753	13064	13258	13378	13570
3	Fishing	10972	11406	12279	13179	13718
4	Mining & Quarrying	27269	27919	28608	31185	33195
5	Manufacturing	191925	206189	213681	227642	243400
6	Electricity, Gas & Water Supply	28401	29632	30715	31659	32827
7	Construction	58740	62651	65161	69911	74819
8	Trade, Hotels & Restaurant	168199	174927	190436	206046	224113
9	Transport, storage & communication	87608	98329	107395	120922	141446
10	Financing, Insurance, eal Estate & Business Services	145863	150907	157746	171463	183718
11	Community, Social & Personal Services	153379	161372	169537	176141	186419
Gross Domestic Product at Factor Cost (Total 1 to 11)		1148367	1198592	1267945	1318362	1430548

Source : Central Statistical Organisation.

TABLE : 5.5 CONTRIBUTION OF AGRICULTURE IN STATE NET DOMESTIC DOMESTIC PRODUCT AT CURRENT PRICES

S.No.	State/UT	1999-2000	2000-2001	2001-2002	2002-2003	2003-2004 (Rs Crore)
1	2	3	4	5	6	7
1	Andhra Pradesh	31232 (27)	35530 (28)	35559 (26)	33009 (22)	38745 (23)
2	Arunachal Pradesh	488 (33)	531 (33)	505 (31)	553 (31)	N.A
3	Assam	1057 (40)	9735 (34)	10175 (34)	10465 (32)	11456 (30)
4	Bihar	14303 (37)	15929 (37)	15284 (33)	17114 (33)	16529 (30)
5	Jharkhand	6693 (26)	3921 (17)	4064 (16)	4213 (15)	N.A -
6	Goa	454 (8)	388 (6)	400 (6)	479 (6)	N.A -
7	Gujarat	15369 (16)	13597 (15)	16954 (17)	16141 (14)	28782 (20)
8	Haryana	13795 (32)	14643 (30)	14578 (27)	15096 (26)	16878 (25)
9	Himachal Pradesh	2526 (23)	2749 (23)	3181 (24)	3133 (22)	N.A -
10	J&K	3562 (29)	3671 (29)	3899 (29)	NA -	N.A -
11	Karnataka	24206 (29)	25956 (28)	21487 (23)	21501 (21)	N.A -
12	Kerala	12221 (22)	10678 (17)	10265 (16)	10407 (15)	10383 (13)
13	Madhya Pradesh	22789 (33)	16556 (26)	22036 (30)	17947 (25)	27655 (31)
14	Chhattisgarh	4685 (22)	3788 (18)	5854 (23)	4117 (16)	N.A -
15	Maharashtra	33777 (16)	31061 (15)	34103 (15)	34041 (13)	32845 (11)
16	Manipur	685 (28)	750 (30)	793 (27)	837 (26)	882 (25)

Contd..

TABLE : 5.5 CONTRIBUTION OF AGRICULTURE IN STATE NET DOMESTIC DOMESTIC PRODUCT AT CURRENT PRICES

(Rs Crore)

S.No.	State/UT	1999-2000	2000-2001	2001-2002	2002-2003	2003-2004
1	2	3	4	5	6	7
17	Meghalaya	756 (26)	843 (25)	855 (24)	916 (24)	N.A. -
18	Mizoram	279 (22)	446 (27)	436 (25)	NA	N.A. -
19	Nagaland	606 (26)	942 (28)	1161 (30)	NA	N.A. -
20	Orissa	11116 (33)	9687 (29)	11218 (30)	10402 (27)	14580 (32)
21	Punjab	23138 (43)	24716 (42)	25622 (41)	24908 (40)	27679 (40)
22	Rajasthan	20405 (29)	17364 (25)	21302 (27)	15452 (21)	24426 (27)
23	Sikkim	205 (27)	234 (26)	243 (23)	246 (22)	249 (20)
24	Tamil Nadu	17887 (16)	19382 (15)	19425 (15)	15660 (12)	16533 (11)
25	Tripura	1200 (29)	1130 (23)	1250 (22)	NA	N.A. -
26	Uttar Pradesh	52576 (36)	53596 (35)	55565 (34)	56069 (32)	N.A. -
27	Uttaranchal	3389 (36)	3879 (36)	3580 (32)	NA	N.A. -
28	West Bengal	34340 (29)	34472 (27)	37473 (26)	36857 (24)	N.A. -
29	A & N Islands	175 (21)	196 (22)	246 (26)	NA	N.A. -
30	Chandigarh	52 (1)	48 (1)	53 (1)	58 (1)	65 (1)
31	Delhi	682 (1)	762 (1)	784 (1)	806 (1)	N.A. -
32	Pondicherry	146 (5)	140 (4)	130 (4)	128 (3)	125 (3)

Source : Central Statistical Organisation.

Note : Figures in brackets are percentage share of State Net Domestic Product from Agriculture in Total State Net Domestic Product. N.A.: Not Available

**TABLE : 5.6 CONTRIBUTION OF AGRICULTURE IN STATE NET
DOMESTIC PRODUCT AT CONSTANT (1993-94) PRICES**

(Unit : Rs.Crore)

S.No.	State/UT	1999-00	2000-01	2001-02	2002-03	2003-04
1	2	3	4	5	6	7
1	Andhra Pradesh	18449 (26)	21419 (28)	21125 (26)	18201 (22)	20569 (23)
2	Arunachal Pradesh	298 (31)	309 (31)	272 (29)	298 (30)	NA -
3	Assam	5189 (34)	5086 (32)	5351 (33)	5624 (34)	5234 (29)
4	Bihar	10316 (40)	13460 (42)	11220 (37)	13995 (41)	11386 (35)
5	Jharkhand	4142 (23)	4359 (22)	4587 (22)	4827 (21)	NA -
6	Goa	299 (9)	261 (7)	288 (7)	321 (8)	NA -
7	Gujarat	10628 (16)	9219 (15)	12322 (18)	10344 (14)	18863 (21)
8	Haryana	9161 (34)	9366 (32)	9344 (31)	9347 (30)	10188 (29)
9	Himachal Pradesh	1186 (18)	1276 (19)	1354 (19)	1333 (18)	NA -
10	Jammu & Kashmir	2362 (33)	2336 (32)	2462 (32)	NA -	NA -
11	Kernataka	16344 (29)	18534 (30)	15446 (25)	14915 (23)	NA -
12	Kerala	7017 (21)	5448 (16)	5312 (15)	5380 (15)	5165 (13)
13	Madhya Pradesh	15760 (33)	11083 (26)	13992 (30)	10793 (25)	16126 (31)
14	Chhattisgarh	2867 (21)	2237 (17)	3408 (22)	2307 (16)	NA -
15	Maharashtra	22834 (16)	21253 (16)	22606 (16)	22202 (15)	20575 (13)
16	Manipur	410 (26)	432 (28)	446 (26)	460 (24)	475 (22)

Contd..

TABLE : 5.6 CONTRIBUTION OF AGRICULTURE IN STATE NET DOMESTIC PRODUCT AT CONSTANT (1993-94) PRICES

(Unit : Rs.Crore)

S.No.	State/UT	1999-00	2000-01	2001-02	2002-03	2003-04
1	2	3	4	5	6	7
17	Meghalaya	530 (26)	538 (25)	538 (24)	550 (24)	NA -
18	Mizoram	NA -	NA -	NA -	NA -	NA -
19	Nagaland	455 (28)	676 (30)	795 (33)	NA -	NA -
20	Orissa	5691 (33)	5212 (28)	6285 (25)	4830 (28)	6520 -
21	Punjab	14780 (42)	15169 (41)	15316 (41)	14781 (39)	15804 (40)
22	Rajasthan	12841 (28)	11135 (25)	14233 (29)	9637 (22)	14541 (28)
23	Sikkim	123 (23)	128 (22)	130 (21)	NA -	NA -
24	Tamil Nadu	13309 (18)	13935 (17)	13930 (18)	10546 (13)	10784 (13)
25	Tripura	638 (25)	624 (21)	640 (19)	NA -	NA -
26	Uttar Pradesh	33701 (37)	33209 (36)	34022 (36)	31295 (33)	NA -
27	Uttaranchal	2034 (34)	2179 (34)	2077 (31)	NA -	NA -
28	West Bengal	18520 (25)	19028 (24)	20520 (24)	20043 (22)	NA -
29	A & N Islands	120 (21)	133 (24)	142 (25)	NA -	NA -
30	Chandigarh	31 (1)	29 (1)	30 (1)	31 (1)	32 (1)
31	Delhi	433 (1)	511 (1)	501 (1)	494 (1)	NA -
32	Pondicherry	89 (5)	91 (4)	77 (3)	72 (3)	66 (3)

Source Central Statistical Organisation

Note : Figures in brackets are percentage share of State Net Domestic Product from Agriculture in total State Net Domestic Product.

N.A. : Not Available.

6. FINANCIAL EXPENDITURE ON IRRIGATION PROJECTS

**TABLE :6.1 PLAN OUTLAY BY HEADS OF DEVELOPMENT
:CENTRE, STATES & UNION TERRITORIES**

Sl. No.	Period	Agriculture & allied activities	Irrigation & Flood Control	Power	Other	Total Outlay Rs. Crore
		% age	% age	% age	% age	
1	2	3	4	5	6	7
1	Third Plan(1961-66)	12.7	7.8	14.6	65.0	8576.5
2	Annual Plans(1966-69)	16.7	7.1	18.3	57.9	6625.4
3	Fourth Plan(1969-74)	14.7	8.6	18.8	58.1	15778.8
4	Fifth Plan(1974-79)	12.3	9.8	18.8	59.1	39426.2
5	Annual Plans(1979-80)	16.4	10.6	16.4	54.6	12176.5
	Sixth Plan(1980-85)					
6	Actual	6.1	10.0	16.7	67.2	109291.7
7	Seventh Plan (1985-90) Actual	5.8	7.6	17.3	69.2	218729.6
8	Annual Plan(1990-91) actual	5.8	6.8	19.5	67.8	58369.3
9	Annual Plan(1991-92) (Actual)	5.9	6.5	22.4	65.1	64751.2
10	Eighth Plan (1992-97) Actual	5.1	6.5	15.8	72.6	485457.2
11	Ninth Plan (1997-2002) Actual	4.9	6.5	NA	88.6	859200.0
12	X Plan 2002-07 (Outlay)	3.9	6.8	NA	NA	1525639.0
13	Annual Plan(2002-03) (RE)	3.8	6.9	12.7	76.6	233732.7
14	Annual Plan 2003-04 (BE)	3.9	6.9	13.0	76.2	256041.9

Source: Economic Survey (2003-04)Ministry of Finance

Note : N.A : Not Available

Chart : 18

AVERAGE ANNUAL FINANCIAL EXPENDITURE ON IRRIGATION AT CURRENT PRICES

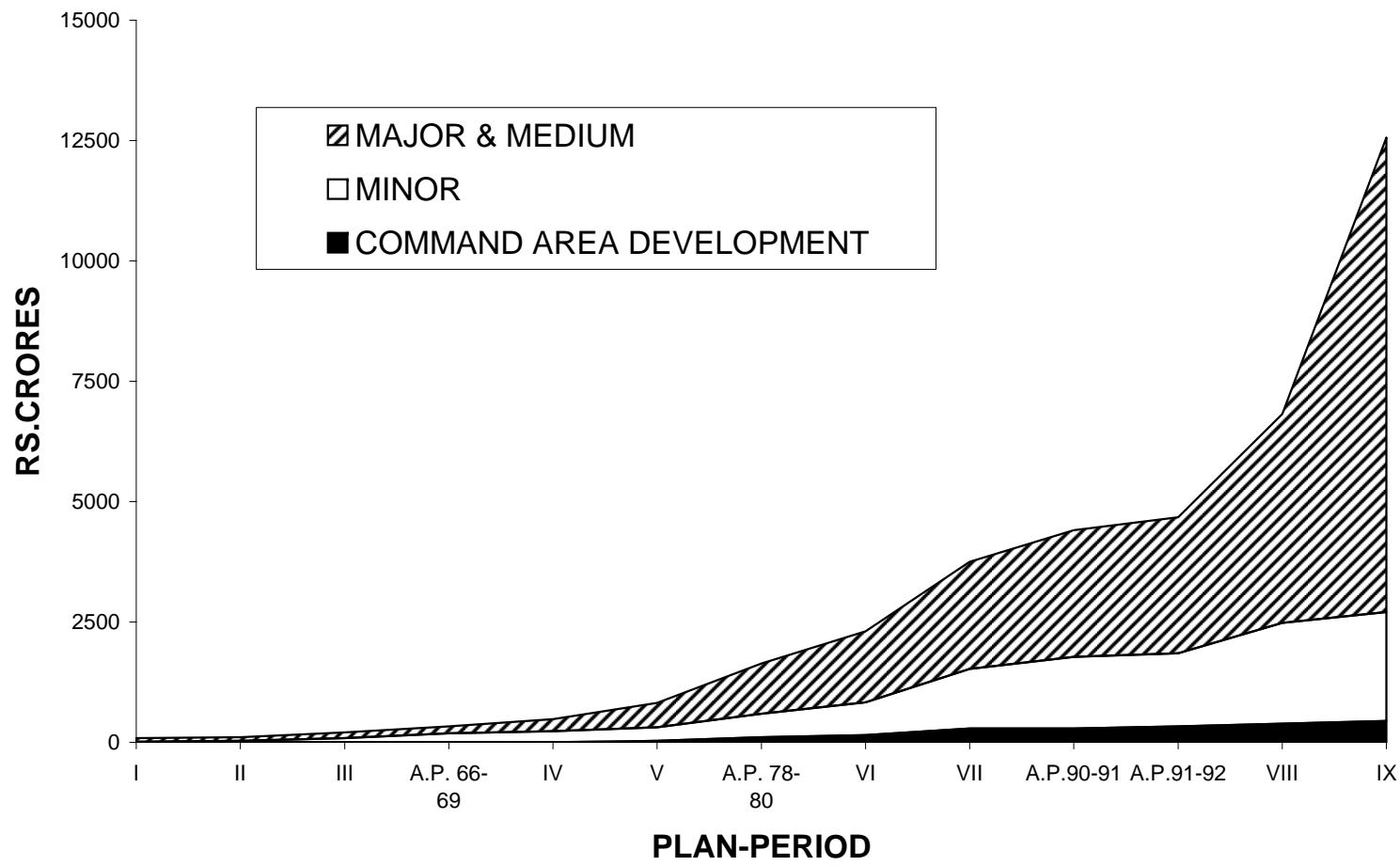


Chart : 19

PLAN WISE % SHARE OF EXPENDITURE ON IRRIGATION TO TOTAL EXPENDITURE IN ALL SECTORS

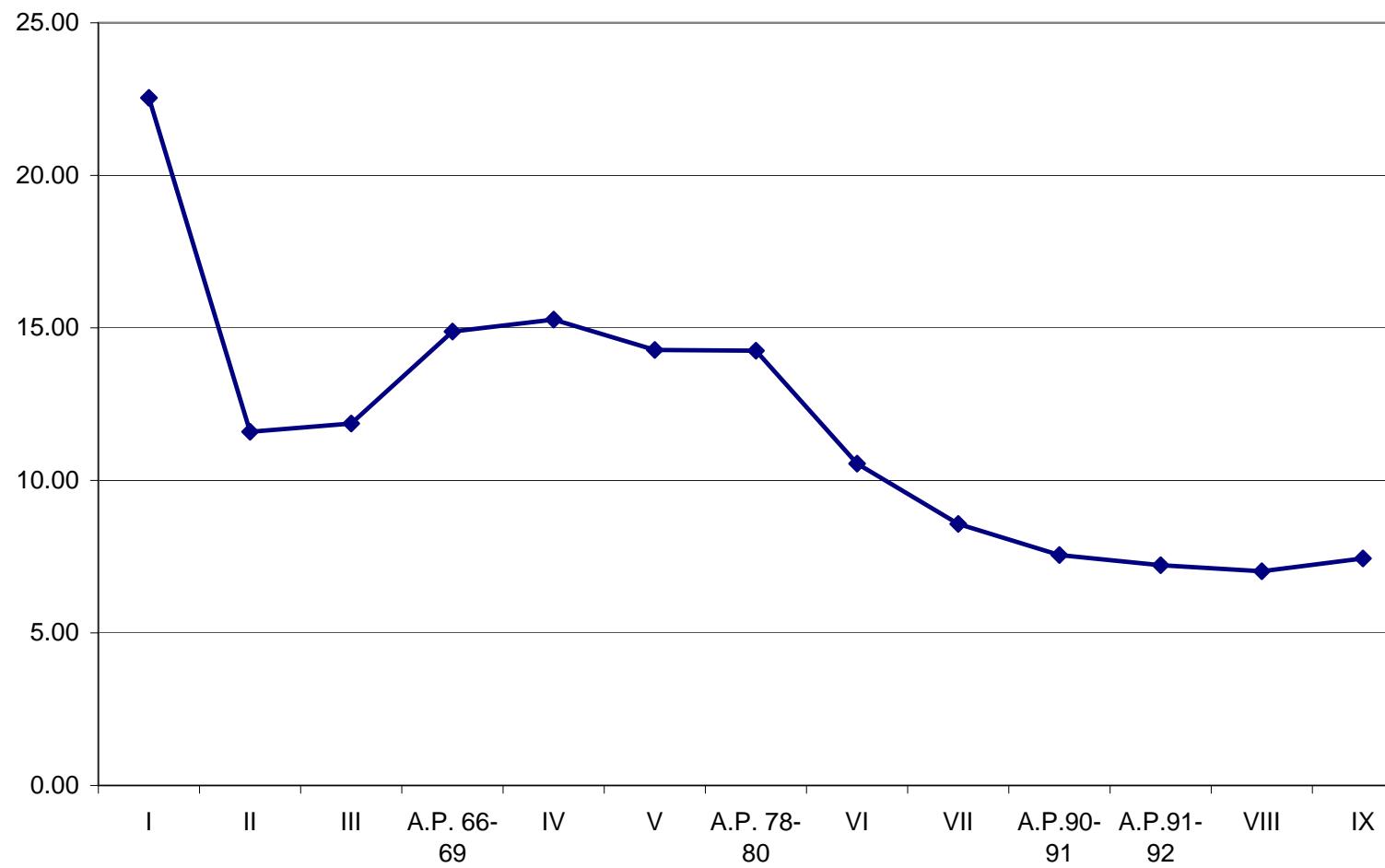


TABLE : 6.2 PLANWISE FINANCIAL EXPENDITURE ON IRRIGATION IN INDIA

(Rs.Crore)

Sl. No.	Period	Major & Medium	Minor		Comm- and Area Develo- pment	Major, Medium, Minor and CAD	Total Plan Expen- diture in All Sectors
			State	Insti- tutional			
1	2	3	4	5	6	7	8
1.	First Plan(1951-56)	376.2	65.6	NEG.	-	441.8	1960
2.	Second Plan(1956-61)	380.0	142.2	19.4	-	541.6	4672
3.	Third Plan(1961-66)	576.0	326.1	115.4	-	1017.5	8577
4.	Annual Plans(1966-69)	429.8	321.3	234.7	-	985.9	6625
5.	Fourth Plan(1969-74)	1242.3	506.2	661.1	-	2409.6	15779
6.	Fifth Plan(1974-78)	2516.2	627.5	798.8	147.6	4090.1	28653
7.	Annual Plans(1978-80)	2078.6	496.2	480.4	215.3	3270.5	22950
8.	Sixth Plan(1980-85)	7368.8	1979.3	1437.6	743.1	11528.7	109292
9.	Seventh Plan(1985-90)	11107.3	3131.9	3061.0	1447.5	18747.7	218730
10.	Annual Plan(1990-91)	2634.8	812.2	675.6	285.6	4408.2	58369
11.	Annual Plan(1991-92)	2824.0	844.1	674.0	333.8	4675.9	64751
12.	Eighth Plan (1992-97)	21669.2	6230.6	4241.8	1937.9	34079.5	485457
13.	Ninth Plan (1997-2002)	49289.6	8635.0	2661.7	2222.8	62809.1	844031
14.	Tenth Plan (2002-07) Apprtoved outlay	71213.2	14406.7	NA	4196.7	89816.5	1525639
15.	Annual Plan(2002- 03)Revised Approved	13131.9	1950.5	NA	419.1	15501.5	144038

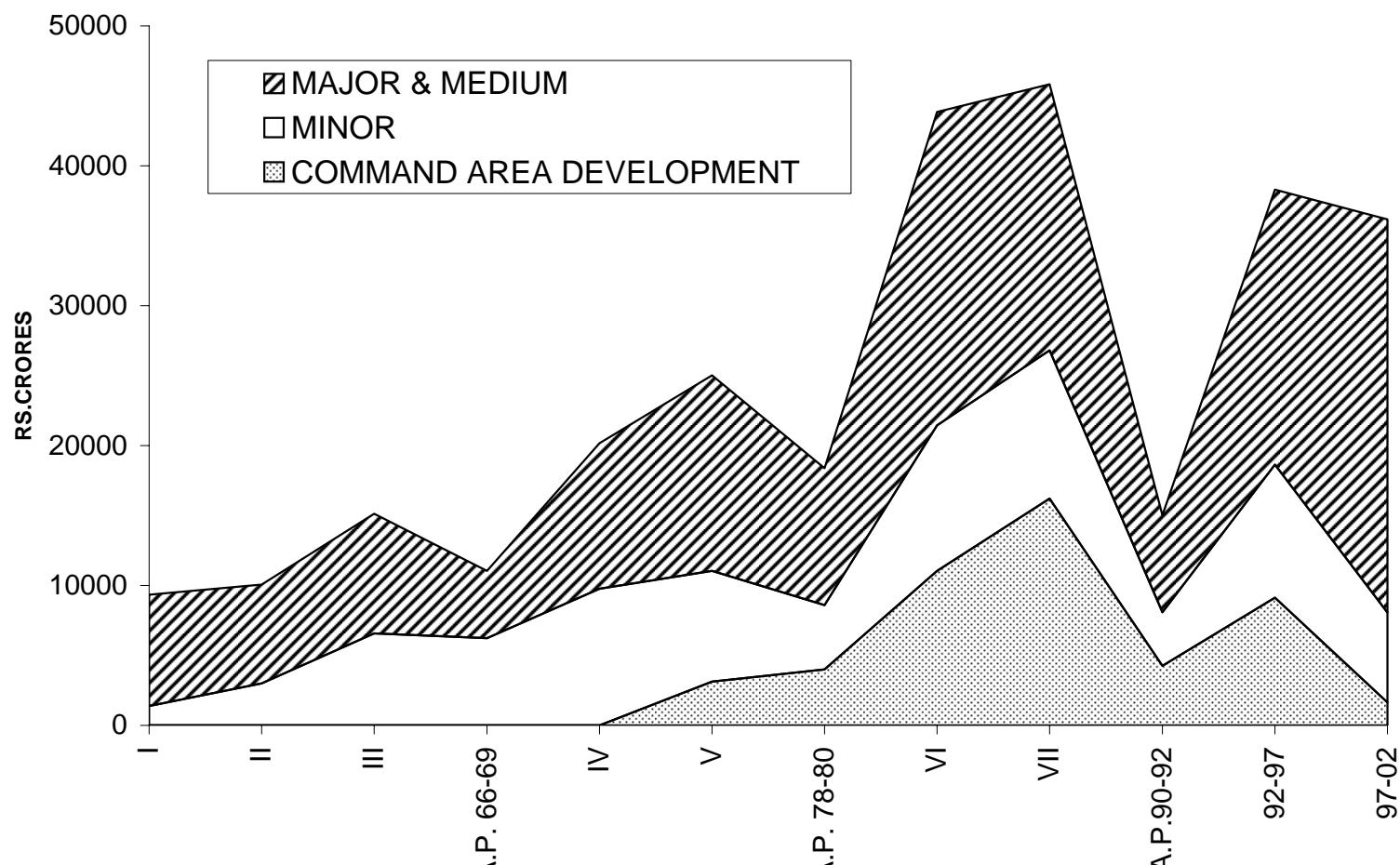
Source: Central Water Commission (P&P Directorate), Ministry of Water Resources (Minor).

Irrigation Division). Planning Commission

Note : Totals may not tally due to rounding off. NA.: Not Available

Chart : 20

FINANCIAL EXPENDITURE ON IRRIGATION AT 1993-94 PRICES



**TABLE : 6.3 PLANWISE FINANCIAL EXPENDITURE ON IRRIGATION IN INDIA
AT 1993-94 PRICES**

(Rs.Crore)

Sl. No.	Period	Major & Medium	Minor		Comm- and Area Develop- ment	Major, Medium, Minor and CAD	Total Plan Expenditure in All Sectors
			State	Insti- tutional			
1	2	3	4	5	6	7	8
1.	First Plan(1951-56)	7948.3	1386.3	0.0	0.0	9334.6	41406.0
2.	Second Plan(1956-61)	7060.3	2642.6	359.5	0.0	10062.4	86804.5
3.	Third Plan(1961-66)	8568.0	4850.8	1715.1	0.0	15134.0	127583.4
4.	Annual Plans(1966-69)	4813.1	3598.0	2628.7	0.0	11039.8	74188.4
5.	Fourth Plan(1969-74)	10402.2	4238.6	5535.3	0.0	20176.1	132123.5
6.	Fifth Plan(1974-78)	13978.6	3486.1	4437.7	3119.0	25021.1	159181.5
7.	Annual Plans(1978-80)	9783.7	2335.6	2261.2	4001.0	18381.5	108023.2
8.	Sixth Plan(1980-85)	22400.9	6016.8	4370.1	11053.0	43840.8	332242.0
9.	Seventh Plan(1985-90)	19017.1	5362.2	5240.7	16209.0	45829.0	374493.2
10.	Annual Plan (1990-91)	3518.8	1084.7	902.2	2391.0	7896.7	77951.5
11.	Annual Plan (1991-92)	3431.3	1025.7	818.9	1854.0	7129.9	78675.4
12.	Eighth Plan (1992-97)	19671.8	5656.3	3850.8	9121.0	38299.9	440709.9
13	Annual Plan (1997-98) Actual	5557.2	1102.2	372.0	1315.0	8346.4	95382.3
	Annual Plan (1998-99) (Anticipated)						
14		4566.0	876.9	296.1	533.0	6272.0	84368.9
15	Annual Plan (1999-00) (Anticipated)	7335.2	1234.3	362.7	644.0	9576.2	104502.4
16	Annual Plan (2000-01) (Anticipated)	6061.0	1124.2	268.9	606.0	8060.1	108138.0
17	Annual Plan (2001-02) (Anticipated)	6498.0	923.3	331.7	320.0	8073.0	118699.4
18	Ninth Plan (1997-2002)	28095.1	4922.0	1517.2	1634.0	36168.3	481097.7

Source: Central Water Commission(P&P Directorate), Ministry of Water Resources (Minor Irrigation Division) and Planning Commission (Water Resources Division) Economic Survey 2002-03.

Note : Totals may not tally due to rounding off.

**TABLE : 6.4 STATEWISE AND PLANWISE FINANCIAL EXPENDITURE ON
Major & Medium IRRIGATION**
(Rs.Crore)

Sl. No.	State/U.ts.	Ssventh Plan (1985-90)	Annual Plan (1990-92)	Eighth Plan (1992-97)	Ninth Plan (1997-2002)	Tenth Plan (2002-2007) (Outlay)
1	2	3	4	5	6	7
1.	Andhra Pradesh	1272.4	262.4	2632.5	4045.8	9153.8
2.	Arunachal Pradesh	1.1	0.5	2.9	1.7	1.7
3.	Assam	116.1	22.4	119.0	213.0	273.6
4.	Bihar	1332.5	257.0	808.1	1621.9	3273.2
5.	Chhattisgarh	Include in M.P.			224.2	175.4
6.	Goa	66.9	23.2	123.0	160.6	1721.4
7.	Gujarat	998.5	378.7	2749.5	5298.4	7660.9
8.	Haryana	502.0	68.4	506.4	1154.4	1129.6
9.	Himachal Pradesh	9.1	2.8	15.7	65.1	55.0
10.	Jammu & Kashmir	71.6	11.6	86.7	128.5	237.4
11.	Jharkhand	Include in Bihar			167.0	1720.9
12.	Karnataka	527.4	161.3	2957.6	8700.5	13277.3
13.	Kerala	301.9	62.6	583.6	703.3	600.0
14.	Madhya Pradesh	1155.4	247.4	1618.4	2203.7	3819.0
15.	Maharashtra	1561.9	364.4	3707.0	14807.3	12150.1
16.	Manipur	73.8	27.7	153.3	171.7	221.6
17.	Meghalaya	0.2	0.6	6.1	10.7	24.8
18.	Mizoram	0.4	-	0.2	0.1	0.1
19.	Nagaland	-	-	1.4	0.9	0.5
20.	Orissa	591.4	155.4	1024.2	2331.2	2329.0
21.	Punjab	220.2	28.4	259.3	334.9	1592.5
22.	Rajasthan	470.6	110.1	1219.2	1725.1	2269.6
23.	Sikkim	-	-	0.0	2.2	0.0
24.	Tamil Nadu	195.4	43.6	299.2	1218.5	1700.0
25.	Tripura	30.9	7.2	29.1	32.4	44.2
26.	Uttar Pradesh	1245.0	300.4	1671.5	3014.7	6424.6
27.	Uttaranchal	Include in U.P.			61.0	103.3
28.	West Bengal	234.4	51.8	438.0	667.8	895.9
Total States		10979.1	2587.9	21011.9	49066.6	70855.4
Total U.Ts		6.9	0.7	9.9	4.2	6.5
Total States & U.Ts		10986.0	2588.6	21021.8	49070.8	70861.9
Central Sector		121.2	46.2	647.5	218.7	351.4
Grand Total		11107.2	2634.8	21669.3	49289.5	71213.3

Source : Central Water Commission (P&P Dte.) & Planning Commission (WR Div.)

Note : Totals may not tally due to rounding off.

**TABLE :6.5 STATE-WISE AND PLAN-WISE FINANCIAL EXPENDITURE
ON MINOR IRRIGATION (STATE EXPENDIURE)**

(Rs. Crore)

Sl. No.	State/ U.T.	Annual Plan (1990- 92)	Eighth Plan (1992-97)	Ninth Plan (1997-02)	Tenth Plan (2002-2007) (Outlay)
1	2	3	4	5	6
1.	Andhra Pradesh	114.0	370.1	976.3	1607.2
2.	Arunachal Pradesh	17.3	67.6	94.6	160.7
3.	Assam	84.4	231.7	382.2	305.1
4.	Bihar	116.1	199.6	231.6	382.2
5.	Chhattisgarh	Include in M.P.		71.5	776.6
6.	Goa	8.6	16.1	26.7	27.0
7.	Gujarat	56.5	441.2	933.3	1098.5
8.	Haryana	26.1	205.0	200.9	154.3
9.	Himachal Pradesh	42.5	123.9	232.7	333.0
10.	Jammu & Kashmir	29.6	99.8	142.9	325.8
11.	Jharkhand	Include in Bihar		39.3	333.1
12.	Karnataka	58.0	307.8	459.0	719.4
13.	Kerala	32.5	152.3	225.8	205.0
14.	Madhya Pradesh	226.2	634.5	746.3	1047.5
15.	Maharashtra	226.7	1571.2	1348.6	2043.2
16.	Manipur	7.1	25.3	30.1	101.2
17.	Meghalaya	9.4	24.7	34.2	60.0
18.	Mizoram	4.9	12.6	26.3	26.8
19.	Nagaland	5.7	13.5	25.3	35.6
20.	Orissa	97.4	367.7	435.7	1604.4
21.	Punjab	36.3	129.6	189.0	275.1
22.	Rajasthan	51.1	194.7	259.5	285.4
23.	Sikkim	3.8	11.2	19.4	15.0
24.	Tamil Nadu	60.2	197.7	287.7	500.0
25.	Tripura	15.5	29.5	75.3	219.3
26.	Uttar Pradesh	175.5	351.0	362.0	535.2
27.	Uttarakhand	Include in U.P.		19.6	59.9
28.	West Bengal	74.7	204.5	346.1	238.5
Total States		1580.1	5982.8	8221.9	13475.0
Total U.Ts.		8.3	32.7	55.3	98.4
Central Sector		68.0	213.2	358.0	533.8
GRAND TOTAL		1656.4	6228.7	8635.2	14107.2

Source: Ministry of Water Resources(Minor Irrigation Division)Annual

Document of Planning Commission.

Note :- Total may not tally due to rounding off.

**TABLE :6.6 STATE-WISE AND PLAN-WISE FINANCIAL EXPENDITURE
ON MINOR IRRIGATION (INSTITUTIONAL)**

(Rs. Crore)

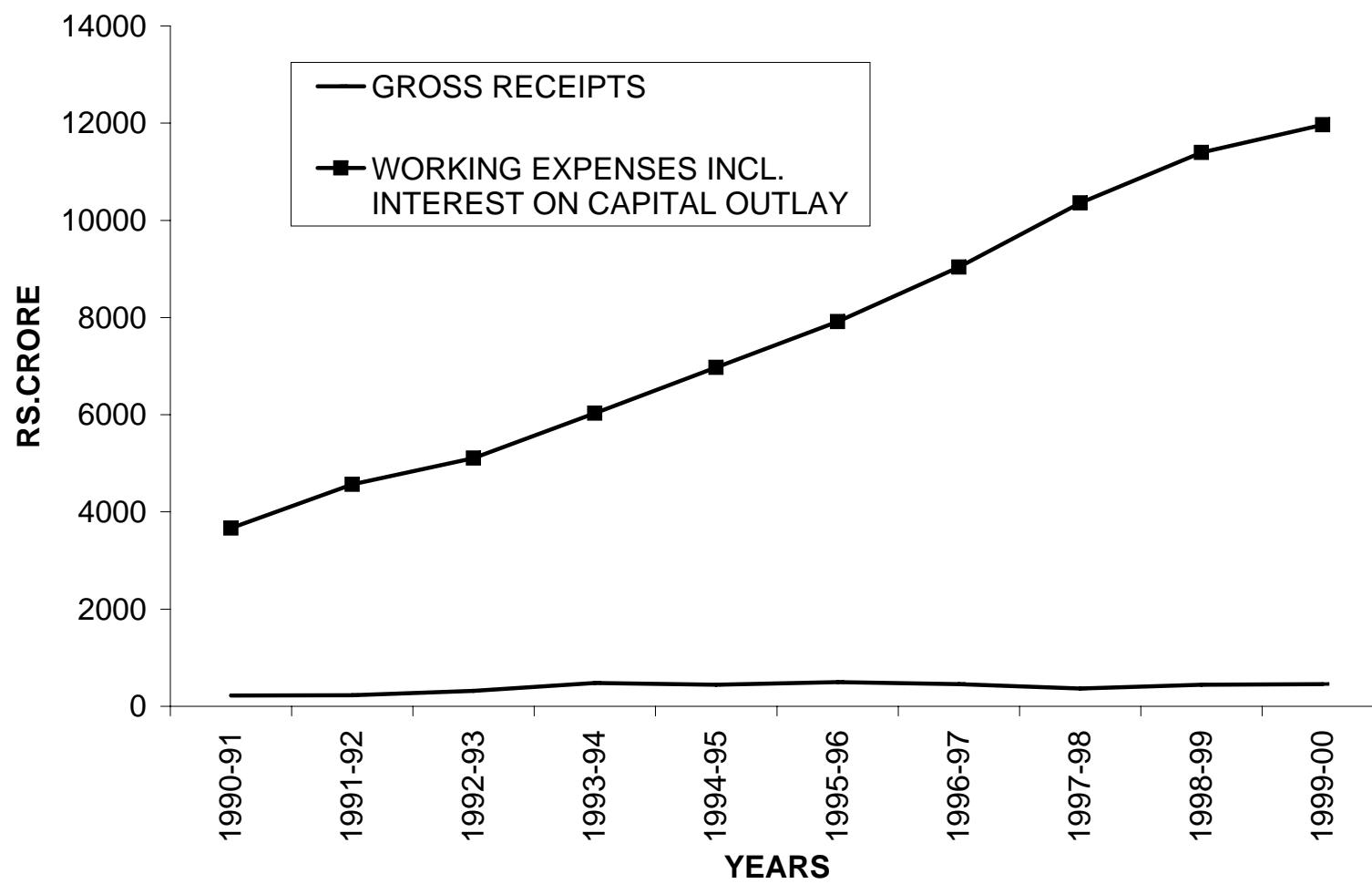
Sl. No.	State/ U.T.	Seventh Plan (1985-90)	Eighth Plan (1992-97)	Ninth Plan (1997-02)
1	2	3	4	5
1.	Andhra Pradesh	404.8	934.3	364.7
2.	Arunachal Pradesh	-	-	0.0
3.	Assam	36.7	0.0	0.0
4.	Bihar	127.0	26.7	12.9
5.	Chhattisgarh	Includes in M.P.		
6.	Goa	0.1	0.7	0.9
7.	Gujarat	163.1	160.2	40.5
8.	Haryana	111.5	172.9	183.9
9.	Himachal Pradesh	0.3	1.7	113.1
10.	Jammu & Kashmir	0.1	0.4	0.5
11.	Jharkhand	Includes in Bihar		
12.	Karnataka	295.6	343.9	127.4
13.	Kerala	93.1	168.7	92.6
14.	Madhya Pradesh	301.4	140.7	146.3
15.	Maharashtra	532.7	827.2	102.2
16.	Manipur	-	-	0.0
17.	Meghalaya	-	-	0.0
18.	Mizoram	-	-	0.1
19.	Nagaland	-	-	0.0
20.	Orissa	35.2	60.3	1.2
21.	Punjab	154.1	108.4	197.8
22.	Rajasthan	128.2	256.4	363.7
23.	Sikkim	-	-	0.0
24.	Tamil Nadu	174.3	296.7	15.7
25.	Tripura	-	-	0.1
26.	Uttar Pradesh	423.3	705.5	884.1
27.	Uttarakhand	Includes in U.P.		
28.	West Bengal	76.1	35.3	11.9
Total States		3057.6	4240.0	2659.6
U.Ts		3.4	1.9	2.0
GRAND TOTAL		3061.0	4241.9	2661.6

Source: Ministry of Water Resources(Minor Irrigation Division)

Note :- Totals may not tally due to rounding off.

Chart : 21

FINANCIAL ASPECTS OF MAJOR & MEDIUM IRRIGATION PROJECTS (ALL INDIA)



**TABLE 6.7 FINANCIAL ASPECTS OF MAJOR & MEDIUM IRRIGATION
PROJECTS (ALL INDIA)**
(Rs. Crore)

Year	Capital Outlay		Gross Receipts	Working Expenses	Interest on Capital Outlay
	During the year	Cummulative			
1	2	3	4	5	6
1990-91					
Cu Pri.	2846.4	30556.9	224.2	2452.2	1213.3
Co Pri.	3862.1	41461.2	304.2	3327.3	1646.3
1991-92					
Cu Pri.	3131.9	33688.8	227.4	2790.2	1775.5
Co Pri.	3732.9	40153.5	271.0	3325.6	2116.2
1992-93					
Cu Pri.	3416.3	37105.1	320.3	3162.1	1942.2
Co Pri.	3701.3	40200.5	347.0	3425.9	2104.2
1993-94					
Cu Pri.	3975.3	41080.4	477.6	3629.8	2401.8
Co Pri.	3975.3	41080.4	477.6	3629.8	2401.8
1994-95					
Cu Pri.	4806.1	45885.6	444.5	4352.4	2618.4
Co Pri.	4268.3	40751.0	394.8	3865.4	2325.4
1995-96					
Cu Pri.	5458.6	51346.9	495.4	4818.5	3095.9
Co Pri.	4489.0	42226.1	407.4	3962.6	2546.0
1996-97					
Cu Pri.	5494.4	56840.7	458.4	5445.6	3590.1
Co Pri.	4319.5	44686.1	360.4	4281.1	2822.4
1997-98					
Cu Pri.	7137.9	63984.2	363.3	6257.9	4100.8
Co Pri.	5374.9	48180.9	273.6	4712.3	3088.0
1998-99					
Cu Pri.	7093.7	71077.9	441.8	7215.4	4177.6
Co Pri.	5041.7	50517.3	314.0	5128.2	2969.2
1999-00					
Cu Pri.	7874.7	78952.8	456.9	7980.2	3988.2
Co Pri.	5419.6	54337.8	314.5	5492.2	2744.8
2000-01					
Cu Pri.	7295.8	86248.7	753.5	8762.4	4462.0
Co Pri.	4685.8	55394.2	483.9	5627.7	2865.8
2001-02					
Cu Pri.	7649.4	93898.2	652.2	8249.7	5605.0
Co Pri.	4742.3	58213.4	404.3	5114.5	3474.9

Source : (i) Combined Finance and Revenue Accounts of the Union and State Government of India (ii) State Finance Accounts (iii) Central Water Commission, ISO (Financial Performance Unit)

Note : Working Expenses include interest on the Cumulative Capital.

: Cu Pri. : Current Price, Co Pri : Constant Price (1993-94)

**TABLE 6.8 FINANCIAL ASPECTS OF MINOR IRRIGATION SCHEMES
(ALL INDIA)**
(Rs. Crore)

Year	Capital Outlay		Gross Receipts	Working Expenses
	During the Year	Cumulative		
1	2	3	4	5
1990-91				
Cu Pri.	488.6	5459.4	41.9	974.8
Co Pri.	663.0	7407.6	56.9	1322.7
1991-92				
Cu Pri.	483.4	5928.9	54.1	1004.2
Co Pri.	576.2	7066.6	64.5	1196.9
1992-93				
Cu Pri.	559.8	6503.0	58.4	950.4
Co Pri.	606.5	7045.5	63.3	1029.7
1993-94				
Cu Pri.	635.3	7138.3	69.0	1459.5
Co Pri.	635.3	7138.3	69.0	1459.5
1994-95				
Cu Pri.	732.4	7898.2	98.8	1617.5
Co Pri.	650.4	7014.4	87.7	1436.5
1995-96				
Cu Pri.	756.3	8654.6	111.5	1755.8
Co Pri.	622.0	7117.3	91.7	1443.9
1996-97				
Cu Pri.	890	9533.1	103.8	1913.6
Co Pri.	699.7	7494.6	81.6	1504.4
1997-98				
Cu Pri.	906.2	10439.4	115.9	1906.9
Co Pri.	682.4	7861.0	87.3	1435.9
1998-99				
Cu Pri.	1006.7	11446.0	101.4	2663.4
Co Pri.	715.5	8135.0	72.1	1893.0
1999-00				
Cu Pri.	1141.6	12604.0	95.3	1736.8
Co Pri.	785.7	8674.5	65.6	1195.3
2000-01				
Cu Pri.	968.8	13572.8	80.1	2004.3
Co Pri.	622.2	8717.3	51.4	1287.3
2001-02				
Cu Pri.	1038.4	14611.2	85.3	2098.9
Co Pri.	643.8	9058.4	52.9	1301.2

Source : (I) Combined Finance and Revenue Accounts of the Union and State Governments of India (ii) State Finance Accounts (iii) Central Water Commission, ISO (Financial Performance Unit)

Note : Cu Pri. : Current Price, Co Pri. : Constant Price (1993-94)

**TALE 6.9 FINANCIAL ASPECTS OF COMMAND AREA
DEVELOPMENT PROGRAMME (ALL INDIA) (Rs. Crore)**

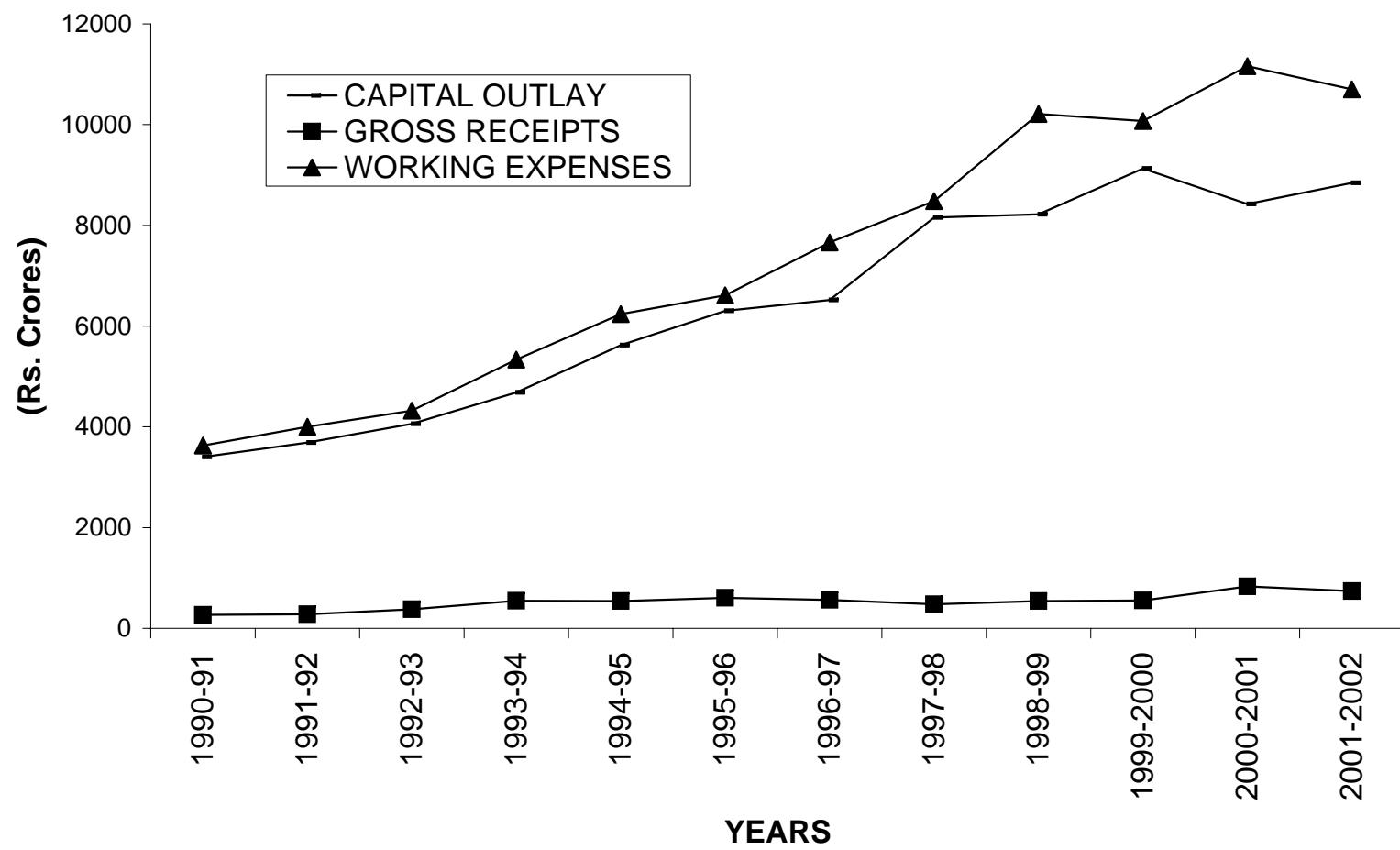
Year	Capital Outlay		Working Expenses
	During the year	Cumulative	
1	2	3	4
1990-91			
Cu Pri.	69.7	461.8	205.0
Co Pri.	94.6	626.6	278.2
1991-92			
Cu Pri.	72.1	533.9	210.1
Co Pri.	85.9	636.4	250.4
1992-93			
Cu Pri.	83.8	617.7	210.7
Co Pri.	90.8	669.2	228.3
1993-94			
Cu Pri.	71.1	688.8	247.3
Co Pri.	71.1	688.8	247.3
1994-95			
Cu Pri.	83.4	772.2	268.0
Co Pri.	74.1	685.8	238.0
1995-96			
Cu Pri.	89.7	861.9	37.3
Co Pri.	73.8	708.8	30.7
1996-97			
Cu Pri.	135	996.9	298.2
Co Pri.	106.1	783.7	234.4
1997-98			
Cu Pri.	109.7	1106.6	317.7
Co Pri.	82.6	833.3	239.2
1998-99			
Cu Pri.	119.5	1226.1	335.7
Co Pri.	84.9	871.4	238.6
1999-00			
Cu Pri.	109.3	1335.4	356.4
Co Pri.	75.2	919.1	245.3
2000-01			
Cu Pri.	158.4	1493.8	393.7
Co Pri.	101.7	959.4	252.9
2001-02			
Cu Pri.	155.2	1649.0	354.5
Co Pri.	96.2	1022.3	219.8

Source : (I) Combined Finance and Revenue Accounts of the Union
and State Governments of India (ii) State Finance Accounts
(iii) Central Water Commission, ISO (Financial Performance Unit).

Note : Cu Pri. : Current Price, CoPri.: Constant Price (1993-94)

Chart :22

**FINANCIAL ASPECTS OF IRRIGATION PROJECTS (MAJOR, MEDIUM & MINOR
IRRIGATION SCHEMES AND COMMAND AREA DEVELOPMENT PROGRAMMES)
(ALL INDIA)**



**TALE 6.10 FINANCIAL ASPECTS OF IRRIGATION PROJECTS
(MAJOR, MEDIUM & MINOR IRRIGATION SCHEMES AND
COMMAND AREA DEVELOPMENT PROGRAMMES) (ALL-INDIA)**

(Rs. Crore)

Year	Capital Outlay		Gross Receipts	Working Expenses
	During the year	Cumulative		
1	2	3	4	5
1990-91				
Cu Pri.	3404.7	36478.1	266.1	3632.0
Co Pri.	4619.7	49495.4	361.1	4928.1
1991-92				
Cu Pri.	3687.4	40151.6	281.5	4004.5
Co Pri.	4395.0	47856.5	335.5	4772.9
1992-93				
Cu Pri.	4059.9	44225.8	378.7	4323.2
Co Pri.	4398.6	47915.3	410.3	4683.9
1993-94				
Cu Pri.	4681.7	48907.5	546.6	5336.6
Co Pri.	4681.7	48907.5	546.6	5336.6
1994-95				
Cu Pri.	5621.9	54556.0	543.3	6237.9
Co Pri.	4992.8	48451.2	482.5	5539.9
1995-96				
Cu Pri.	6304.6	60863.4	606.9	6611.6
Co Pri.	5184.7	50052.1	499.1	5437.2
1996-97				
Cu Pri.	6519.4	67370.7	562.2	7657.4
Co Pri.	5125.3	52964.4	442.0	6020.0
1997-98				
Cu Pri.	8153.8	75530.2	479.2	8482.5
Co Pri.	6139.9	56875.2	360.8	6387.4
1998-99				
Cu Pri.	8219.9	83750.0	543.2	10214.5
Co Pri.	5842.1	59523.8	386.1	7259.8
1999-00				
Cu Pri.	9125.6	92892.2	552.2	10073.4
Co Pri.	6280.5	63931.3	380.0	6932.8
2000-01				
Cu Pri.	8423	101315.3	833.6	11160.4
Co Pri.	5409.8	65070.8	535.4	7167.9
2001-02				
Cu Pri.	8843	110158.4	737.5	10703.1
Co Pri.	5482.3	68294.1	457.2	6635.5

Source : (I) Combined Finance and Revenue Accounts of the Union and
State Governments of India (ii) State Finance Accounts

(iii) Central Water Commission, ISO (Financial Performance Unit)

Note : Cu Pri. : Current Price, Co Pri. : Constant Price (1993-94)

**TALE 6.11 FINANCIAL ASPECTS OF FLOOD CONTROL
AND ANTI SEA EROSION PROJECTS (ALL - INDIA)**

(Rs. Crore)

Year	Capital Outlay		Working Expenses
	During the year	Cumulative	
1	2	3	5
1990-91			
Cu Pri.	160.0	2158.0	133.4
Co Pri.	217.1	2928.1	181.0
1991-92			
Cu Pri.	167.2	2325.1	127.5
Co Pri.	199.3	2771.3	152.0
1992-93			
Cu Pri.	128.8	2453.9	169.4
Co Pri.	139.5	2658.6	183.5
1993-94			
Cu Pri.	151.9	2605.8	183.2
Co Pri.	151.9	2605.8	183.2
1994-95			
Cu Pri.	156.8	2762.6	206.6
Co Pri.	139.3	2453.5	183.5
1995-96			
Cu Pri. @	191.3	2936.9	228.8
Co Pri.	157.3	2415.2	188.2
1996-97			
Cu Pri.	294.4	3231.4	272.9
Co Pri.	231.4	2540.4	214.5
1997-98			
Cu Pri.	252.8	3483.8	291.9
Co Pri.	190.4	2623.3	219.8
1998-99			
Cu Pri.	267.3	3751.1	351.2
Co Pri.	190.0	2666.0	249.6
1999-00			
Cu Pri.	335.6	4086.7	401.9
Co Pri.	231.0	2812.6	276.6
2000-01			
Cu Pri.	329.6	4410.4	534.1
Co Pri.	211.7	2832.6	343.0
2001-02			
Cu Pri.	362.3	4732.7	422.0
Co Pri.	224.6	2934.1	261.6

Source : (I) Combined Finance and Revenue Accounts of the Union and State

Governments of India (ii) State Finance Accounts

(iii) Central Water Commission, ISO (Financial Performance Unit)

Remarks : @:An amount of Rs.3798 lakh is less at the end of 1995-96 due to more receipt over expenditure as indicated in the Finance Accounts U.P. for the year 1995-96

Note : Cu Pri. : Current Price, Co Pri. : Constant Price(1993-94)

TALE 6.12 FINANCIAL ASPECTS OF DRAINAGE PROJECTS
(ALL - INDIA) (Rs. Crore)

Year	Capital Outlay		Working Expenses
	During the year	Cumulative	
1	2	3	5
1990-91			
Cu Pri.	45.8	636.2	74.4
Co Pri.	62.1	863.2	100.9
1991-92			
Cu Pri.	76.3	712.5	59.6
Co Pri.	90.9	849.2	71.0
1992-93			
Cu Pri.	148.9	861.4	69.5
Co Pri.	161.3	933.3	75.3
1993-94			
Cu Pri.	167.2	1028.6	90.7
Co Pri.	167.2	1028.6	90.7
1994-95			
Cu Pri.*	97.0	1125.6	123.9
Co Pri.	86.1	999.6	110.0
1995-96			
Cu Pri.**	94.2	1181.3	148.4
Co Pri.	77.5	971.5	122.0
1996-97			
Cu Pri.	113.9	1295.2	163.6
Co Pri.	89.5	1018.2	128.6
1997-98			
Cu Pri.	102.5	1397.7	175.2
Co Pri.	77.2	1052.5	131.9
1998-99			
Cu Pri.	168.8	1566.4	176.1
Co Pri.	120.0	1113.3	125.2
1999-00			
Cu Pri.	150.6	1717.0	199.3
Co Pri.	103.6	1181.7	137.2
2000-01			
Cu Pri.	173.3	1893.9	186.3
Co Pri.	111.3	1216.4	119.7
2001-02			
Cu Pri.	199.9	2088.3	211.3
Co Pri.	123.9	1294.7	131.0

Source : (I) Combined Finance and Revenue Accounts of the Union and State Government of India (ii) State Finance Accounts

(iii) Central Water Commission, ISO (Financial Performance Unit)

Note : *:Includes an amount of Rs.14108 lakhs adopted from CAG's office.

** An amount of Rs.3847 lakhs is less at the end of 1995-96 due to more receipts over expenditure.

**TALE 6.13 FINANCIAL ASPECTS OF RURAL WATER SUPPLY SCHEMES
(ALL - INDIA) (Rs. Crore)**

Year	Capital Outlay		Gross Receipts	Working Expenses
	During the year	Cumulative		
1	2	3	4	5
1990-91				
Cu Pri.	247.8	2541.4	14.1	839.8
Co Pri.	336.2	3448.3	19.1	1139.5
1991-92				
Cu Pri.	345	2901.2	14.4	847.6
Co Pri.	411.2	3457.9	17.2	1010.3
1992-93				
Cu Pri.	387.6	3196.7	16.6	991.4
Co Pri.	419.9	3463.4	18.0	1074.1
1993-94				
Cu Pri.	423.9	3701.8	19.3	1069.3
Co Pri.	423.9	3701.8	19.3	1069.3
1994-95				
Cu Pri.	594.0	4295.8	23.5	1078.3
Co Pri.	527.5	3815.1	20.9	957.6
1995-96				
Cu Pri.	587.6	4980.8	21.5	1502.8
Co Pri.	483.2	4096.1	17.7	1235.9
1996-97				
Cu Pri.	680.7	5677.0	23.6	1862.8
Co Pri.	535.1	4463.1	18.6	1464.5
1997-98				
Cu Pri.	808.7	6507.1	22.7	2258.5
Co Pri.	609.0	4899.9	17.1	1700.7
1998-99				
Cu Pri.	1164.6	7670.9	55.5	2665.2
Co Pri.	827.7	5452.0	39.4	1894.2
1999-00				
Cu Pri.	1271.0	9045.3	67.1	2540.4
Co Pri.	874.7	6225.3	46.2	1748.4
2000-01				
Cu Pri.	1992.1	11037.1	62.5	2698.4
Co Pri.	1279.4	7088.7	40.1	1733.1
2001-02				
Cu Pri.	1808.0	12845.1	62.4	2864.6
Co Pri.	1120.9	7963.5	38.7	1775.9

Source : (I) Combined Finance and Revenue Accounts of the Union and State

Government of India (ii) State Finance Accounts

(iii) Central Water Commission, ISO (Financial Performance Unit)

Note : Figures under col.3 may not be compatible for some of the years with those under col. 2 due to accounting adjustments.

Cu Pri. : Current Price, Co Pri. : Constant Price (1993-94)

**TALE 6.14 FINANCIAL ASPECTS OF URBAN WATER SUPPLY SCHEMES
(ALL - INDIA)**

(Rs. Crore)

Year	Capital Outlay		Gross Receipts	Working Expenses
	During the year	Cumulative		
1	2	3	4	5
1990-91				
Cu Pri.	88.2	1068.7	57.1	340.0
Co Pri.	119.7	1450.1	77.5	461.3
1991-92				
Cu Pri.	120.1	1159.5	56.2	295.1
Co Pri.	143.1	1382.0	67.0	351.7
1992-93				
Cu Pri.	148.3	1342.1	54.6	385.2
Co Pri.	160.7	1454.1	59.2	417.3
1993-94				
Cu Pri.	182.9	1534.1	69.5	573.1
Co Pri.	182.9	1534.1	69.5	573.1
1994-95				
Cu Pri.	256.3	1840.8	73.7	609.7
Co Pri.	227.6	1634.8	65.5	541.5
1995-96				
Cu Pri.	253.1	2093.4	85.3	542.8
Co Pri.	208.1	1721.5	70.1	446.4
1996-97				
Cu Pri.	680.7	5677.0	23.6	1862.8
Co Pri.	535.1	4463.1	18.6	1464.5
1997-98				
Cu Pri.	808.7	6507.1	22.7	2258.5
Co Pri.	609.0	4899.9	17.1	1700.7
1998-99				
Cu Pri.	1164.6	7670.9	55.5	2665.2
Co Pri.	827.7	5452.0	39.4	1894.2
1999-00				
Cu Pri.	1271.0	9045.3	67.1	2540.4
Co Pri.	874.7	6225.3	46.2	1748.4
2000-01				
Cu Pri.	1992.1	11037.1	62.5	2698.4
Co Pri.	1279.4	7088.7	40.1	1733.1
2001-02				
Cu Pri.	1808.0	12845.1	62.4	2864.6
Co Pri.	1120.9	7963.5	38.7	1775.9

Source : (i) Combined Finance and Revenue Accounts of the Union and State Government of India (ii) State Finance Accounts

(iii) Central Water Commission, ISO (Financial Performance Unit)

Note : Figures under col.3 may not be compatible for some of the years with those under col. 2 due to accounting adjustments.

Cu Pri. : Current Price, Co Pri. : Constant Price (1993-94)

**TALE 6.15 FINANCIAL ASPECTS OF SOIL AND WATER
CONSERVATION PROGRAMMES (ALL - INDIA)**

(Rs. Crore)

Year	Gross Receipts	Working Expenses
1	3	5
1996-97		
Cu Pri.	8.2	769.4
Co Pri.	6.4	604.9
1997-98		
Cu Pri.	7.8	750.5
Co Pri.	5.9	565.1
1998-99		
Cu Pri.	8.3	932.2
Co Pri.	5.9	662.5
1999-00		
Cu Pri.	9.1	1230.8
Co Pri.	6.3	847.1
2000-01		
Cu Pri.	21.1	1117.6
Co Pri.	13.6	717.8
2001-02		
Cu Pri.	9.5	1071.7
Co Pri.	5.9	664.4

Source : (i) Combined Finance and Revenue Accounts of
the Union and State Governments of India
(ii) State Finance Accounts
(iii) Central Water Commission, ISO (Financial
Performance Unit)

Cu Pri. : Current Price, Co Pri. : Constant Price (1993-94)

7. FLOOD MANAGEMENT AND DROUGHT

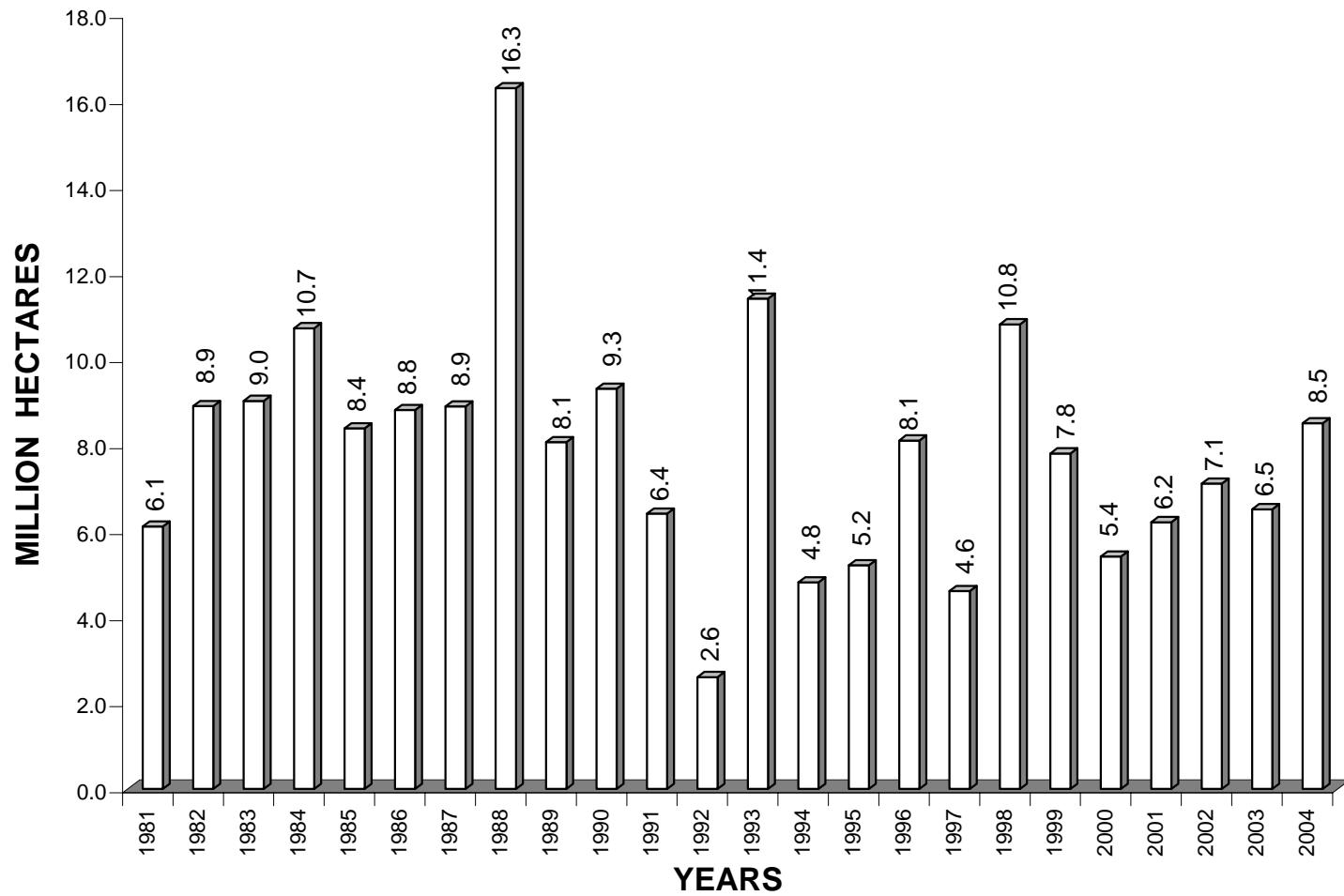
TABLE : 7.1 FLOOD AFFECTED AREA & FLOOD DAMAGES IN INDIA
(Abstract for the period 1953 to 2004)

Sl. No.	Item	Unit	Average During (1953-2004)	Maximum Damage (Year)	Damage During 2004
1	2	3	4	5	6
1	Area Affected	Million Hactare	7.63	17.50 (1978)	8.47
2	Population Affected	Million	32.92	70.45 (1978)	34.19
3	Human Live Lost	No.	1597	11316 (1977)	1650
4	Cattle Lost	Th. No.	94	618 (1979)	67
5	Cropped Area Affected	Million Hectare	3.56	10.15 (1988)	2.92
6	Value of Damage Crops	Rs.Crore	708.57	4246.62 (2000)	755.67
7	Houses Damaged	Th. No.	1235.61	3508.00 (1978)	1544.00
8	Value of Damage Houses	Rs.Crore	251.05	1307.89 (1995)	870.73
9	Value of Damage Public Utilities	Rs.Crore	813.69	5604.00 (2001)	2228.25
10	Value of total Damage to Houses, Crops and Public Utilities	Rs.Crore	1817.07	8864.54 (2000)	3854.65

Source :Central Water Commission (FMP Directorate)

Chart 23

FLOOD DAMAGE - AREA AFFECTED



**TABLE : 7.2 FLOOD DAMAGES IN INDIA DURING
1953 TO 2004**

Sl. No.	Year	Area Affected (M.Ha.)	Popul- ation Affected (Million)	Damage to Crops		Cattle Lost Nos. ('000)
				Area (M.Ha.)	Value (Rs.Crore)	
1	2	3	4	5	6	7
1	1953	2.29	24.28	0.93	42.08	47
2	1954	7.49	12.92	2.61	40.52	23
3	1955	9.44	25.27	5.31	77.80	72
4	1956	9.24	14.57	1.11	44.44	16
5	1957	4.66	6.76	0.45	14.12	7
6	1958	6.26	10.98	1.40	38.28	18
7	1959	5.77	14.52	1.54	56.76	73
8	1960	7.53	8.35	2.27	42.55	14
9	1961	6.56	9.26	1.97	24.04	16
10	1962	6.12	15.46	3.39	83.18	38
11	1963	3.49	10.93	2.05	30.17	5
12	1964	4.90	13.78	2.49	56.87	5
13	1965	1.46	3.61	0.27	5.87	7
14	1966	4.74	14.40	2.16	80.15	9
15	1967	7.12	20.46	3.27	133.31	6
16	1968	7.15	21.17	2.62	144.61	130
17	1969	6.20	33.22	2.91	281.90	270
18	1970	8.46	31.83	4.91	162.78	19
19	1971	13.25	59.74	6.24	423.13	13
20	1972	4.10	26.69	2.45	98.56	58
21	1973	11.79	64.08	3.73	428.03	261
22	1974	6.70	29.45	3.33	411.64	17
23	1975	6.17	31.36	3.85	271.49	17
24	1976	11.91	50.46	6.04	595.03	80
25	1977	11.46	49.43	6.84	720.61	556
26	1978	17.50	70.45	9.96	911.09	239
27	1979	3.99	19.52	2.17	169.97	618

Contd..

**TABLE : 7.2 FLOOD DAMAGE IN INDIA DURING
1953 TO 2004**

Sl. No.	Year	Damage to Houses		Human Live Lost (No.)	Damage to Public Utilities (Rs. Crore)	Total Damages Crops Houses & Public Utilities (Rs.Crore)
		Nos. ('000)	Value (Rs.Crore)			
1	2	8	9	10	11	12
1	1953	265	7.42	37	2.90	52.40
2	1954	200	6.56	279	10.15	57.23
3	1955	1667	20.95	865	3.98	102.73
4	1956	726	8.05	462	1.14	53.63
5	1957	318	4.98	352	4.27	23.37
6	1958	382	3.90	389	1.79	43.97
7	1959	649	9.42	619	20.02	86.20
8	1960	610	14.31	510	6.31	63.17
9	1961	533	0.89	1374	6.44	31.37
10	1962	514	10.66	348	1.05	94.89
11	1963	421	3.70	432	2.74	36.61
12	1964	256	4.59	690	5.15	66.61
13	1965	113	0.20	79	1.07	7.14
14	1966	217	2.54	180	5.74	88.43
15	1967	568	14.26	355	7.86	155.43
16	1968	683	41.11	3497	25.37	211.10
17	1969	1269	54.42	1408	68.11	404.44
18	1970	1434	48.61	1076	76.44	287.83
19	1971	2428	80.24	994	129.11	632.48
20	1972	897	12.46	544	47.17	158.19
21	1973	870	52.48	1349	88.49	569.00
22	1974	747	72.43	387	84.94	569.02
23	1975	804	34.10	686	166.05	471.64
24	1976	1746	92.16	1373	201.50	888.69
25	1977	1662	152.29	11316	328.95	1201.85
26	1978	3508	167.57	3396	376.10	1454.76
27	1979	1329	210.61	3637	233.63	614.20

Contd..

**TABLE : 7.2 FLOOD DAMAGES IN INDIA DURING
1953 TO 2004**

Sl. No.	Year	Area Affected (M.Ha.)	Popul- ation Affected (Million)	Damage to Crops		Cattle Lost Nos. ('000)
				Area (M.Ha.)	Value (Rs.Crore)	
1	2	3	4	5	6	7
28	1980	11.46	54.12	5.55	366.37	59
29	1981	6.12	32.49	3.27	524.56	82
30	1982	8.87	56.01	5	589.40	247
31	1983	9.02	61.03	3.29	1285.85	153
32	1984	10.71	54.55	5.19	906.09	141
33	1985	8.38	59.59	4.65	1425.37	43
34	1986	8.81	55.5	4.58	1231.58	60
35	1987	8.89	48.34	4.94	1154.64	129
36	1988	16.29	59.55	10.15	2510.9	151
37	1989	8.06	34.15	3.01	956.74	75
38	1990	9.3	40.26	3.18	695.61	134
39	1991	6.36	33.89	2.7	579.02	41
40	1992	2.64	19.26	1.75	1027.58	79
41	1993	11.44	30.41	3.21	1308.63	211
42	1994	4.81	27.55	3.96	888.62	52
43	1995	5.24	35.93	3.24	1714.79	62
44	1996	8.05	44.73	3.83	1124.49	73
45	1997	4.57	29.66	2.26	692.74	28
46	1998	10.85	47.44	7.45	2594.17	107
47	1999	7.77	27.99	1.75	1850.87	91
48	2000	5.38	45.01	3.58	4246.62	123
49	2001	6.18	26.46	3.96	688.48	33
50	2002	7.09	26.32	2.19	913.09	22
51	2003*	6.5	34.47	3.43	1424.83	16
52	2004	8.47	34.19	2.92	755.67	67
Total		397	1712	185	36846	4913
Average		7.63	32.92	3.56	708.57	94
Maximum (Year)		17.50 (1978)	70.45 (1978)	10.15 (1988)	4246.62 (2000)	618 (1979)

Contd..

**TABLE : 7.2 FLOOD DAMAGE IN INDIA DURING
1953 TO 2004**

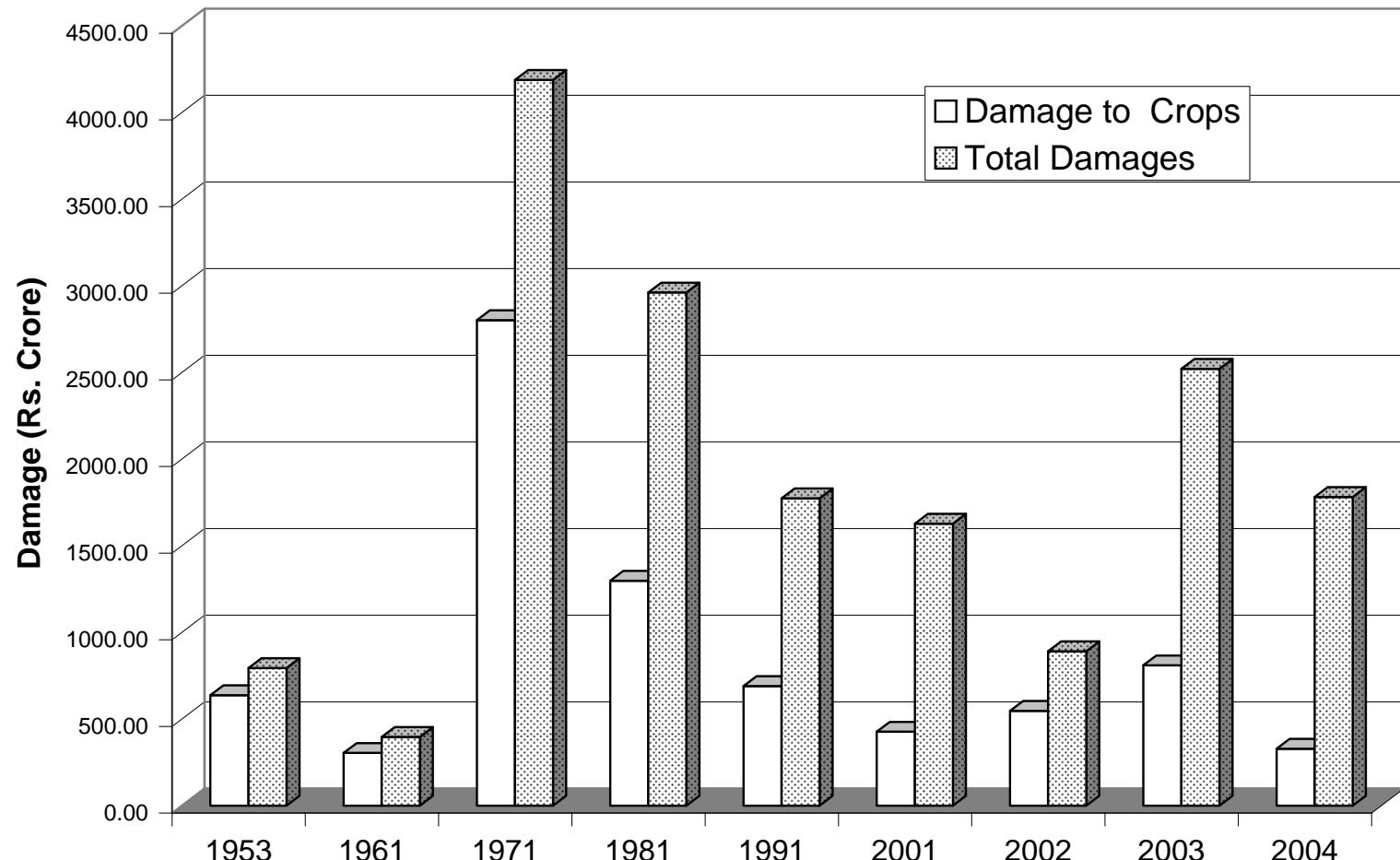
Sl. No.	Year	Damage to Houses		Human Live Lost (No.)	Damage to Public Utilities (Rs. Crore)	Total Damages Crops Houses & Public Utilities (Rs.Crore)
		Nos. ('000)	Value (Rs.Crore)			
1	2	8	9	10	11	12
28	1980	2533	170.85	1913	303.28	840.50
29	1981	913	159.63	1376	512.31	1196.50
30	1982	2397	383.87	1573	671.61	1644.88
31	1983	2394	332.33	2378	873.43	2491.61
32	1984	1764	181.31	1661	818.16	1905.56
33	1985	2450	583.86	1804	2050.04	4059.27
34	1986	2049	534.41	1200	1982.54	3748.53
35	1987	2919	464.49	1835	950.59	2569.72
36	1988	2277	741.6	4252	1377.8	4630.3
37	1989	782	149.82	1718	1298.77	2405.33
38	1990	1020	213.73	1855	455.27	1708.92
39	1991	1134	180.42	1187	728.89	1488.33
40	1992	687	308.28	1533	2010.67	3344.53
41	1993	1926	528.32	2864	1445.53	3382.49
42	1994	915	165.21	2078	740.76	1794.59
43	1995	2002	1307.9	1814	679.63	3702.31
44	1996	727	176.59	1803	861.39	3005.74
45	1997	505	152.5	1402	1985.93	2831.18
46	1998	1933	118.8	2889	5157.77	8860.72
47	1999	1613	1299.1	745	462.83	3612.76
48	2000	2629	680.94	2606	3936.98	8864.54
49	2001	716	816.47	1444	5604.46	7109.41
50	2002	762	599.37	1001	1062.08	2574.54
51	2003*	847	802.93	1864	2206.60	4434.35
52	2004	1544	870.73	1650	2228.25	3854.65
Total		64252	13054	83079	42312	94488
Average		1235.61	251.05	1597.67	813.69	1817.07
Maximum (Year)		3508 (1978)	1307.89 (1995)	11316 (1977)	5604 (2001)	8864.54 (2000)

Source : Central water Commission [FMP Directorate]

* : Figures are Tentative.

Chart 24

TREND IN FLOOD DAMAGES (1993-94 PRICES)



**TABLE : 7.2A FLOOD DAMAGE IN INDIA DURING
1953 TO 2004 (At 1993-94 Prices)**

(Rs.Crore)

Sl. No.	Year	Damage to Crops		Total Damages	
		Current Price	1993-94 Prices	Value	1993-94 Prices
1	2	3	4	5	6
1	1953	42.08	637.58	52.40	793.94
2	1954	40.52	653.55	57.23	923.06
3	1955	77.80	1318.64	102.73	1741.19
4	1956	44.44	663.28	53.63	800.45
5	1957	14.12	204.64	23.37	338.70
6	1958	38.28	539.15	43.97	619.30
7	1959	56.76	767.03	86.20	1164.86
8	1960	42.55	538.61	63.17	799.62
9	1961	24.04	304.30	31.37	397.09
10	1962	83.18	1014.39	94.89	1157.20
11	1963	30.17	346.78	36.61	420.80
12	1964	56.87	586.29	66.61	686.70
13	1965	5.87	56.44	7.14	68.65
14	1966	80.15	673.53	88.43	743.11
15	1967	133.31	1009.92	155.43	1177.50
16	1968	144.61	1103.89	211.10	1611.45
17	1969	281.90	2072.79	404.44	2973.82
18	1970	162.78	1138.32	287.83	2012.80
19	1971	423.13	2802.19	632.48	4188.61
20	1972	98.56	590.18	158.19	947.25
21	1973	428.03	2129.50	569.00	2830.85
22	1974	411.64	1640.00	569.02	2267.01
23	1975	271.49	1094.72	471.64	1901.77
24	1976	595.03	2351.90	888.69	3512.61
25	1977	720.61	2709.06	1201.85	4518.23
26	1978	911.09	3425.15	1454.76	5469.02
27	1979	169.97	544.78	614.20	1968.59
28	1980	366.37	992.87	840.50	2277.78
29	1981	524.56	1298.42	1196.50	2961.63
30	1982	589.40	1423.67	1644.88	3973.14
31	1983	1285.85	2838.52	2491.61	5500.24
32	1984	906.09	1864.38	1905.56	3920.91
33	1985	1425.37	2778.50	4059.27	7912.81
Contd..					
34	1986	1231.58	2280.70	3748.57	6941.80
35	1987	1154.64	1983.92	2569.72	4415.33
36	1988	2510.9	4036.82	4630.3	7444.21
37	1989	956.74	1430.10	2405.33	3595.41

**TABLE : 7.2A FLOOD DAMAGE IN INDIA DURING
1953 TO 2004 (At 1993-94 Prices)**

(Rs.Crore)

Sl. No.	Year	Damage to Crops		Total Damages	
		Current Price	1993-94 Prices	Value	1993-94 Prices
1	2	3	4	5	6
38	1990	695.61	943.84	1708.92	2318.75
39	1991	579.02	690.13	1488.33	1773.93
40	1992	1027.58	1113.30	3344.53	3623.54
41	1993	1308.63	1308.63	3382.49	3382.49
42	1994	888.62	789.18	1794.59	1593.77
43	1995	1714.79	1410.19	3702.31	3044.66
44	1996	1124.49	884.03	3005.74	2363.00
45	1997	692.74	521.64	2831.18	2131.91
46	1998*	2594.17	1843.76	5845.98	4154.93
47	1999*	1850.87	1273.83	2107.86	1450.70
48	2000*	4246.62	2727.44	1660.14	1066.24
49	2001*	688.48	426.83	2624.81	1627.28
50	2002	913.09	547.42	1486.79	891.36
51	2003*	1424.83	810.02	4434.35	2520.95
52	2004*	615.07	328.39	3336.59	1781.41
Total		36705	67463	76673	
Average		705.87	1297.37	1474	0.00
Maximum (Year)		4246.62 (2000)	4036.82 (1988)	5845.98 (1998)	1307.89 (1995)

Source : Central water Commision (FMP Directorate)

**TABLE :7.3 PLAN-WISE EXPENDITURE & CUMULATIVE BENEFITS
(AREA PROTECTED) UNDER FLOOD MANAGEMENT PROGRAMME**

(Unit: Rs.Crore)

Sl. No.	Period	States & U.Ts	Centre	Total	Cumulative benefits (Area-protected in million Ha. at the end of the period)
1	2	3	4	5	6
1.	First Plan (1954-56)	13.21	-	13.21	1.00
2.	Second Plan (1956-61)	48.06	-	48.06	3.24
3.	Third Plan (1961-66)	82.09	-	82.09	5.43
4.	Annual Plans(1966-69)	41.96	-	41.96	5.83
5.	Fourth Plan (1969-74)	157.37	4.67	162.04	8.04
6.	Fifth Plan (1974-78)	242.46	56.15	298.61	9.98
7.	Annual Plans (1978-80)	290.13	39.83	329.96	11.21
8.	Sixth Plan (1980-85)	618.88	167.97	786.85	13.01
9.	Seventh Plan(1985-90)	781.02	160.56	941.58	13.80
10.	Annual Plan(1990-92)	393.61	66.83	460.44	14.20
11	Eighth Plan (1992-97)	1,641.14	226.17	1,867.31	15.29
Expenditure upto March ,1997		4,309.93	722.18	5,032.11	N.A
(Total 1 to 11)					
12	Ninth Plan (1997-2002) Approved Outlay)	2,216.36	623.04	2,839.40	1.37*
13	Annual Plan (1997-98) Actual	351.70	67.20	418.19	N.A
14	Annual Plan (1998-99) Actual	466.10	74.60	540.70	N.A
15	Annual Plan (1999-2000) Actual	486.80	68.70	555.50	15.81
16	Annual Plan (2000-2001) Actual	620.20	106.00	726.20	N.A
17	Annual Plan (2001-2002) Outlay	693.70	146.00	839.00	N.A
18	Ninth Plan (1997-2002) Anticipated/Acttual	2,618.50	462.50	3,081.00	16.41
19	Tenth Plan (2002-2007) Agreed Outlay)	4,562.25	1,168.10	5,730.35	N.A.
20	Annual Plan (2002-2003) Approved Outlay	592.06	151.02	743.08	16.37

Source : Annual Plan document 2002-03 of Planning Commission

* During Ninth Plan panel as envisaged.

**TABLE : 7.4 PLAN-WISE EXPENDITURE & CUMULATIVE BENEFITS
(AREA PROTECTED-UNDER FLOOD MANAGEMENT
PROGRAMME (at 1993-94 PRICES)**

(Rs.Crore)

Sl. No.	Period	States & U.Ts	Centre	Total	Cumulative benefits (Area- protected in Million Ha. at the end of the period)
1	2	3	4	5	6
1.	First Plan (1951-56)	279.07	-	279.07	1.00
2.	Second Plan (1956-61)	892.94	-	892.94	3.24
3.	Third Plan (1961-66)	469.88	-	469.88	5.43
4.	Annual Plan(1966-69)	460.88	-	460.88	5.83
5.	Fourth Plan (1969-74)	1,317.72	39.10	1,356.82	8.04
6.	Fifth Plan (1974-78)	1,346.93	311.94	1,658.87	9.98
7.	Annual Plan (1978-80)	562.67	77.24	639.91	11.21
8.	Sixth Plan (1980-85)	1,881.36	510.62	2,391.98	13.01
9.	Seventh Plan(1985-90)	1,337.20	274.90	1,612.10	13.80
10.	Annual Plan(1990-92)	500.59	84.99	585.58	14.20
11	Eighth Plan (1992-97) Anticipated	1,489.87	205.32	1,695.19	15.29
Exptd. Upto March, 1997 (total 1-11)		10,539.11	1,504.11	12,043.22	N.A
12	Ninth Plan (1997-2002) Agreed Outlay	1,231.26	398.60	1,629.86	N.A
13	Annual Plan (1997-98) Actual	228.95	43.71	272.66	N.A
14	Annual Plan (1998-99) Actual	271.29	32.53	303.82	N.A
15	Annual Plan (1999-2000) Actual	564.53	44.87	609.40	15.81
16	Annual Plan (2000-2001) Anticipated	347.49	76.59	424.08	N.A
17	Annual Plan (2001-2002) Proposed	335.52	76.01	411.53	N.A
18	Ninth Plan (1997-02) Anticipated	1,800.53	283.88	2,084.41	N.A

Source : Central Water Commission (FMP Directorate)

**TABLE : 7.5 STATEWISE AND PLANWISE EXPENDITURE ON
FLOOD MANAGEMENT WORK (Rs. Crore)**

Sl. No.	Name of the State/U.Ts.	Expd. upto March 1997 8Th Plan	Anti. Expd. during 9th Plan	Anti. Expd. upto 9th Plan
1	2	3	4	5
1.	Andhra Pradesh	462.0	220.8	632.8
2.	Arunachal Pradesh	17.4	20.1	37.5
3.	Assam	248.5	73.1	321.6
4.	Bihar	727.6	309.7	1037.3
5.	Chhattisgarh			
6.	Delhi	211.8	83.2	295.0
7.	Goa	5.4	6.8	12.2
8.	Gujarat	55.8	16.5	72.3
9.	Haryana	296.9	88.8	385.6
10.	Himachal Pradesh	20.6	31.1	51.6
11.	Jammu & Kashmir	168.3	88.7	257.6
12.	Jharkhand			
13.	Karnataka	57.5	51.9	109.5
14.	Kerala	189.3	107.4	296.7
15.	Madhya Pradesh	15.0	5.8	20.8
16.	Maharashtra	107.8	8.0	115.8
17.	Manipur	49.6	32.8	82.4
18.	Meghalaya	10.5	12.1	22.6
19.	Mizoram	1.1	0.0	1.1
20.	Nagaland	0.7	0.4	1.1
21.	Orissa	124.3	50.7	175.1
22.	Punjab	353.8	383.9	737.6
23.	Rajasthan	123.6	29.3	152.9
24.	Sikkim	4.8	6.8	11.6
25.	TamilNadu	34.7	0.0	34.7
26.	Tripura	30.2	33.5	63.7
27.	Uttar Pradesh	387.6	141.1	528.7
28.	Uttaranchal			
29.	West Bengal	566.9	767.6	1334.5
	Total States	4271.7	2570.1	6792.3
30.	A & N Islands	2.5	0.0	2.5
31.	Chandigarh	0.0	0.0	0.0
32.	Dadra & Nagar Haveli	0.0	0.0	0.0
33.	Daman & Diu	1.9	1.3	3.2
34.	Lakshadweep	12.8	18.1	30.9
35.	Pondicherry	21.1	23.2	44.3
	Total U.Ts.	38.3	42.6	80.9
	Total States & U.Ts.	4310.0	2612.7	6873.2
	Central Sector	722.2	462.4	1184.8
	GRAND TOTAL	5032.2	3075.1	8058.0

Source : Annual Plan Document 2002-03 of Planning Commission

Note : Total may not tally due to rounding off.

**TABLE: 7.6 STATEWISE PROGRESS OF PHYSICAL WORKS
UNDER FLOOD MANAGEMENT PROGRAMME
UP TO MARCH 2003**

Sl. No.	Name of the State/U.T	Length of Emban- kments (Km.)	Length of Drainage Channels (Km.)	Town/Village Protection Works (No.)	Villages Raised/ Protected (No.)	Area likely to be benefitted by end of IXth Plan (Million Ha.)
1	2	3	4	5	6	7
1	Andhra Pradesh	2601	17071	72	23	1.035
2	Arunachal Pradesh	7	9	18	22	0
3	Assam	4459	851	681	0	1.638
4	Bihar	3454	365	47	0	2.949
5	Chhattisgarh			Included in Madhya Pradesh		
6	Delhi	83	453	-	-	0.078
7	Goa	17	32	2	0	0.003
8	Gujarat	104	271	805	30	0.483
9	Haryana	1144	4385	448	98	2.000
10	Himachal Pradesh	58	11	0	0	0.010
11	Jammu & Kashmir	230	14	12	5	0.217
12	Jharkhand	3	0	2	5	0
13	Karnataka	74	10	30	0	0.005
14	Kerala	117	29	4	5	0.056
15	Madhya Pradesh	26	-	37	-	0.004
16	Maharashtra	45	110	0	0	0.001
17	Manipur	360	126	1	1	0.130
18	Meghalaya	112	0	8	2	0.001
19	Mizoram	0	0	0	0	0
20	Nagaland	0	-	0	0	0
21	Orissa	6541	131	29	14	0.630
22	Punjab	1370	6622	3	0	3.190
23	Rajasthan	145	197	25	0	0.082
24	Sikkim	7	12	6	0	0.002
25	Tamil Nadu	87	19	46	4	0.122
26	Tripura	133	94	11	0	0.026
27	Uttar Pradesh	2810	13357	65	4511	1.589
28	Uttranchal			Included in UP		
29	West Bengal	10350	7129	48	0	2.201
30	A & N Islands	0	0	0	0	0
31	Chandigarh	0	0	0	0	0
32	Dadra & Nagar Haveli	0	0	0	0	0
33	Daman & Diu	0	0	0	0	0
34	Lakshadweep	0	0	0	0	0.000
35	Pondicherry	61	20	0.00	0	0.004
ALL INDIA		34398	51318	2400	4720	16.456

Source:- Central Water Commission (FMP Directorate-Report of the Working Group on Flood Control Programme for Tenth Five Year Plan

TABLE : 7.7 STATE-WISE DAMAGE DUE TO FLOOD/HEAVY RAINS DURING 2004

Sl. No.	Name of the State/UTs.	Area Affected (Million Ha.)	Population Affected (Million)	Damage to Crops		Cattle lost No.
				Area (M.Ha.)	Value (Rs.Crore)	
1	2	3	4	5	6	7
1	Arunachal Pradesh	0.16	0.31	0.01	103.53	5679
2	Assam	2.59	12.20	1.26	0.00	50375
3	Bihar	4.99	21.25	1.40	418.60	2673
4	Maharashtra	NEG	NEG.	NEG.	0.00	6
5	Meghalaya	0.03	0.16	0.03	78.05	4993
6	West Bengal	0.01	0.18	0.00	14.22	34
Total		7.78	34.10	2.70	614.40	63760.00

Contd..

TABLE : 7.7 STATEWISE DAMAGE DUE TO FLOOD/HEAVY RAINS DURING 2004

Sl. No.	Name of the State/UTs.	Damage To Houses		Human lives lost No.	Damage to Public Utilities (Rs.Crore)	Total Damages to crops houses & public utilities (Rs Crore)
		No	Value (Rs. Crore)			
1	2	8	9	10	11	12
1	Arunachal Pradesh	0	37.23	15.00	364.81	505.57
2	Assam	589064	0.00	251	0.00	0.00
3	Bihar	897427	739.49	800	1057.69	2215.78
4	Maharashtra	NIL	NIL	4	0.00	NEG
5	Meghalaya	32	1.42	13	130.87	210.34
6	West Bengal	1812	73.65	5	2.49	90.36
Total		1488335	852	1088	1555.86	3022

Source : Central Water Commission(FMP Directorate)

Totals may not tally due to rounding off.

**TABLE :7.8 BROAD FEATURES OF THE FLOOD FORECASTING
PERFORMANCE OF CWC DURING THE FLOOD SEASON 2004
(BETWEEN 01.05.2004 AND 31.10.2004)**

Sl. No.	Details	No. of FF Sites	%age of F.F. Sites
1	2	3	4
1	Flood Forecasting Sites operated during the Flood Season	172	100%
2	Flood Forecasting sites where "No Forecast" was issued/required because water levels at those sites were below their warning stages during the flood season 2003	58	33.5%
3	Flood Forecasting Sites where "Forecasts were Actually" issued during the Flood Season	114	66.5%
4	Flood Forecasting sites where accuracy was "100%"	49	28.3%
5	Flood Forecasting sites where accuracy was 0.0% (I.e. where all the Flood Forecasts issued were out of prescribed accuracy limit of +/- 15 cm or +/- 20% cumecs)	Nil	N.A
6	Total number of Flood Forecasts issued	4889	4696 (96.1%)
7	Total number of correct Flood Forecasts issued within prescribed accuracy limit of +/- 15 cms or +/-20% cumecs		
8	Total number of Flood Forecasting sites where the accuracy of forecasts issued were equal to or more than the percentage on accuracy of item 7 cited above		69 (39.9%)
9	Average number of Flood Forecasts issued per sites (I.e. the sites where forecasts are actually issued during the Flood season)	42.89	

Source : Central Water Commission (Flood Forecasting Monitoring Dte.)

**TABLE : 7.9 COMPARATIVE FLOOD FORECAST PERFORMANCE
FROM 1978 TO 2004**

(Up to 31-10-2004)

Year	Total No of Forecasts Issued	No of Forecasts Within +/- 15cm/ +/-20% cumecs of deviation from actual	Percentage of forecasts within +/-15 cm/+/-20% cumecs of deviation from actual
1	2	3	4
1978	6964	5741	82.4
1979	4353	3531	81.1
1980	5175	4485	86.7
1981	5185	4460	86.0
1982	4224	3721	88.1
1983	5058	4377	86.5
1984	5191	4676	90.1
1985	6181	5668	91.7
1986	4787	4409	92.1
1987	5813	5525	95.1
1988	6982	6554	93.9
1989	5536	5262	95.1
1990	8566	8071	94.2
1991	6603	6225	94.3
1992	4764	4567	95.9
1993	6643	6438	96.9
1994	7476	7087	94.8
1995	6417	6189	96.4
1996	6467	6266	96.9
1997	5465	5263	96.3
1998	7943	7775	97.9
1999	7055	6826	96.8
2000	6510	6315	97.0
2001	5463	5343	97.8
2002	4241	4151	97.9
2003	6600	6368	96.5
2004	4889	4696	96.1

Source : Central Water Commission (FFM Dte., Hydromet Division).

**TABLE :7.10 STATES AND BLOCKS COVERED UNDER
DROUGHT PRONE AREA PROGRAMME (DPAP) AND
DESERT DEVELOPMENT PROGRAMME (DDP)**

As on April 2003

S. No	States	Number of Districts		Number of Blocks		Area in sq. kms	
		DPAP	DDP	DPAP	DDP	DPAP	DDP
1	2	3	4	5	6	7	8
1	Andhra Pradesh	11	1	94	16	99218	19136
2	Bihar	6	-	30	-	9533	-
3	Chattisgarh	8	-	29	-	21801	-
4	Gujarat	14	6	67	52	43938	55424
5	Haryana	-	7		45	-	20542
6	Himachal Pradesh	3	2	10	3	3319	35107
7	Jammu & Kashmir	2	2	22	12	14705	96701
8	Jharkhand	14	-	100	-	34843	-
9	Karnataka	15	6	81	22	84332	32295
10	Madhya Pradesh	23	-	105	-	89101	-
11	Maharashtra	25	-	149	-	194473	-
12	Orissa	8	-	47	-	26178	-
13	Rajasthan	11	16	32	85	31969	198744
14	Tamil Nadu	16	-	80	-	29416	-
15	Uttar Pradesh	15	-	60	-	35698	-
16	Uttarnchal	7	-	30	-	15796	-
17	West Bengal	4	-	36	-	11594	-
GRAND TOTAL		182	40	972	235	745914	457949

Source : Ministry of Rural Development.

TABLE :7.11 GROUND WATER RESOURCE POTENTIAL IN DROUGHT PRONE DISTRICTS OF EACH STATE IN INDIA

(MCM/year)

S. No	State/UTs	No of Districts	Total repl- enishable Ground Water Resources	Utilisable Ground Water Resources for irrigation	Net G.W. Draft	
1	2	3	4	5	6	
1	Andhra Pradesh	8	11035.31	9380.01	2637.36	
2	Bihar	5	4694.24	3990.11	564.40	
3	Gujarat	8	8548.03	7265.83	2811.14	
4	Haryana	1	164.05	139.44	233.15	
5	Jammu & Kashmir	2	NOT ESTIMATED			
6	Karnataka	11	9621.18	8178.00	2725.00	
7	Madhya Pradesh	6	6426.13	5462.21	1130.76	
8	Maharashtra	12	17787.63	11964.32	5116.20	
9	Orissa	4	3916.33	3328.88	207.48	
10	Rajasthan	8	4877.88	4143.64	1370.76	
11	Tamil Nadu	7	5588.72	4750.41	1975.11	
12	Uttar Pradesh	16	17226.18	14642.26	4432.28	
13	West Bengal	3	4610.06	3918.55	814.58	
GRAND TOTAL		91	94495.74	77163.66	24018.22	

Source : Ground Water Statistics, 1996(Central Ground Water Board).
MCM/Yr- Million Cubic Metre per Year

**TABLE : 7.12 GROUND WATER RESOURCE POTENTIAL
UNDER DESERT DEVELOPMENT
PROGRAMME (DDP)**

(Tentative)

S. No	State/UTs	No of Districts	Total repl- enishable Ground Water Resources (MCM/Yr)	Utilisable Ground Water Resources for irrigation (MCM/Yr)	Net G.W. Draft (MCM/Yr)
1	2	3	4	5	6
1	Gujarat	2	2314.49	1967.32	1695.95
2	Haryana	4	3132.51	2662.63	939.12
3	Rajasthan	11	3210.42	2668.59	1445.87
4	Jammu & Kashmir	2	0.00	0.00	0.00
5	Himachal Pradesh	2	0.00	0.00	0.00
GRAND TOTAL		21	8657.42	7298.54	4080.94

Source : Ground Water Statistics, 1996(Central Ground Water Board).
MCM/Yr : Million Cubic Metre Per Year.

8. HYDRO ELECTRIC POWER DEVELOPMENT

**TABLE : 8.1 REGION-WISE/STATE-WISE IRRIGATION PUMPSETS
ENERGISED (As On 31st March2004)& ELECTRICITY
CONSUMPTION IN AGRICULTURE**

Sl. No.	Name of the Region/State	Irrigation Pumpsets Energised (31.3.2004) (Nos.) Tentative	AGRICULTURE CONSUMPTION 2004	
			Quantum (GWH)	% to Total Consumption in the State
1	2	3	4	5
I.NORTHERN REGION				
1	Haryana	450617	5513.76	42.69
2	Himachal pradesh	8114	19.54	0.71
3	Jammu & Kashmir	9529	115.86	3.28
4	Punjab	880902	6242.86	28.22
5	Rajasthan	701283	4274.37	29.09
6	Uttar Pradesh	841951	4951.63	18.57
7	Utteranchal	17508	318.33	11.96
8	Chandigarh	623	2.35	0.29
9	Delhi	25883	90.82	0.76
	Sub-Total	2936410	21529.52	21.96
II. WESTERN REGION				
1	Gujarat	794148	14360.58	37.82
2	Madhya Pradesh	1325092	5582.97	35.10
3	Chhattishgarh	98035	630.89	11.64
4	Maharashtra	2491521	10572.01	20.40
5	Goa	7332	18.27	1.33
6	Daman & Diu	953	4.73	0.31
7	Dadra & Nagar Haveli	1006	2.00	0.22
	Sub Total	4718087	31171.45	27.11
III.SOUTHERN REGION				
1	Andhra Pradesh	2309605	13448.19	39.36
2	Karnataka	1416164	8992.48	38.86
3	Kerala	430449	188.09	2.07
4	Tamil Nadu	1821432	9382.00	23.91
5	Pondicherry	0	0.00	0.00
6	Lakshadweep	10485	117.73	6.56
	Sub Total	5988135	32128.49	29.90

Contd..

**TABLE : 8.1 REGION-WISE/STATE-WISE IRRIGATION PUMPSETS
ENERGISED (As On 31st March2004)& ELECTRICITY
CONSUMPTION IN AGRICULTURE**

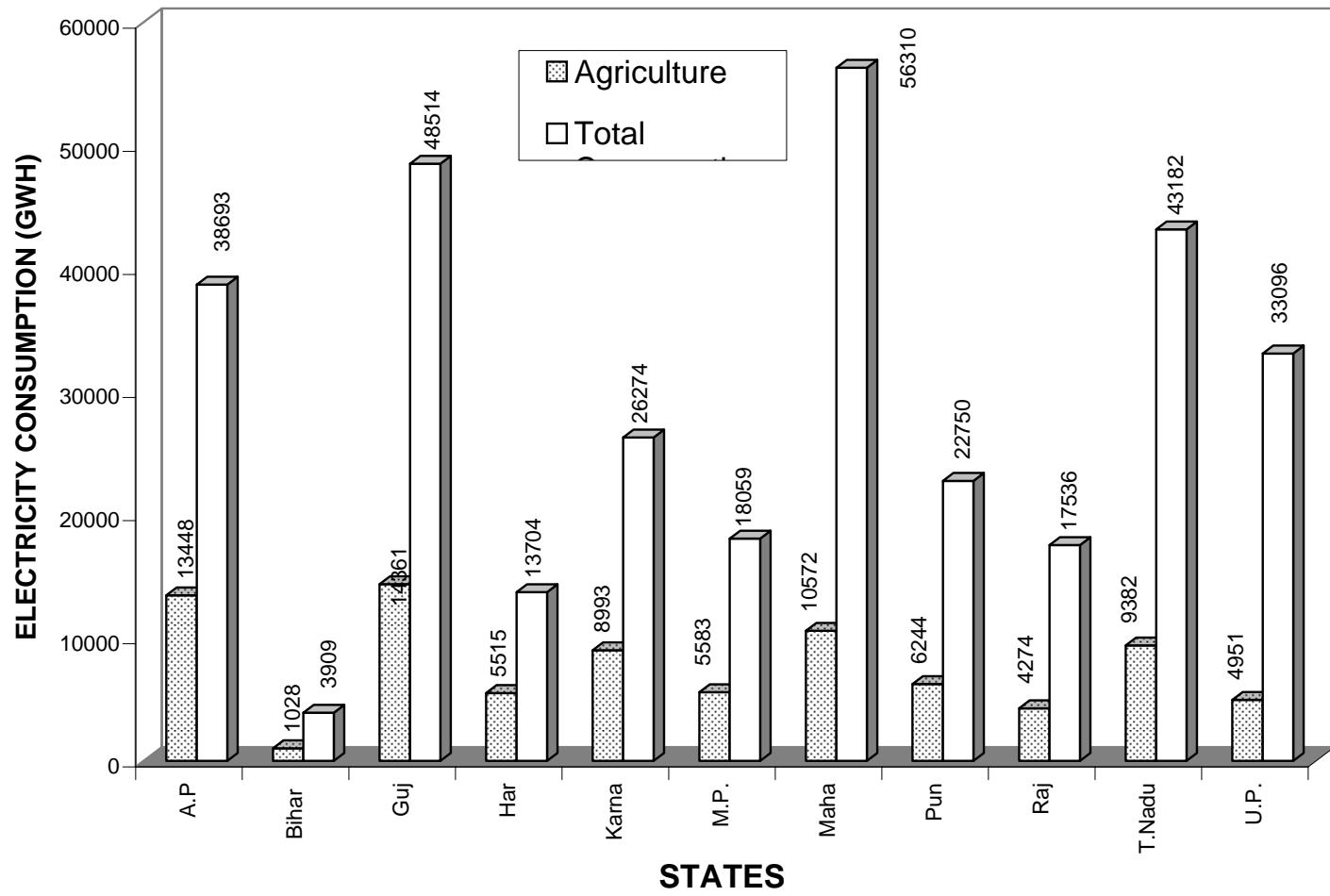
Sl. No.	Name of the Region/State	Irrigation Pumpsets Energised (31.3.2004) (Nos.) Tentative	AGRICULTURE CONSUMPTION 2004	
			Quantum (GWH)	% to Total Consumption in the State
1	2	3	4	5
IV.EASTERN REGION				
1	Bihar	278399	1028.74	27.58
2	Jharkhand		134.62	1.73
3	Orissa	74625	180.76	2.53
4	West Bengal	112815	785.39	4.41
5	A & N Islands	1	0.00	0.00
6	Sikkim	0	0.00	0.00
	Sub Total	465840	2129.51	5.79
V. NORTH-EASTERN REGION				
1	Assam	3675	50.49	2.63
2	Manipur	45	0.61	0.35
3	Meghalaya	65	0.47	0.06
4	Nagaland	176	0.00	0.00
5	Tripura	2940	78.71	19.00
6	Arunachal Pradesh	0	0.00	0.00
7	Mizoram	0	0.00	0.00
	Sub Total	6901	130.28	3.52
	Total (All India)	14115373	87089.25	24.13

Source : Central Electricity Authority (DMLF Division).

GWH : Giga Watt Hours

Chart 25

STATEWISE CONSUMPTION OF ELECTRICITY IN AGRICULTURE SECTOR



**TABLE : 8.2 STATEWISE CONSUMPTION OF ELECTRICITY
IN AGRICULTURE SECTOR**

(Giga Watt Hour)

Sl. No.	State/U.Ts.		2001-02	2002-03	2003-04	Per Capita Consumption (KWH) 2003-04
1	2	3	4	5	6	
1	Andhra Pradesh	A	12829	12912	13448	172
		T	31482	36106	38693	495
2	Arunachal Pradesh	A	0	0	0	0
		T	75	79	125	110
3	Assam	A	10	51	50	2
		T	1818	2888	2934	105
4	Bihar	A	671	994	1028	12
		T	2904	3843	3909	45
5	Jharkhand	A	149	50	135	5
		T	6778	8575	11100	395
6	Goa	A	14	18	18	13
		T	1245	1625	1537	1067
7	Gujarat	A	15696	12966	14361	272
		T	33769	43576	48514	918
8	Haryana	A	4473	5165	5515	249
		T	10535	12609	13704	619
9	Himachal Pradesh	A	18	20	20	3
		T	2352	2606	2793	445
10	Jammu & Kashmir	A	123	109	116	11
		T	2992	3325	3535	327
11	Karnataka	A	7541	8508	8993	165
		T	19840	24922	26274	482
12	Kerala	A	187	184	188	6
		T	8622	9206	9522	291
13	Madhya Pradesh	A	4584	5196	5583	88
		T	14509	17357	18059	284
14	Chhattishgarh	A	678	734	631	29
		T	5301	11043	8830	405
15	Maharashtra	A	8673	10641	10572	105
		T	46331	53419	56310	559
16	Manipur	A	1	1	1	0
		T	169	179	176	71
17	Meghalaya	A	0	0	0	0
		T	551	713	798	332
18	Mizoram	A	0	0	0	0
		T	132	148	130	140
19	Nagaland	A	0	0	0	0
		T	117	126	136	65
20	Orissa	A	164	172	181	5
		T	5773	12961	14169	373

Contd..

**TABLE : 8.2 STATEWISE CONSUMPTION OF ELECTRICITY
IN AGRICULTURE SECTOR**

(Giga Watt Hours)

Sl. No.	State/U.Ts.		2001-02	2002-03	2003-04	Per Capita Consumption (KWH) 2003-04
1	2	3	4	5	6	
21	Punjab	A	5452	5818	6244	248
		T	20009	21638	22750	903
22	Rajasthan	A	3850	4326	4274	72
		T	13587	16997	17536	294
23	Sikkim	A	0	0	0	0
		T	123	73	181	324
24	Tamil Nadu	A	9622	9030	9382	147
		T	35923	40725	43182	677
25	Tripura	A	65	82	79	24
		T	348	363	415	125
26	Uttar Pradesh	A	4986	4821	4951	28
		T	25230	32228	33096	189
27	Uttranchal	A	480	369	318	36
		T	2183	2715	3031	342
28	West Bengal	A	1183	725	785	9
		T	16003	18415	19739	237
29	A & N Islands	A	0	0	0	0
		T	91	108	115	302
30	Chandigarh	A	2	2	2	2
		T	748	807	819	853
31	Dadra & Ngr Haveli	A	1	1	5	20
		T	800	938	1592	6631
32	Damman & Diu	A	2	2	2	12
		T	740	821	923	5428
33	Delhi	A	123	1490	91	6
		T	9799	10708	11905	797
34	Lakshadweep	A	0	0	0	0
		T	17	18	18	296
35	Pondicherry	A	97	98	118	117
		T	1563	1589	1847	1828
All India		A	81673	84488	87093	81
		T	322459	393534	418338	390
		%	25	21	21	21

Remarks : A= Electricity Consumption in Agriculture T= Total Electricity
Total may not tally due to roundig of

**TABLE 8.3 STATEWISE AND REGIONWISE HYDRO ELECTRIC (HE)
POWER POTENTIAL DEVELOPMENT**

(As on 01.10.2004)

Sl. No.	Name of the Region/State	HE Power Potential Assessed At 60% Load Factor (MW)	HE Power Potential Development At 60% Load Factor (MW) (% of Col.3)	HE Power Potential Under Developmemnt At 60% Load Factor (MW) (% of Col.3)
1	2	3	4	5
I Northern Region				
1	Jammu & Kashmir	7487	515.00 (6.88)	401.93 (5.37)
2	Himachal Pradesh	11647	2545 (21.86)	893.62 (7.67)
3	Haryana	64	51.67 (80.73)	0.00 (0.00)
4	Punjab	922	679.50 (73.70)	0.00 (0.00)
5	Rajasthan	291	188.67 (64.83)	0.00 (0.00)
6	Utaranchal	9341	831.68 (8.90)	1326.17 (14.20)
7	Uttar Pradesh	403	337.90 (83.85)	0.00 (0.00)
Sub-Total (NR)		30155	5149.98 (17.08)	2621.72 (8.69)
II. Western Region				
1	M.P.Chhatisgarh	2774	998.77 (36.00)	866.83 (31.25)
II. Western Region (Contd..)				
2	Gujarat	490	143.15 (35.00)	110.67 (27.06)
3	Maharashtra	2460	1127.77 (45.84)	186.83 (7.59)
4	Goa	36	0.00 (0.00)	0.00 (0.00)
Sub Total (WR)		5679	2269.69 (39.97)	1164.33 (20.50)

Contd..

**TABLE 8.3 STATEWISE AND REGIONWISE HYDRO ELECTRIC (HE)
POWER POTENTIAL DEVELOPMENT**

(As on 01.10.2004)

Sl. No.	Name of the Region/State	HE Power Potential Assessed At 60% Load Factor (MW)	HE Power Potential Development At 60% Load Factor (MW) (% of Col.3)	HE Power Potential Under Developmemnt At 60% Load Factor (MW) (% of Col.3)
1	2	3	4	5
III Southern Region				
1	Andhra Pradesh	2909	1405.45 (43.31)	0.00 (0.00)
2	Karnataka	4347	2362.33 (54.34)	66.95 (1.54)
3	Kerala	2301	1144.17 (49.72)	40.53 (1.76)
4	Tamil Nadu	1206	944.83 (78.34)	112.95 (9.37)
Sub Total (SR)		10763	5856.78 (54.42)	220.43 (2.05)
IV. Eastern Region				
1	Jharkhand	478	75.17 (15.73)	0.00 (0.00)
2	Bihar	60	44.78 (74.64)	0.00 (0.00)
3	Orissa	1983	1100.50 (55.50)	31.17 (1.57)
4	West Bengal	1786	91.33 (5.11)	48.95 (2.74)
5	Sikkim	1283	52.50 (4.48)	121.07 (9.44)
Sub Total (ER)		5590	1364.28 (24.41)	201.19 (3.60)
V. North-Eastern Region				
1	Assam	351	111.67 (31.81)	74.17 (21.13)
2	Meghalaya	1070	121.67 (11.37)	23.58 (2.20)

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**TABLE 8.3 STATEWISE AND REGIONWISE HYDRO ELECTRIC (HE)
POWER POTENTIAL DEVELOPMENT**

(As on 01.10.2004)

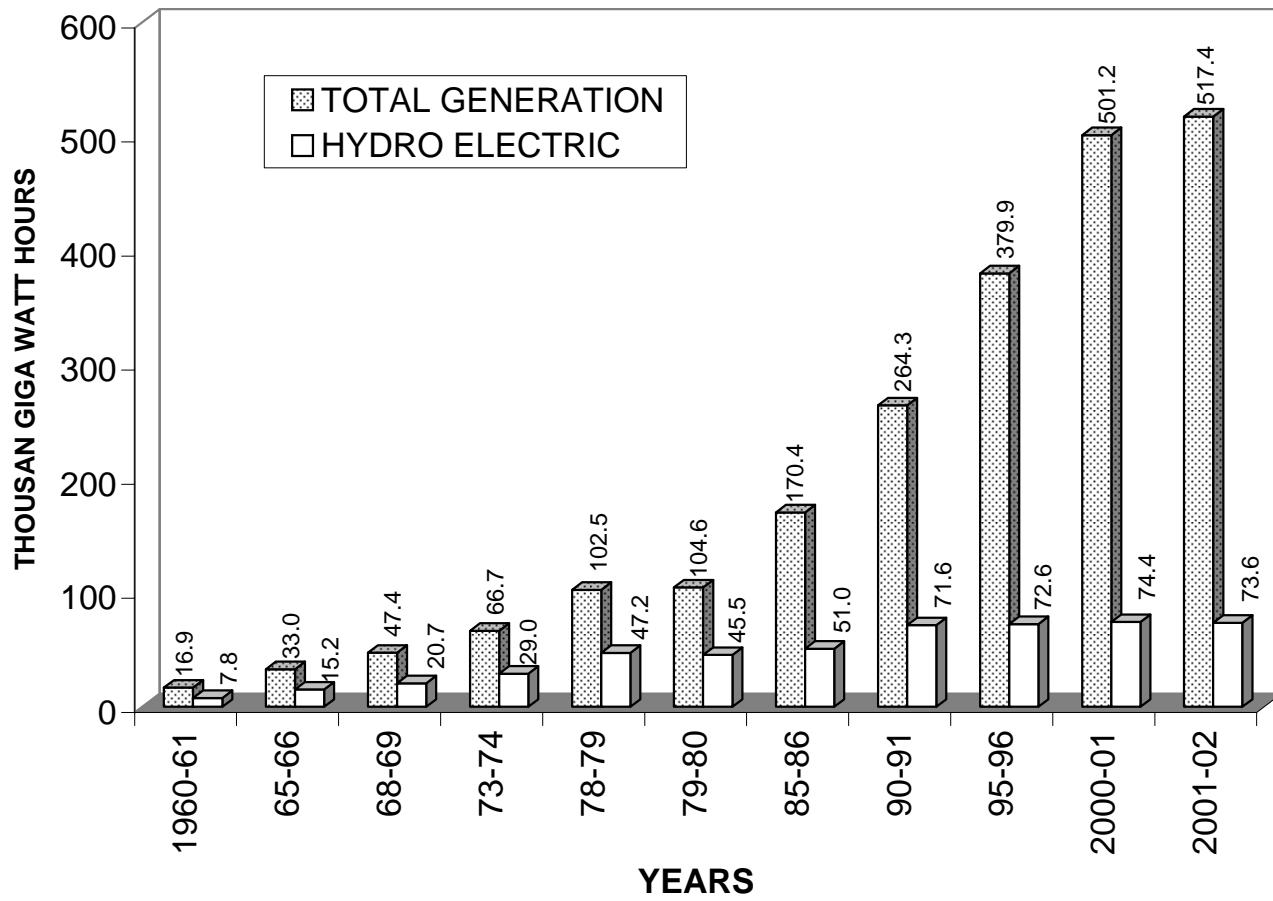
Sl. No.	Name of the Region/State	HE Power Potential Assessed At 60% Load Factor (MW)	HE Power Potential Development At 60% Load Factor (MW) (% of Col.3)	HE Power Potential Under Developmemnt At 60% Load Factor (MW) (% of Col.3)
1	2	3	4	5
V. North-Eastern Region (Contd..)				
3	Tripura	9	7.50 (88.33)	0.00 (0.00)
4	Arunachal Pradesh	26756	122.67 (0.46)	491.83 (1.84)
5	Manipur	1176	71.67 (6.22)	0.00 (0.00)
6	Mizoram	1455	0.00 0.00	30.83 (2.12)
7	Nagaland	1040	81.83 (7.87)	0.00 (0.00)
Sub Total (NER)		31857	517.00 (1.62)	620.42 (1.95)
Total (All Regions)		84044	15157.74 (18.04)	4828.08 (5.74)

Source : Central Electricity Authority, HP&I Division.

Remark : Figures in brackets are the percentages. **MW** : Mega Watts.

Chart 26

HYDRO ELECTRIC POWER GENERATION



**TABLE : 8.4 HYDRO ELECTRIC POWER INSTALLED CAPACITY
AND GENERATION ALL INDIA
(1947 TO 2003-04)**

Sl. No.	Year	Installed Capacity		Generation	
		Total (MW)	Hydro (MW)	Total (GWH)	Hydro (GWH)
1	2	3	4	5	6
1	1947	1361.8	508.1	4073.3	2194.5
2	1950	1712.5	559.3	5106.7	2519.8
3	1955	2694.8	939.5	8592.5	3742.2
4	1960-61	4653.1	1916.7	16937.0	7836.6
5	1965-66	9027.0	4123.7	32990.1	15225.0
6	1968-69	12957.3	5906.9	47433.7	20722.7
7	1973-74	16663.6	6965.3	66689.0	28971.8
8	1978-79	26680.1	10833.1	102522.5	47158.9
9	1979-80	28447.8	11384.0	104627.3	45477.6
10	1984-85	42584.7	14460.0	156859.4	53948.3
11	1985-86	46796.0	15471.6	170350.1	51020.8
12	1986-87	49265.9	16195.6	187714.0	53840.9
13	1987-88	54155.2	17265.3	202092.7	47444.4
14	1988-89	59040.4	17798.1	221396.1	57867.9
15	1989-90	63627.3	18307.6	245437.9	62116.1
16	1990-91	66086.3	18753.4	264328.6	71641.3
17	1991-92	69065.2	19194.3	287028.6	72757.1
18	1992-93	72330.4	19575.9	301361.7	69869.3
19	1993-94	76750.2	20378.0	324049.6	70462.6
20	1994-95	81171.3	20832.3	350490.4	82712.0
21	1995-96	83293.5	20985.6	379877.1	72579.2
22	1996-97	85795.4	21658.1	395889.5	68900.8
23	1997-98	89102.3	21904.5	421747.3	74581.7
24	1998-99	93293.6	22479.1	448544.1	82922.6
25	1999-00	97884.5	23856.8	481055.2	80755.5
26	2000-01	101626.2	25152.9	501204.1	74361.9
27	2001-02	105046.0	26268.8	517439.4	73579.9
28	2002-03	107877.4	26916.8	532693.0	64013.7
29	2003-04	112683.5	29506.8	565101.7	75242.5

Sources: Central Electricity Authority (DMLF Division)

MW : Mega Watt **GWH :** Giga Watt Hours

**TABLE: 8.5 NUMBER OF TOWNS AND VILLAGES ELECTRIFIED IN INDIA
AS ON 31-3-2004**

Sl. No.	State/ Union Territory	Towns		Villages	
		Total *	Electrified	Total *	Electrified during 2003-04
1	2	3	4	5	6
Northern Region					
1	Haryana	94	94	6759	0
2	Himachal Pradesh	58	58	16891	1
3	Jammu & Kashmir	58	58	6303	3
4	Punjab	120	120	12428	0
5	Rajasthan	222	222	37255	370
6	Uttar Pradesh	753	753	55461	231
7	Urranchal			13317	454
8	Chandigarh	5	5	25	0
9	Delhi	32	32	199	0
Sub Total (Northern region)		1342	1342	148638	1059
Western Region					
1	Gujarat	264	264	17940	0
2	Madhya Pradesh	465	465	50474	74
3	Chhattishgarh			18540	219
4	Maharashtra	336	336	40351	0
5	Goa	31	31	360	0
6	Daman & Diu	2	2	71	0
7	Dadra & Nagar Haveli	1	1	263	0
Sub Total (Western Region)		1099	1099	130421	293
Southern Region					
1	Andhra Pradseh	264	264	26565	0
2	Karnataka	306	306	26772	0
3	Kerala	197	197	1384	0
4	Tamil Nadu	469	469	15822	0

Contd..

5	Pondicherry	11	11	7	0
6	Lakshadweep	4	4	263	0
Sub Total (Southern Region)		1251	1251	70813	0

TABLE: 8.5 NUMBER OF TOWNS AND VILLAGES ELECTRIFIED IN INDIA AS ON 31-3-2004

Sl. No.	State/ Union Territory	Towns		Villages	
		Total *	Electrified	Total *	Electrified during 2003-04
1	2	3	4	5	6
Eastern Region					
1	Bihar	271	271	48166	118
Eastern Region					
2	Jharkhand				
3	Orissa	124	124	37347	40
4	West Bengal	382	382	31705	338
5	A & N island	1	1	501	0
6	Sikkim	8	8	405	0
Sub Total (Eastern Region)		786	786	69958	378
North Eastern Region					
1	Assam	93	93	19081	42
2	Manipur	31	31	2084	77
3	Meghalaya	12	12	3484	727
4	Nagaland	9	9	1216	0
5	Tripura	18	18	820	3
6	Arunachal Pradesh	10	10	2316	NA
7	Mizoram	22	22	695	4
Sub Total (North Eastern Region)		195	195	29696	853
TOTAL ALL INDIA		4673	4673	495031	2706

Source: Central Electricity Authority

* : As per 1991 Census.

NA: Not Available

9. MISCELLANEOUS

9.1 DECENTNIAL GROWTH OF POPULATION BY CENSUS

(As on 1st March)

(Population in Thousand)

S.N o.	Name of the State / Uts	1901 3	1951 4	1981 5	1991 6	2001 7
1	India	238396	361088	683329	846421	1028737
1	Andhra Pradesh	19066	31115	53551	66508	76210
2	Arunachal Pradesh	-	-	632	865	1098
3	Assam	3290	8029	18041	22414	26656
4	Bihar	27312	38782	69915	86374	82999
5	Chhattisgarh	Included in Madhya Pradesh				20834
6	Goa	476	547	1008	1170	1348
7	Gujarat	9095	16263	34086	41310	50671
8	Haryana	4623	5674	12922	16464	21145
9	Himachal Pradesh	1920	2386	4281	5171	6078
10	Jammu & Kashmir	2139	3254	5987	7837*	10144
11	Jharkhand	Included in Bihar				26946
12	Karnataka	13055	19402	37136	44977	52851
13	Kerala	6396	13549	25454	29099	31841
14	Madhya Pradesh	16861	26072	52179	66181	60348
15	Maharashtra	19392	32003	62783	78937	96879
16	Manipur	284	578	1421	1837	2294
17	Meghalaya	341	606	1336	1775	2319
18	Mizoram	82	196	494	690	889
19	Nagaland	102	213	775	1210	1990
20	Orissa	10303	14646	26370	31660	236805
21	Punjab	7545	9161	16789	20282	24359
22	Rajasthan	10294	15971	34262	44006	56507
23	Sikkim	59	138	316	406	541
24	Tamil Nadu	19253	30119	48408	55859	62406
25	Tripura	173	639	2053	2757	3199
26	Uttaranchal	Included in Uttar Pradesh				8489
27	Uttar Pradesh	48628	63220	110863	139112	166198
28	West Bengal	16940	26300	54581	68078	80176
	Union Territory					
29	A & N Islands	25	31	189	281	356
30	Chandigarh	22	24	452	642	901
31	D & N Haveli	24	42	104	138	220
32	Daman & Diu	32	49	79	102	158
33	Delhi	406	1744	6220	9421	13851
34	Lakshadweep	14	21	40	52	61
35	Pondicherry	246	317	604	808	974

Source : Office of the Registrar General of India, Ministry of Home Affairs.

Totals May not tally due to rounding off. * : Workedout by Interpolation.

TABLE: 9.2 EXTENT OF VARIOUS TYPES OF DEGRADED LANDS IN THE COUNTRY

(Unit : Lakh Hactare)

S. No.	State/UT	Water Erosion	Wind Erosion	Ravines	Soil Affected	Water Logging
1	2	3	4	5	6	7
1	Andhra Pradesh	103.54	-	-	2.4	3.39
2	Arunachal Pradesh	1.58	-	-	-	-
3	Assam	13.34	-	1.93	-	4.5
4	Bihar	32.39	-	6	0.04	7.07
5	Goa	1.35	-	-	-	-
6	Gujarat	94.62	7.04	4	10.42	4.84
7	Haryana	15.35	14.00	-	5.2	6.2
8	Himachal Pradesh	10.75	-	-	-	-
9	J & K	6.73	-	-	-	0.1
10	Karnataka	102.25	-	-	4.04	0.1
11	Kerala	15.77	-	-	1.17	0.61
12	Madhya Pradesh	155.1	-	6.83	2.42	0.57
13	Maharashtra	175.89	-	0.2	5.34	1.11
14	Manipur	2.94	-	-	-	-
15	Meghalaya	5.48	-	-	-	-
16	Mizoram	2.87	-	-	-	-
17	Nagaland	2.77	-	-	-	-
18	Orissa	27.71	-	1.13	4.04	0.6
19	Punjab	9.14	-	1.2	7.18	10.9
20	Rajasthan	188.41	156.92	4.52	10	3.48
21	Sikkim	2.58	-	-	-	-
22	Tamil Nadu	32.42	-	0.6	1.04	0.18
23	Tripura	0.45	-	-	-	-
24	Uttar Pradesh	58.98	-	12.3	12.95	19.8
25	West Bengal	7.64	-	1.04	9.86	21.6
26	Union Territories	1.21	-	-	-	0.01
TOTAL a : (Lakh Hactare)		1071.26	177.96	39.75	76.1	85.26
b : Million Hactare		107.1	17.8	3.97	7.6	8.5

Contd..

TABLE: 9.2 EXTENT OF VARIOUS TYPES OF DEGRADED LANDS IN THE COUNTRY

(Unit : Lakh Hactare)

S.No.	State/UT	Shifting cultivation	Degraded forests	Special problems	Total
1	2	8	9	10	11
1	Andhra Pradesh	1.5	11.48	-	122.31
2	Arunachal Pradesh	2.1	22.86		26.54
3	Assam	1.39	8.83		29.99
4	Bihar	0.85	10.21	9	65.52
5	Goa		0.65		2
6	Gujarat		4.84	0.10	125.86
7	Haryana		0.56	0.25	41.62
8	Himachal Pradesh		8.39		19.14
9	J & K		2.1		8.93
10	Karnataka		7.64		114.03
11	Kerala		1.8		19.35
12	Madhya Pradesh	1.25	41		207.17
13	Maharashtra		15.92		198.46
14	Manipur	3.6	0.8		7.34
15	Meghalaya	2.65	2.89		11.02
16	Mizoram	1.89	1.34		6.1
17	Nagaland	6.33	1.28		10.38
18	Orissa	26.48	18.07	2.95	78.03
19	Punjab		0.93		32.3
20	Rajasthan		10.61		373.94
21	Sikkim		0.45		3.03
22	Tamil Nadu		3.98		38.22
23	Tripura	1.12	1.22		2.79
24	Uttar Pradesh		12.12	15	131.15
25	West Bengal		2.69		43.03
26	Union Territories		2.28		3.5
TOTAL a : (Lakh Hactare)		49.16	194.94	27.3	1721.75
b : Million Hactare		4.92	19.5	2.73	172.18
Costal Sands – No Statewise data Available					14.65
GRAND TOTAL a). Lakh Hactare					1736.40
b). Million Hactare					173.64

Source:-Report of Working Group on Watershed Development, Rainfed

Farms & Natural Resource Management for 10th Five Year Plan

(Ministry of Agriculture, Directorate of Economics & Statistics)

Table 9.3 AREA DEVELOPED UNDER VARIOUS WATERSHED DEVELOPMENT PROGRAMMES

Sl. No.	Ministry/Scheme (Year of Start)	Upto IX Plan		Area treated since inception up-to March 2003	
		Area Treated (Lakh Ha.)	Total Investment (Rs. Crores)	Area Treated (Lakh Ha.)	Total Investment (Rs. Crores)
1	2	3	4	5	6
1) Ministry of Agriculture, Department of Agriculture & Co-operation					
i)	NWDPRA (1990-91)	69.89	1877.73	71.68	1991.32
ii)	Soil conservation in the catchments of RVP & FPR (since 1962)	54.87	1516.23	56.91	1636.18
iii)	WDPSCA (Since 1994-95)	2.24	113.51	2.43	133.18
iv)	EAWDP	15.00	2071.00	15.00	2071.00
Sub Total		142.00	5578.47	146.02	5831.68
Sl. No.	Ministry/Scheme (Year of Start)	Upto VIII Plan		Area treated since inception up-to March 2000	
		Area Treated (Lakh Ha.)	Total Investment (Rs. Crores)	Area Treated (Lakh Ha.)	Total Investment (Rs. Crores)
2) Min of Rural Development, Department of Land Resources					
i)	DPAP (1973-74)	68.60	1109.95	87.95	1558.24
ii)	DDP (1977-78)	8.48	722.79	16.96	1092.58
iii)	IWDP (1988-89)	2.84	542.96	9.35	869.76
iv)	TDET (1993-94)	Neg.		0.32	41.57
v)	IPS (1994-95)	Neg.		0.01	0.59
vi)	WDTF	0.01	4.74	0.01	4.74
Sub Total		79.93	2380.44	114.60	3567.48
3) Ministry of Environment and Forests					
I)	IAEPS (1989-90)	2.98	203.12	4.21	344.66
TOTAL (2+3)		82.91	2583.56	118.81	3912.14

Details of abbreviations: NWDPRA - National Watershed Development Project for Rainfed Areas

RVP&FPR - River Valley Projects & Flood Prone Rivers

EAWDP - Externally Aided Watershed Development

IWDP - Integrated Wasteland Development Project

IPS - Investment Promotional Scheme

IAEPS - Integrated Afforestation & Eco-development Project Scheme

WDPSCA - Watershed Development Project fo

DPAP - Drought Prone Area Programme

TDET - Technology Development, Extension &

WDTF - Wasteland Development Task Force

Source :- Report of Working Group on Watershed Development, Rainfed Farms & Natural Resource Management, 10th Five Year Plan (Ministry of Agriculture, Directorate of Economics & Statistics)

TABLE :9.4 YEARWISE FISH PRODUCTION IN INDIA
 (Unit : Lakh Tonne)

Sl. No.	Year	Fish Production		
		Inland	Marine	Total
1	2	3	4	5
1	1950-51	2.18	5.34	7.52
2	1960-61	2.80	8.80	11.60
3	1970-71	6.70	10.86	17.56
4	1980-81	8.87	15.55	24.42
5	1981-82	11.60	17.16	28.76
6	1982-83	9.40	14.27	23.67
7	1983-84	9.87	15.19	25.06
8	1984-85	11.03	16.98	28.01
9	1985-86	11.60	17.16	28.76
10	1986-87	12.29	17.13	29.42
11	1987-88	13.01	16.58	29.59
12	1988-89	13.35	18.17	31.52
13	1989-90	14.02	22.75	36.77
14	1990-91	15.36	23.00	38.36
15	1991-92	17.10	24.47	41.57
16	1992-93	17.89	25.76	43.65
17	1993-94	19.95	26.49	46.44
18	1994-95	20.97	26.92	47.89
19	1995-96	22.42	27.07	49.49
20	1996-97	23.81	29.67	53.48
21	1997-98	24.38	29.50	53.88
22	1998-99	26.02	26.96	52.98
23	1999-00	28.23	28.52	56.75
24	2000-01	28.45	28.11	56.56
25	2001-02	31.26	28.3	59.56
26	2002-03	32.1	29.9	62.00
27	2003-04(P)	34.58	29.41	63.99

Source : Fisheries Division, Department of Animal Husbandry &

Dairying, Ministry of Agriculture.

P : Provisional

**TABLE : 9.5 STATE-WISE INLAND FISH PRODUCTION
DURING 2000-01 TO 2003-2004**

(Unit: '000 Tonne)

Sl. No.	Name of the States/UTs	2000-2001	2001-02	2002-03	2003-04 (P)
1	2	3	4	5	6
1	Andhra Pradesh	407.2	471.2	579.4	680.7
2	Arunachal Pradesh	2.5	2.6	2.6	2.7
3	Assam	158.6	161.5	166.5	181.0
4	Bihar	222.2	240.4	261.0	266.5
5	Goa	4.2	3.4	4.3	3.6
6	Gujarat	40.3	50.8	34.3	45.5
7	Haryana	33.0	34.6	35.2	39.1
8	Himachal Pradesh	7.0	7.2	7.2	6.5
9	Jammu & Kashmir	17.5	18.9	19.8	19.8
10	Karnataka	127.5	121.2	86.3	70.0
11	Kerala	85.2	78.0	75.0	76.2
12	Madhya Pradesh	48.8	47.5	42.2	50.8
13	Maharashtra	123.3	122.8	127.2	125.1
14	Manipur	16.1	16.5	16.6	17.6
15	Meghalaya	6.2	5.0	5.4	5.2
16	Mizoram	2.9	3.2	3.3	3.4
17	Nagaland	5.5	5.2	5.5	5.6
18	Orissa	138.6	168.1	172.5	190.0
19	Punjab	52.0	58.0	66.0	83.7
20	Rajasthan	12.1	14.3	25.6	14.3
21	Sikkim	0.1	0.1	0.1	0.1
22	Tamil Nadu	113.6	114.0	102.0	101.1
23	Tripura	29.4	29.5	29.5	18.0
24	Uttar Pradesh	208.3	225.4	249.8	267.0
25	West Bengal	879.2	915.8	938.5	988.0
26	A & N Islands	0.1	0.1	0.1	0.1
27	Chandigarh	0.1	0.0	0.1	0.1
28	Dadra & Nagar Haveli	0.0	0.1	0.1	0.1
29	Daman & Diu	0.0	0.0	0.0	0.0
30	Delhi	4.0	3.2	2.3	2.1
31	Lakshadweep	-	0.0	0.0	0.0
32	Pondicherry	4.4	4.9	4.9	5.2
33	Chhatisgarh	43.4	95.8	99.8	111.1
34	Uttaranchal	9.1	6.4	2.6	2.6
35	Jharkhand	42.6	101.0	45.4	75.4
All INDIA		2844.8	3126.2	3209.9	3457.9

Source : Fisheries Division, Deptt. of Animal Husbandry & Dairying, Ministry

of Agriculture P= Provisional

Total may not tally due to rounding off.

**TABLE : 9.6 STATE-WISE INLAND FISH PRODUCTION PER HECTARE
AREA OF WATER BODIES 2003-04 (Provisional)**

SI No.	Name of the State/UT.	Total Water Bodies Excluding Rivers & Canals ('000 Ha.)	Inland Fish Production ('000 Tonne)	Yield (Tonnes / Hectare)
1	2	3	4	5
1	Andhra Pradesh	847.00	680.71	0.80
2	Arunachal Pradesh	450.00	2.65	0.01
3	Assam	155.00	181.00	1.17
4	Bihar	110.00	266.49	2.42
5	Chhattishgarh	294.00	111.05	0.38
6	Goa	6.00	3.60	0.60
7	Gujarat	702.00	45.48	0.06
8	Haryana	49.00	39.13	0.80
9	Himachal Pradesh	43.00	6.53	0.15
10	Jammu & Kashmir	38.00	19.75	0.52
11	Jharkhand	123.00	75.38	0.61
12	Karnataka	509.00	70.00	0.14
13	Kerala	546.00	76.18	0.14
14	Madhya Pradesh	287.00	50.82	0.18
15	Maharashtra	348.00	125.12	0.36
16	Manipur	100.00	17.60	0.18
17	Meghalaya	10.00	5.15	0.52
18	Mizoram	2.00	3.38	1.69
19	Nagaland	53.00	5.56	0.10
20	Orissa	910.00	190.02	0.31
21	Punjab	7.00	83.65	11.95
22	Rajasthan	300.00	14.30	0.05
23	Sikkim	123.00	0.14	0.00
24	Tamil Nadu	371.00	101.14	0.27
25	Tripura	18.00	17.98	1.00
26	Uttar Pradesh	432.00	267.00	0.62
27	Uttaranchal	20.00	2.56	1.30
28	West Bengal	545.00	988.00	1.81
29	Andaman & Nicobar	41.00	0.09	0.00
30	Chandigarh	0.00	0.08	0.00
31	Dadra and Nagar Haveli	5.00	0.05	0.00
32	Daman & Diu	0.00	0.00	0.00
33	Delhi	4.00	2.10	0.53
34	Lakshadweep	0.00	0.00	0.00
35	Pondicherry	2.00	5.20	2.60
TOTAL		7453.00	3457.89	0.46

Source : Fisheries Division, Department of Animal Husbandry & Dairying

Ministry of Agriculture.

Note : Yield is based on the total Area of Water bodies in States/Uts excluding rivers and canals.

**TABLE: 9.7 TOTAL AND NAVIGABLE LENGTH OF
IMPORTANT RIVERS BY STATE During 2003-04**

(Unit : In Km.)

Sl. No.	Name of the State/ Rivers	Total Length	Navigable Length
1	2	3	4
1.	Andhra Pradesh	3140*	499*
2.	Assam	1313	1133
3.	Bihar	2903	1101
4	Goa	260	214
5	Gujarat	430(b)	277(b)
6	Karnataka	2823	1308
7	Kerala	2684	1170
8	Orissa	1378*	1544*
9	West Bengal @	4741	4593

Source : Transport Research Wing, Ministry of Transport & Highways and Ministry of Shipping

* Inculding Canals

@ Includes 268 Kms. Length each of Total Length and Navigable Length pertaining to canals.

(b) = Relates to 1994-95

**TABLE:9.8 CIWTC TRAFFIC CARRIED, FREIGHT EARNING,
PLAN OUTLAY AND EXPENDITURE**

Sl. No.	Period	Traffic Carried ('000 tonne)	Freight Earnings (Rs.lakh)	Plan	
				Outlay (Rs.Crore)	Expenditure (Rs.Crore)
1	2	3	4	5	6
1	1981-82	75	163	7.57	4.56
2	1982-83	122	135	6.08	6.46
3	1983-84	201	210	9.06	10.83
4	1984-85	255	372	12.95	10.03
5	1985-86	304	501	26.95	14.54
6	1986-87	321	581	18.12	11.12
7	1987-88	288	452	20.00	18.00
8	1988-89	304	485	25.00	19.08
9	1989-90	410	566	51.00	30.00
10	1990-91	385	581	35.25	8.21
11	1991-92	289	427	35.00	5.00
12	1992-93	312	640	18.00	8.00
13	1993-94	242	552	19.30	15.33
14	1994-95	331	781	13.50	11.00
15	1995-96	325	837	6.30	2.50
16	1996-97	188	718	6.30	2.03
17	1997-98	243	802	10.00	10.00
18	1998-99	141	815	15.04	7.30
19	1999-00	251	1202	6.04	6.04
20	2000-01	106	641	9.26	7.72
21	2001-02	68	462	N.A	N.A
22	2002-03(P)	86	560	N.A	N.A

Source : Transport Research Division Ministry of Shipping and
Ministry of Road Transport & Highways

CIWTC : Central Inland Water Transport Corporation.

N.A. : Not Available P : Provisional

10. INTERNATIONAL COMPARISONS

Chart 27

DISTRIBUTION OF WORLD'S WATER

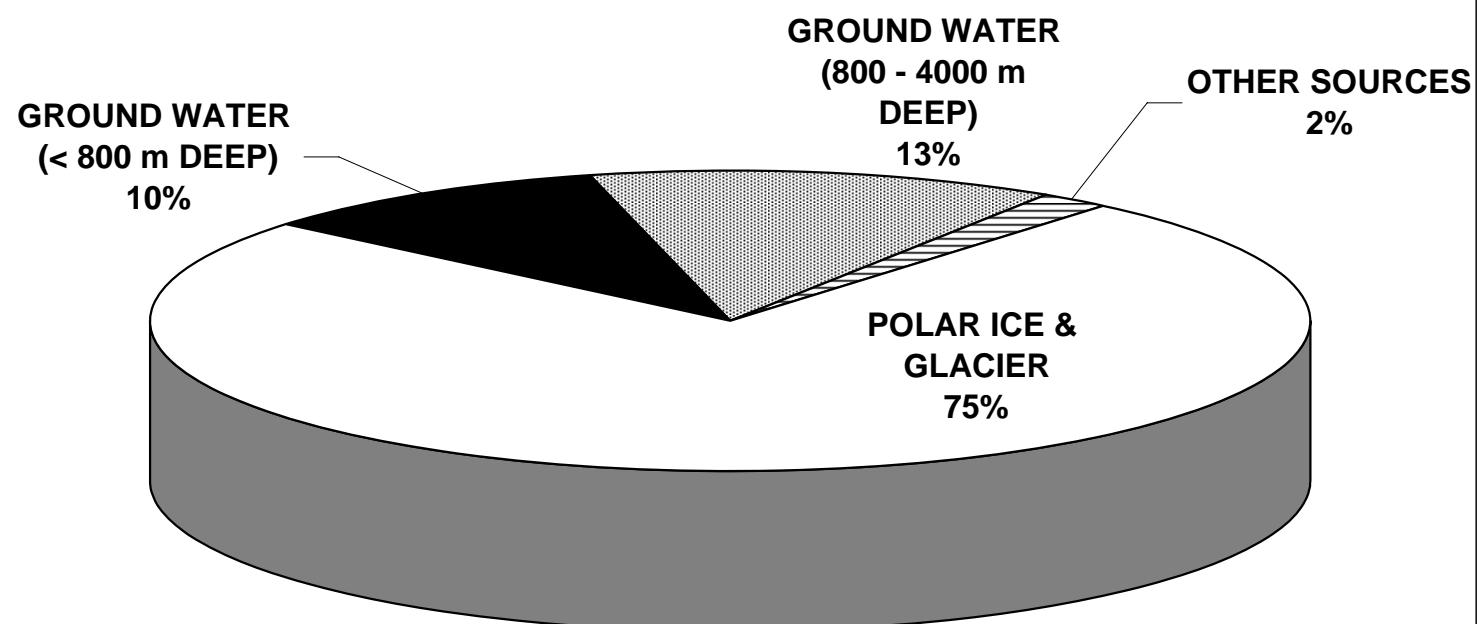


TABLE : 10.1 DISTRIBUTION OF WORLD'S WATER

A. Sources of Water (Approximate)

Item	Volume (Million BCM)	% of Total
Salt Water in oceans	1348	97.3
Fresh Water	37.5	2.7

B. Sources of Fresh Water (Approximate)

Of all fresh water, 75.2% is stored in polar ice and glaciers.
 Another 22.6% is present as groundwater and only a fraction
 (127,000 BCM) appears at any moment in lakes and rivers.

Item	Volume ('000 BCM)	% of Fresh	% of Total
Polar Ice and Glaciers	28200	75.2	2.04
Ground Water <800 m deep	3740	10.0	0.27
800-4000m deep	4710	12.6	0.34
Lakes & Rivers	127	0.3	0.01
Other (Soil Moisture and Atmospheric Vapour)	704	1.9	0.05

Source : The role of Dams in the 21st Century, June 1992,

United States Committee on Large Dams

BCM : Billion Cubic Metres

TABLE :10.2 THE WORLD'S LARGEST HYDRO PLANTS RANKED BY PRESENT CAPACITY

Rank Order	Name	Year of Initial Operation	Country	Installed Capacity (MW)
1	2	3	4	5
1	Itaipu	1982	Brazil/Paraguay	12600
2	Tueuruc	1984	Brazil	7260
3	Grand Coulee	1942	Columbia	6809
4	Sayano-Shushensk	1989	Russia	6400
5	Krasnoyarsk	1967	Russia	6000
6	Bratsk	1964	Russia	4500
7	Tucurui(Raul-G.Lhano)	1984	Brazil	4000
8	Boyuchany	1989	Russia	4000
9	Ust-Ilim	1977	Russia	3840
10	Tarbela	1976	Pakistan	3478
11	LLha Solteira	1973	Brazil	3200
12	Xingo	1994	Brazil	3000
13	Minamiaiki	1995	Japan	2700
14	Nurek	1980	Russia	2700
15	Yacyreta	n/s	Argentina	2700
16	Dherdap1	1972	Serbia	2660
17	Volgograd 22nd Congress	1958	Russia	2563
18	Itaparica	1988	Brazil	2500
19	Paulo Afonso IV	1979	Brazil	2462
20	Cahora Bassa	1974	Mozambique	2425
21	Chicoasen	1980	Mexico	2400
22	Ataturk	1992	Turkey	2400
23	Tehri	2006	India	2400
24	Volga-VI Lenin(Kuibyshev)	1953	Russia	2300
25	Itumbiara	1980	Brazil	2080

Source :International Water Power & Dam Construction Year Book, 2005
 Remark: n/s : Year not supplied. MW : Mega Watt.

10.3 THE WORLD'S LARGEST DAMS - BY DAM VOLUME

Rank Order	Name	Year Completed/ Due	Country	Type	Volume $m^3 \times 10^3$
1	2	3	4	5	6
1	Soufengying	2006	China	PG	739000
2	Yacambu	2000	Venezuela	ER/PG	600000
3	635	2000	China	TE	458000
4	Ali-e-delvari(Jarreh)	n/s	Iran	VA	395000
5	Sihwaho	1996	Korea (Republic)	BM	342330
6	Taleqan	n/s	Iran	EF	329000
7	Chapeton	n/s	Argentina	EF/PG	296000
8	Youngamho	1993	Korea (Republic)	BM	245000
9	Pati	n/s	Argentina	EF/PG	238180
10	Barrug DC Peligre	1955	Haiti	CB	210375
11	Kielder	1982	U.K.	TE	200000
12	Panzadahe Khurdad	n/s	Iran	EF	175000
13	Gumgangho	1990	Korea (Republic)	BM	138000
14	Kambaratinsk	n/s	Russia	EF/PG	112200
15	Ranganadi (Diversion)	n/s	India	TE	100373
16	Cipasang	n/s	Indonesia	EF/RF	90000
17	Ataturk	1992	Turkey	RF	84500
18	Rogun	n/s	Russia /Tadgikistan	TE	75500
19	Parambikulam	1967	India	TE	69165
20	Yacyreta	n/s	Argentina/Paraguay	EF/PG	67700
21	Lee	n/s	Zimbabwe	TE	65500
22	Gardiner	1968	Canada	TE	65440
23	Afsluitdijk	1932	Netherlands	EF	63430
24	Oroville	1967	U.S.	TE	61000
25	B.F. Sisk	1967	U.S.	TE	59386

Source : International Water, Power & Dam Construction Yearbook, 2005

Dam types : VA = arch, TE = earthfill, PG = gravity, BM = Barrage Mobile (Moveable Dam)

: MV = multi-arch, ER = rockfill, CB = Buttress n/s = year not supplied.

TABLE :10.4 THE WORLD'S HIGHEST DAMS (ALL TYPES) - BY HEIGHT

Rank Order	Name	Year Completed	Country	Type	Height (m) *
1	2	3	4	5	6
1	Jafar-Mashadi (Shahid Yaqobi)	1996	Iran	EF	611
2	Rogun	U/C	Russia/	E	335
3	Nurek	1980	Tadzhikistan	EF	300
4	Grande Dixence	1961	Switzerland	PG	285
5	Inguri	1980	Russia	VA	272
6	Tehri	2006	India	EF/RF	261
7	Chicoasen	1980	Mexico	EF/RF	261
8	Khersan II	n/s	Iran	MV	260
9	Kambaratinsh	n/s	Russia	EF/RF	255
10	Kishau	n/s	India	EF/RF	253
11	Mauvoisin	1957/90	Switzerland	VA	250
12	Guavio	1990	Colombia	EF/RF	250
13	Sayano-Shushensk	1989	Russia	VA/PG	245
14	Mica	1973	Canada	TE	242
15	Chivor(La Esmeralsa)	1975	Colombia	RF	237
16	Shuibuya	2009	China	ER	233
17	Bhakra	1963	India	PG	226
18	Luzzone	1963/98	Switzerland	VA	225
19	Hoover	1936	US	VA/PG	223
20	Contra	1965	Switzerland	VA	220
21	Mrantinje	1976	Yugoslavia	VA	220
22	Dworshak	1973	US	PG	219
23	Glen Canyon	1964	USA	VA	216
24	Toktogul	1978	Russia	PG	215
25	Daniel Johnson	1968	Canada	MV	214

Source : International Water Power & Dam Construction Yearbook, 2005

Dam types : VA = arch, TE = earthfill, PG = gravity, U/c = Under Construction

: MV = multi-arch, ER = rockfill * : above lowest foundation.

n/s = Year not Supplied EF= earthfill, RF=rockfill

Chart 28

PER CAPITA WATER AVAILABILITY IN SELECTED COUNTRIES ('000 CU.M)

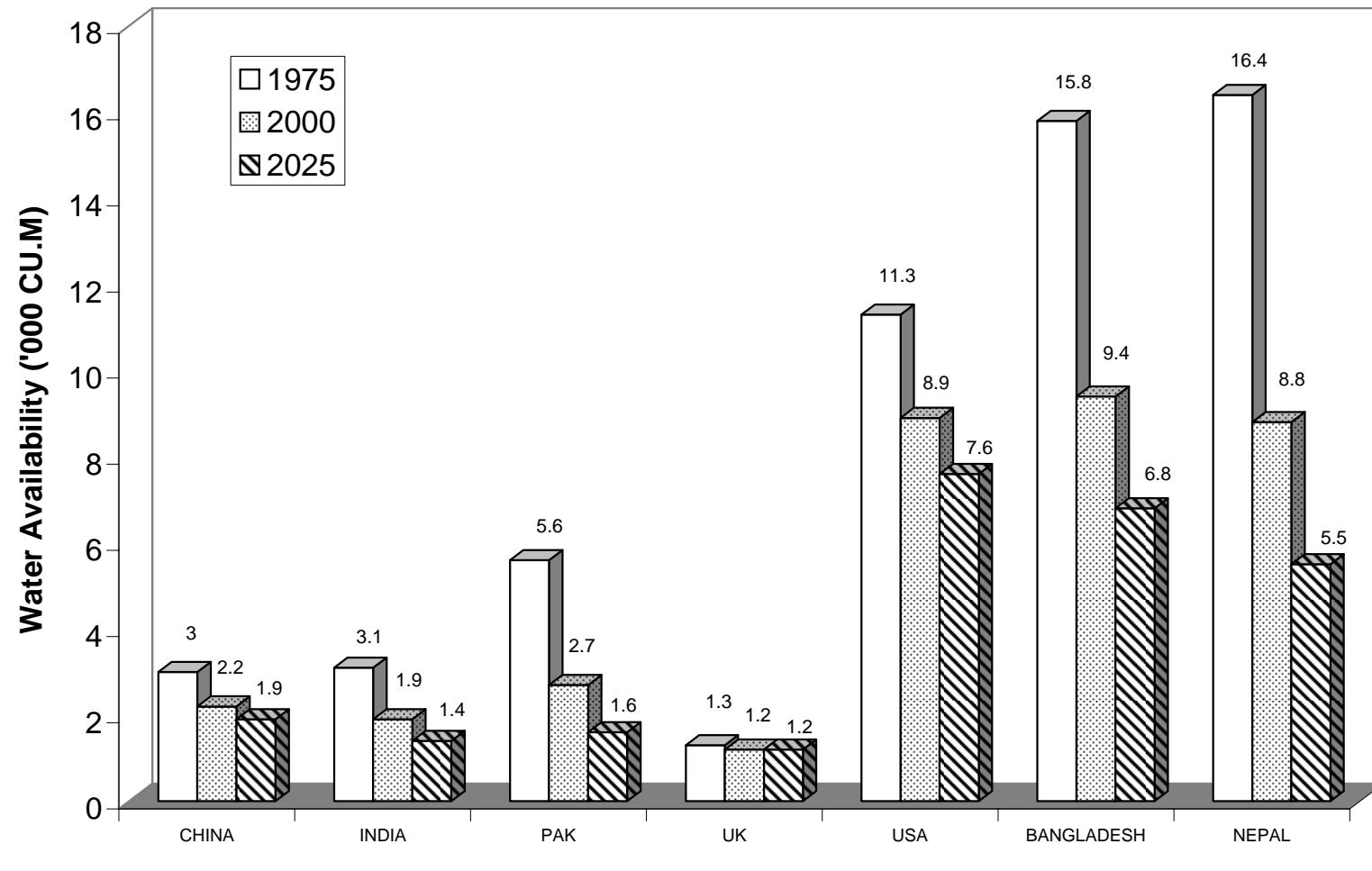


TABLE : 10.5 PER CAPITA AVAILABILITY OF RENEWABLE FRESH WATER IN SELECTED COUNTRIES

Sl. No.	Country	Total Annual Renewable Fresh Water Available (Cu.KM.)	PER CAPITA WATER AVAILABILITY (Cu.M)		
			1975	2000	2025
1	2	3	4	5	6
1	Afghanistan	65	4227	2861	1447
2	Albania	56	23020	17922	14608
3	Angola	184	30051	14288	7329
4	Argentina	994	38158	26842	21077
5	Australia	343	24675	18162	14850
6	Austria	90	11915	10998	11031
7	Bangladesh	1211	15808	9373	6773
8	Bhutan	95	80668	44728	24335
9	Bolivia	300	63040	36020	22846
10	Brazil	6950	64252	40855	31891
11	Canada	2901	124995	93140	76551
12	Chile	468	45276	30767	23941
13	China	2830	3050	2215	1911
14	Colombia	1070	42158	25283	17906
15	Congo Democratic Republic of the	832	574966	282660	146244
16	Czech Republic	58	5822	5682	6119
17	Denmark	13	2569	2456	2482
18	Ecuador	314	45460	24830	17644
19	Equatorial Guinea	30	133297	66275	37749
20	Finland	113	23984	21833	21508
21	France	198	3757	3351	3211
22	Gabon	164	276354	133754	82777
23	Gambia	8	14609	6129	3719
24	Germany	171	2173	2080	2131
25	Hungary	120	11394	11957	13483
26	India	1908	3074	1882	1434
27	Indonesia	2838	20919	13380	10379
28	Ireland	50	15737	13404	11354

Contd..

**TABLE : 10.5 PER CAPITA AVAILABILITY OF RENEWABLE FRESH WATER
IN SELECTED COUNTRIES**

Sl. No.	Country	Total Annual Renewable Fresh Water Available (Cu.KM.)	PER CAPITA WATER AVAILABILITY (Cu.M)		
			1975	2000	2025
1	2	3	4	5	6
29	Italy	167	3012	2915	3257
30	Japan	430	3856	3393	3549
31	Kuwait	0	20	10	7
32	Lao People's democratic Republic	332	109645	61034	34354
33	Malaysia	580	47317	26074	18729
34	Mauritania	11	8314	4270	2392
35	Mauritius	2	2477	1908	1602
36	Myanmar	1046	34348	22924	17990
37	Nepal	210	16426	8784	5530
38	Netherlands	90	6592	5701	5703
39	New Zealand	327	106062	84673	69649
40	Pakistan	418	5597	2673	1590
41	Paraguay	314	118096	57128	33564
42	Portugal	70	7654	7048	7445
43	Romania	208	9790	9316	10428
44	Singapore	1	265	168	144
45	South Africa	50	2022	1238	1087
46	Sri Lanka	50	3676	2656	2123
47	Suriname	200	548698	479467	381212
48	Sweden	180	21971	20202	19787
49	Tanzania, United Republic of	89	5597	2655	1537
50	United Kingdom	71	1263	1207	1184
51	United States of America	2478	11255	8902	7611
52	Venezuela	1317	103421	54490	37872
53	Zambia	116	23961	12652	7428

Source : i) : Tom Gardner-Outlaw and Robert Engelman, sustaining Water, Easing Scarcity:

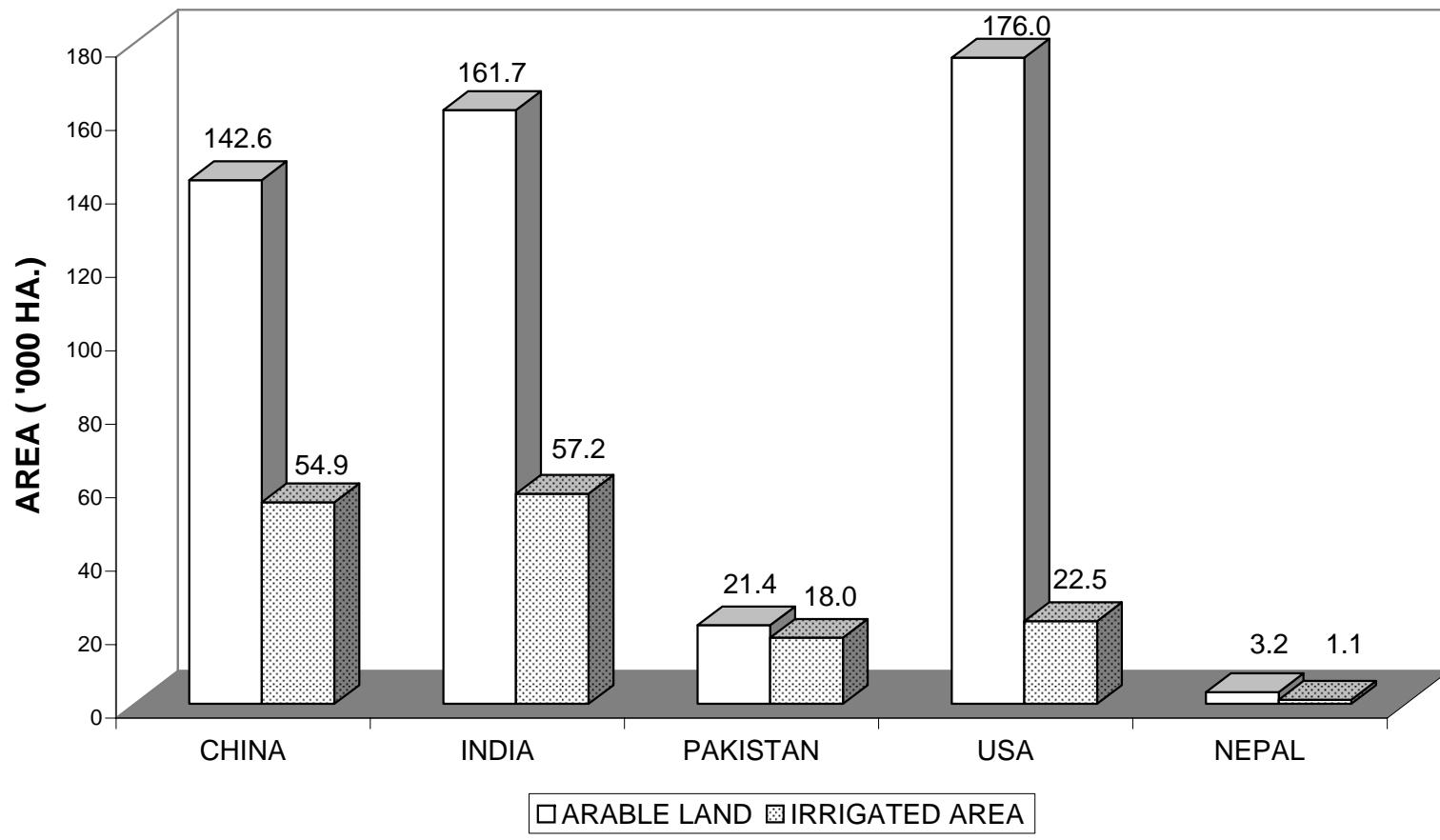
A Second Update (Washington, DC : Population Action International, 1997).

This fact sheet is based on data and analysis contained in this publication.

Note : 1. Figures of annual renewable fresh water are as per the sources quoted above and may not tally with the official figures of respective countries as in the case of India.

Chart : 29

ARABLE LAND AND IRRIGATED AREA IN SELECTED COUNTRIES DURING 2002 (M.Ha.)



**TABLE : 10.6 GEOGRAPHICAL AREA, ARABLE LAND AND
IRRIGATED AREA IN SELECTED COUNTRIES : 2002**

(Unit : '000 Hactare)

Sl. No.	Name of the Country	Geographical Area	Arable Land	Irrigated Area
1	2	3	4	5
AFRICA				
1	ALGERIA	238174	7665	560
2	ANGOLA	124670	3000 F	75
3	CHAD	128400	3600 F	20
4	CONGO DEMR	234486	6700 F	11
5	ETHIOPIA	110430	9936 F	190
6	LIBYA	175954	1815 F	470
7	MALI	124019	4660 F	138
8	NAMIBIA	82429	816 F	7
9	SOUTH AFRICA	121909	14753 F	1498
10	SUDAN	250581	16233 F	1950
Total	(Africa)	3030974	184898	12879
N.C.AMERICA				
11	CANADA	997061	45744 F	785
12	COSTA RICA	5110	225 F	108
13	CUBA	11086	2668 F	870
14	GREEN LAND	4145	NA	NA
15	GUATEMALA	10889	1360 F	130
16	HONDURAS	11209	1068 F	80
17	MEXICO	195820	24800 F	6320
18	NICARAGUA	13000	1925 F	94
19	PANAMA	7552	548 F	35
20	USA	962909	176018 F	22500
Total	(NC America)	2272494	257357	31408
SOUTH AMERICA				
21	ARGENTINA	278040	33700 F	1561
22	BOLIVIA	109858	2900 F	132
23	BRAZIL	851488	58980 F	2920
24	CHILE	75663	1982 F	1900
25	COLOMBIA	113892	2293	900

Contd..

**TABLE : 10.6 GEOGRAPHICAL AREA, ARABLE LAND AND
IRRIGATED AREA IN SELECTED COUNTRIES : 2002**

(Unit : '000 Hactare)

Sl. No.	Name of the Country	Geographical Area	Arable Land	Irrigated Area
1	2	3	4	5
26	ECUADOR	28356	1620 F	865
27	GUYANA	21497	510 F	150
28	PARAGUAY	40675	3020 F	67
29	PERU	128522	3700 F	1195
30	VENEZUELA	91205	24407	575
Total (South America)		1783361	112484	10499
ASIA				
31	BANGLA DESH	14400	8019 F	4597
32	BHUTAN	4700	145 F	40
33	CHINA	959805	142621	54937
34	INDIA	328726	161715 F	57198
35	INDONESIA	190457	20500 F	4815
36	IRAN	164820	15020 F	7500
37	IRAQ	43832	5750 F	3525
38	JAPAN	37789	4418	2607
39	KAZAKHSTAN	272490	21535 F	2350
40	MONGOLIA	156650	1198 F	84
41	MYANMAR	67658	9863	1996
42	NEPAL	14718	3200 F	1135
43	PAKISTAN	79610	21448 F	17800
44	SAUDI ARABIA	214969	3600 F	1620
45	SRI LANKA	6561	916 F	638
46	TURKEY	77482	23938	5215
Total (Asia)		3187017	511702	193869
EUROPE				
47	FINLAND	33815	2200	64
48	FRANCE	55150	18449	2600
49	GERMANY	35703	11791	485
50	ITALY	30134	8287	2750

Contd..

**TABLE : 10.6 GEOGRAPHICAL AREA, ARABLE LAND AND
IRRIGATED AREA IN SELECTED COUNTRIES : 2002**

Unit : '000 Hactare)

Sl. No.	Name of the Country	Geographical Area	Arable Land	Irrigated Area
1	2	3	4	5
51	NORWAY	32376	871	127
52	POLAND	31269	13922	100
53	RUSSIAN FEDERATION	1707540	123465	4600
54	SPAIN	50599	13738	3780
55	SWEDEN	44996	2679	115
56	UKRAINE	60370	32544	2262
Total (Europe)		2297647	287223	25220
OCEANIA				
*57	AUSTRALIA	774122	48300 F	2545
*58	FIJI	1827	200 F	3
*59	FR POLYNESIA	400	3 F	1
*60	NEW ZEALAND	27053	1500	285
*61	NEW - CALEDONIA	1858	5	10
*62	PAPUA NEW GUINEA	46284	220	95
*63	SAMOA	284	60	NA
*64	SOLOMON ISLAND	2890	18	NA
*65	TONGA	75	17	NA
*66	VANUATU	1219	30	NA
Total (Oceania)		856440	50388	2844
World		13427933	1404052	276719

SOURCE : F.A.O. YEAR BOOK ON PRODUCTION (VOL.57, 2003)

Note : * Relates to previous years figures F - FAO estimates

1. Totals are reproduced as given in F.A.O. Year Book may not tally due to

rounding-off. N.A. Not Available

2. Arable Land refers to land under temporary crops

TABLE : 10.7 AREA HARVESTED, YIELD AND PRODUCTION
OF TOTAL CEREALS IN SELECTED COUNTRIES : 2004

S.No.	Name of the country	Area Harvested ('000 Ha.)	Yield (Kg/Ha.)	Production ('000 MT)
1	2	3	4	5
AFRICA				
1	BURKINA FASO	3601	8505	3063
2	CONGO D. REPUBLIC	2012	7800	1570
3	EGYPT	2755	73542	20261
4	ETHIOPIA	7404	12533	9280
5	MOROCCO	5690	15099	8591
6	NIGER	7844	4040	3169
7	NIGERIA	21563	10566	22783
8	SOUTH AFRICA	4350	28102	12225
9	SUDAN	8805	4306	3792
10	TANZANIA	2860	15586	4458
Total	(Africa *)	101397	1257	127503
N.C.AMERICA				
11	CANADA	16930	31117	52680
12	CUBA	314	29302	910
13	DOMINICAN REPUBLIC	164	41758	687
14	EL-SALVADOR	331	24847	822
15	GUATEMALA	666	17595	1172
16	HAITI	461	7961	367
17	HONDURAS	2990	14720	597
18	MEXICO	10980	27550	30251
19	NICARAGUA	522	16828	877
20	USA	56802	68494	389068
Total	(NC America *)	89909	4844	435507
SOUTH AMERICA				
21	ARGENTINA	9359	36554	34212
22	BOLIVIA	750	17874	1341
23	BRAZIL	20324	31514	64049
24	CHILE	699	56611	3956
25	COLOMBIA	1255	35462	4450
26	ECUADOR	857	21031	1802
27	PARAGUAY	828	24167	2002
28	PERU	1023	3312	3389
29	URUGUAY	585	43170	2523
30	VENEZUELA	1098	33418	3670
Total	(South America *)	37274	3293	122745
ASIA				
31	BANGLA DESH	11730	33447	39232
32	BHUTAN	64	15242	97
33	CHINA	80436	51416	413567
34	INDIA	95870	24341	233360

Contd..

TABLE : 10.7 AREA HARVESTED, YIELD AND PRODUCTION
OF TOTAL CEREALS IN SELECTED COUNTRIES : 2004

S.No.	Name of the country	Area Harvested ('000 Ha.)	Yield (Kg/Ha.)	Production ('000 MT)
1	2	3	4	5
35	INDONESIA	15254	42882	65416
36	IRAN	9227	23420	21610
37	IRAQ	NA	NA	NA
38	JAPAN	2024	59497	12041
39	KAZAKHSTAN	14027	8802	12347
40	MYANMAR	6627	34544	22892
41	NEPAL	3344	22697	7591
42	PAKISTAN	12325	24753	30508
43	SRI LANKA	787	32280	2541
44	THAILAND	1128	28171	31349
45	TURKEY	13996	24269	33967
46	VIETNAM	8434	46918	39571
Total (Asia *)		314107	3169	995307
EUROPE				
47	FRANCE	9349	75446	70534
48	GERMANY	7204	70929	51097
49	HUNGARY	2991	56004	16749
50	ITALY	4277	53454	22864
51	POLAND	8705	32365	28174
52	ROMANIA	6000	40384	24232
53	RUSSIAN FEDERATION	40493	188726	76231
54	SPAIN	6592	37532	24743
55	UK	3128	71413	22338
56	UKRAINE	14443	28372	40979
Total (Europe *)		113139	3140	355267
OCEANIA				
57	AUSTRALIA	17574	17833	31340
58	FIJI-ISLANDS	7	2362	16330
59	NEW CALEDONIA	1	36338	3
60	NEW ZEALAND	136	64	882
61	PAPUA NEW GUINEA	3	35333	10
62	SOLOMON ISLAND	1	39286	5
63	VANUATU	1	8385	1
Total (Oceania *)		18512	2106	38981
World *		674338	3078	2075309

SOURCE : www.fao.org

MT: Metric Tonnes Ha : Hactare

Kg/Ha : Kilogram Per Hactare

Note * : Totals relate to the year 2003

TABLE : 10.8 AREA HARVESTED, YIELD AND PRODUCTION OF
WHEAT IN SELECTED COUNTRIES: 2004

S.No.	Name of the Country	Area Harvested ('000 Ha.)	Yield (Kg/Ha.)	Production ('000 MT)
1	2	3	4	5
AFRICA				
1	ALGERIA	1800	14444	2600
2	EGYPT	1070	67083	7178
3	ETHIOPIA	1166	13873	1618
4	KENYA	150	20000	300
5	LIBYA	165	7576	125
6	MOROCCO	3063	18082	5539
7	SOUTH AFRICA	851	20688	1761
8	SUDAN	150	22133	332
9	TANZANIA	60	11833	71
10	TUNISIA	980	17571	1722
Total (Africa *)		9676	2029	19632
N. C. AMERICA				
11	CANADA	9862	26221	25860
12	GUATEMALA	4	24177	11
13	HONDURAS	2	5	1
14	MEXICO	560	44643	2500
15	USA	20234	29029	58737
Total (N.C. America *)		32484	2775	90151
SOUTH AMERICA				
16	ARGENTINA	5735	25388	14560
17	BOLIVIA	115	9342	107
18	BRAZIL	2781	21439	5962
19	CHILE	420	4571	1921
20	COLOMBIA	17	21404	36
21	ECUADOR	22	4455	12
22	PARAGUAY	325	22000	715
23	PERU	122	13886	168
24	URUGUAY	177	30023	533
25	VENEZUELA	0	3333	0
Total (South America *)		10554	2202	23238
ASIA				
26	AFGHANISTAN	NA	NA	NA
27	BANGLA DESH	641	19523	1253

Contd..

**TABLE : 10.8 AREA HARVESTED, YIELD AND PRODUCTION OF
WHEAT IN SELECTED COUNTRIES: 2004**

S.No.	Name of the Country	Area Harvested ('000 Ha.)	Yield (Kg/Ha.)	Production ('000 MT)
1	2	3	4	5
28	BHUTAN	4	11707	4
29	CHINA	21730	42029	91330
30	INDIA	26620	27070	72060
31	IRAN	6750	20741	14000
32	IRAQ	NA	NA	NA
33	JAPAN	213	40378	860
34	KAZAKHSTAN	11758	8437	9942
35	NEPAL	664	20873	1387
36	PAKISTAN	8176	24177	19767
37	SYRIA	1831	24778	4537
38	TURKEY	9400	22430	21000
39	UZBEKISTAN	1210 *	36992	4476
Total (Asia *)		94807	2572	243879
EUROPE				
40	BULGARIA	1039	38100	3961
41	FRANCE	5235	75841	39704
42	GERMANY	3112	81706	25427
43	ITALY	2352	3676	8628
44	POLAND	2420	39052	9450
45	ROMANIA	2291	33753	7735
46	RUSSIAN FEDERATION	22919	19814	45412
47	SPAIN	2151	33037	7108
48	UK	1991	78885	15706
49	UKRAINE	5539	31628	17518
Total (Europe *)		48745	3164	154229
OCEANIA				
50	AUSTRALIA	1191	16993	20376
51	NEWZEALAND	40	72	287
Total (Oceania *)		12499	2018	25221
World *		208765	2665	556349

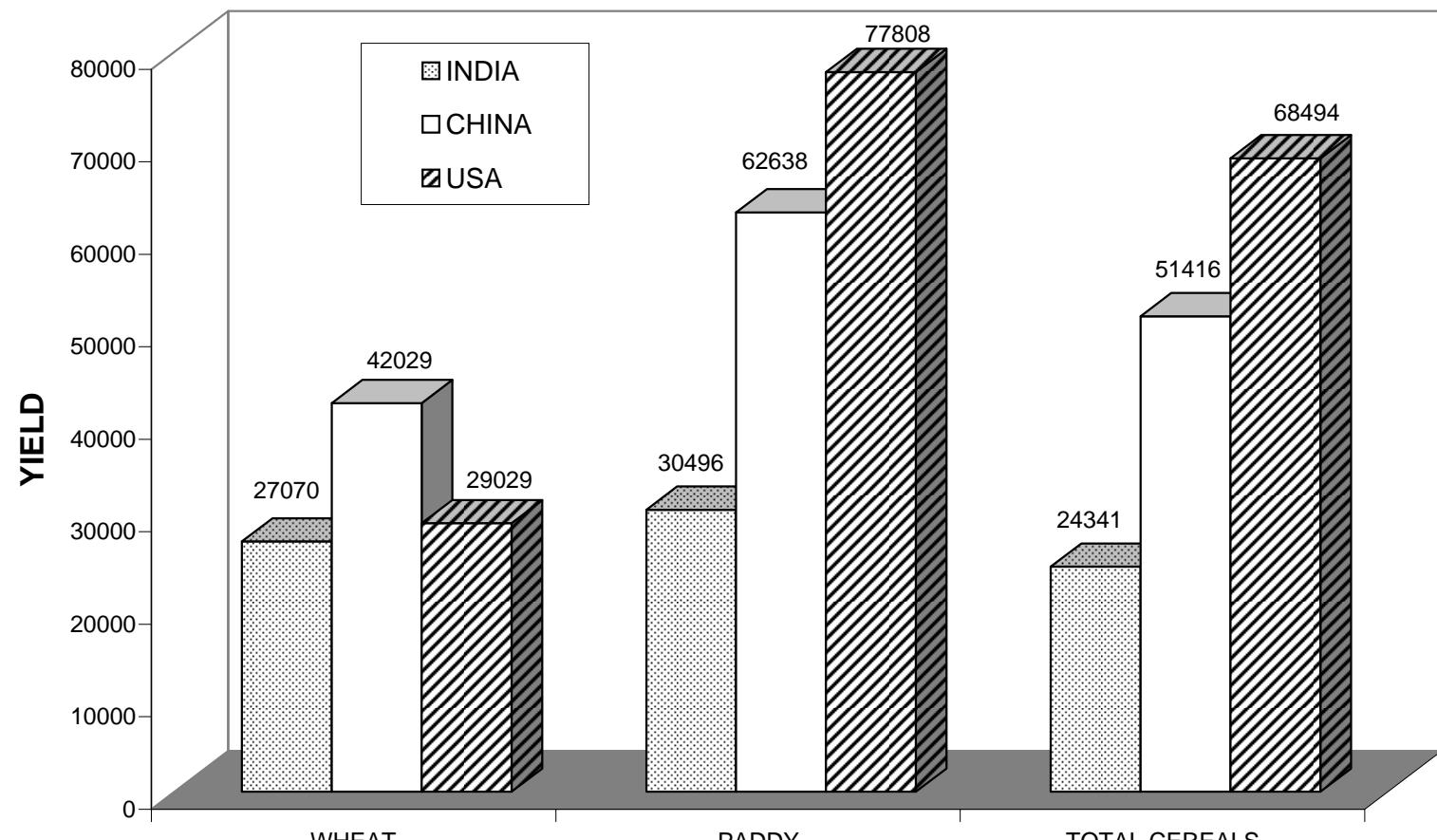
SOURCE : www.fao.org

MT : Metric Tonnes, **Ha** : Hactare, **Kg/Ha** : Kilogram per Hectare

Note * : Totals relate to the year 2003.

Chart : 30

COMPARATIVE YIELD OF IMPORTANT CROPS DURING 2004 (Kg.Ha.)



**TABLE : 10.9 AREA HARVESTED, YIELD AND
PRODUCTION OF RICE, PADDY IN SELECTED COUNTRIES : 2004**

S. No.	Name of the Country	Area Harvested ('000 Ha.)	Yield (Kg/Ha.)	Production ('000 MT)
1	2	3	4	5
A F R I C A				
1	CONGO D. REPUBLIC	415	7593	315
2	COTE DIVOIRE	500	23000	1150
3	EGYPT	635	96850	6050
4	GUINEA	525	17143	900
5	MADAGASCAR	1223	24781	3030
6	MALI	451	19446	877
7	MOZAMBIQUE	179	11229	201
8	NIGERIA	3704	9563	3542
9	SIERRA LEONE	210	12619	265
10	TANZANIA	330	19606	647
Total (Africa *)		10228	1865	19080
N.C. AMERICA				
11	COSTA RICA	53	41802	222
12	CUBA	185	32937	610
13	DOMINICAN REPUBLIC	130	49214	640
14	EL-SALVADOR	3	66430	26519
15	GUATEMALA	14	24087	34926
16	HAITI	53	19245	102
17	MEXICO	46	41369	192
18	NICARAGUA	94	25678	242
19	PANAMA	93	31828	296
20	USA	1346	77808	10469
Total (N.C. America *)		1872	6123	11462
SOUTH AMERICA				
21	ARGENTINA	169	62648	1060
22	BOLIVIA	140	21681	304
23	BRAZIL	3730	345525	13251
24	COLOMBIA	517	51494	2663
25	ECUADOR	310	35484	1100
26	GUYANA	130	35877	502
27	PERU	2725	66048	1816
28	SURINAME	51	38001	195
29	URUGUAY	186	67712	1262
30	VENEZUELA	198	49764	989
Total (South America *)		5129	3925	20133

Contd..

**TABLE : 10.9 AREA HARVESTED, YIELD AND
PRODUCTION OF RICE, PADDY IN SELECTED COUNTRIES : 2004**

S. No.	Name of the Country	Area Harvested ('000 Ha.)	Yield (Kg/Ha.)	Production ('000 MT)
1	2	3	4	5
ASIA				
31	BANGLA DESH	11000	34464	3791
32	BHUTAN	20	22500	45
33	CAMBODIA	2094	19918	4170
34	CHINA	28327	62638	177434
35	INDIA	42300	30496	129000
36	INDONESIA	11908	45397	54060
37	JAPAN	1701	64151	10912
38	MYANMAR	6000	36667	22000
39	NEPAL	1559	27574	4300
40	PAKISTAN	2503	29910	7486
41	PHILIPPINES	4127	35130	14496
42	SRI LANKA	4755	33220	2509
43	THAILAND	9800	27498	26948
44	VIETNAM	7443	48521	36118
Total (Asia *)		135666	3942	534821
EUROPE				
45	BULGARIA	5	49596	28
46	FRANCE	20	57098	115
47	GREECE	24	72500	175
48	HUNGARY	3	40000	12
49	ITALY	227	65903	1496
50	MACEDONIA	2	51676	14
51	PORTUGAL	26	56923	148
52	RUSSIAN FEDERATION	125	37685	471
53	SPAIN	122	74107	900
54	UKRAIN	25	68000	170
Total (Europe *)		581	5538	3217
OCEANIA				
55	AUSTRALIA	65	82308	535
56	FIJI ISLAND	6	23077	15
57	PAPUA NEW GUINEA	0	20	0
58	SOLOMON ISLAND	1	39286	5
Total (Oceania *)		46	8935	413
World *		153522	3837	589126

SOURCE : www.fao.org

MT : Metric Tonnes, **Ha** : Hactare, **Kg/Ha.** : Kilogram per Hactare

Note * : Totals relate to the year 2003