

WATER SECTOR AT A GLANCE

	Item			
1.	Estimated Annual Precipitation (including snowfall)	4000	BCM.	
	Geographical Area	328.7	Million Hectare	
	i) Census Population - 2001	1028.74	Million	
	ii) Projected Population - 2006	1112.19	Million	
	Average Annual Potential in Rivers	1869	BCM	Table 1.7
	i) Per Capita Water Availability (2001)	1816	Cu.M..	
	ii) Per Capita Water Availability (2006)	1680	Cu.M..	
	Estimated Utilisable Water			
	i) Surface	690	BCM	Table 1.6
	ii) Ground	433	BCM	Table 1.27
	iii) Total	1123	BCM	
a)	Live Storage Capacity	396.58	BCM	Table 1.8
	i) Completed Projects	212.78	BCM	
	ii) Projects Under Construction	76.26	BCM	
	iii) Projects Under Consideration	107.54	BCM	
b)	(i) Storage Position of 76 Important Reservoirs (June 2003 to May 2004)			Table 1.10(A) BCM
	Sl. No.	Month	Total Live Storage	Actual Storage
	1.	June-03	133.021	15.279
	2.	July-03	133.021	39.870
	3.	Aug-03	133.021	68.023
	4.	Sept-03	133.021	78.701
	5.	Oct-03	133.021	79.661
	6.	Nov-03	133.021	70.407
	7.	Dec-03	133.021	58.116
	8.	Jan-04	133.021	47.827
	9.	Feb-04	133.021	39.375
	10.	Mar-04	133.021	27.873
	11.	Apr-04	133.021	20.586
	12.	May-04	133.021	14.260
				Percentage of actual Storage
				11
				30
				51
				59
				60
				53
				44
				36
				30
				21
				15
				11
	(ii) Storage Position of 76 Important Reservoirs (June 2004 to May 2005)			Table 1.10(B)
	1.	June-04	133.021	23.213
	2.	July-04	133.021	30.021
	3.	Aug-04	133.021	83.597
	4.	Sept-04	133.021	84.770
	5.	Oct-04	133.021	82.193
	6.	Nov-04	133.021	73.217

	7.	Dec-04	133.021	61.794	46
	8.	Jan-05	133.021	49.833	37
	9.	Feb-05	133.021	41.134	31
	10.	Mar-05	133.021	31.249	23
	11.	Apr-05	133.021	26.507	20
	12.	May-05	133.021	17.143	13
8.	Number of Basins and Drainage Area			No.	Area
	i.) Major River Basins			12	2528 Table 1.2

	ii.) Medium River Basins			46	246 (Th.Sq.km.) Table 1.3
	Irrigation Potential			Table 2.9	
1	At the time of Independence (Pre-Plan)				
	Created & Utilised			22.6	Million Ha.
	i) Major & Medium			9.7	Million Ha
	ii) Minor Irrigation			12.9	Million Ha.
	a) Surface Water			6.4	Million Ha.
	b) Ground Water			6.5	Million Ha.
2	Potential Created		Table 2.9	(Th.Ha.)	
	Period	Major. & Med.	Surface Water	Minor Ground Water	Total
					Total Major Med & Minor
	VI Plan (1980-85)	3401	1698	5823	7521 10922
	VII Plan (1985-90)	2225	1289	7797	9086 11311
	Annual Plan (1990-92)	821	470	3273	3743 4564
	VIII Plan (1992-97)	2216	843	6702	7545 9761
	IX Plan (1997-2002)	4089	1472	4320	5792 9881
	X Plan (Target) *	9926	3000	5000	8000 17926
	* As per Mid Term Appraisal of X Plan, the target for Major & Medium has been scaled down to 6.5 Million Ha and to 4.0 Million Ha. for Minor Irrigation.				
3	Major & Medium (Surface Water)			Table 1.29, 2.16	
	i) Ultimate			58.5	Million Ha.
	ii) Created (Upto 2003-04)			39.2	Million Ha.
	iii) Utilised (Upto 2003-04)			32.4	Million Ha.
4	Minor Irrigation			Table 1.29, 2.16	
	(a) Surface Water				
	i) Ultimate			17.4	Million Ha.
	ii) Created (Upto 2003-04)			13.1	Million Ha.
	iii) Utilised (Upto 2003-04)			7.8	Million Ha.
	(b) Ground Water				
	i) Ultimate			64.2	Million Ha
	ii) Created (Upto 2003-04)			64.8	Million Ha.
	iii) Utilised (Upto 2003-04)			47.0	Million Ha.
	(c) Total (Surface & Ground)				
	i) Ultimate			81.5	Million Ha.
	ii) Created (Upto 2003-04)			77.9	Million Ha.

	iii) Utilised (Upto 2003-04)		54.8	Million Ha.	
9.5	Total (Major & Medium + Minor)				Table 1.29, 2.16
	i) Ultimate		140.0	Million Ha.	
	ii) Created (Upto 2003-04)		117.1	Million Ha.	
	iii) Utilised (Upto 2003-04)		87.2	Million Ha.	
10.	Number of Major, Medium & ERM Irrigation Projects				Table 2.17
	(tentative / Under finalisation)	Major Projects	Medium Projects	ERM	
	i) Completed in Pre Plan	74	143	-	
	ii) Completed in Plan Period upto IX Plan	154	774	87	
	iii) Completed in X Plan upto March 2004	4	12	-	
	iii) On-going in X Plan	169	219	83	
	iv) New in X Plan	78	136	86	
1	CAD Programme				Table 2.19
1.1	Projects				
	i) No. of Projects (As on 30.09.2005)		312		
	ii) Total Irrigation Potential Created		22.7	Million Ha.	
	iii) Total Irrigation Potential Utilised		16.2	Million Ha.	
1.2	Physical Achievement up to March 2006(Cumulative)				
	i) Field Channels		17425.3	'000 Ha	Table 2.20
	ii) Land Levelling (Upto March 2004)		2235.4	'000 Ha	Table 2.21
	iii) Warabandi		11109.2	'000 Ha	Table 2.22
	iv) Field Drains		1600.7	'000 Ha	Table 2.23
2.	Area Sown (2003-04)				Table 2.1
	i) Total Cultivable Area		183.5	Million Ha.	
	ii) Net Sown Area		140.9	Million Ha.	
	iii) Gross Sown Area		190.6	Million Ha.	
3.	Area Irrigated (2003-04)				Table 2.1
	i) Gross		76.8	Million Ha.	
	ii) Net		55.1	Million Ha.	
4.	Net Area Irrigated by Source (2003-04)				Table 2.8
	i) Canals		15.1	Million Ha.	
	ii) Tanks		1.9	Million Ha.	
	iii) Wells		35.3	Million Ha.	
	iv) Others		2.8	Million Ha.	
	Total		55.1	Million Ha.	
5.	Area & Production of Total Foodgrain				Table 3.1
	Year	Area (Million Ha.)	Production (Million Tonnes)		
	1950-51	97.3	50.8		
	1980-81	126.7	129.6		
	1990-91	127.8	176.4		
	2000-01	121.1	196.8		
	2003-04	123.4	213.2		
	2004-05	120.1	198.4		
	2005-06	121.6	208.6		
6.	Foodgrain Production (2005-06)(Table 3.1)		208.6	Million Tonne	
	i) Rice		91.8	Million Tonne	
	ii) Wheat		69.4	Million Tonne	
	iii) Coarse Cereals		34.1	Million Tonne	

	iv) Pulses		13.4	<i>Million Tonne</i>		
17.	Expenditure on Irrigation Sector			Table 4.1		
					(Rs. Million)	
	Period	Major & Medium	Minor	CAD	Total	% of Expenditure on Irrigation to Total
	First Plan (1951-56)	3762	656	Nil	4418	23
	Seventh Plan (1985-90)	111073	61929	14475	187477	9
	Annual Plan (1990-91)	26348	14878	2856	44082	8
	Annual Plan (1991-92)	28240	15181	3338	46759	7
	Eighth Plan (1992-97)	216692	104724	19379	340795	7
	Ninth Plan (1997-2002)	492896	112967	22228	628091	7
	Approved outlay for X Plan	712132	144067	41967	898166	6
	Annual Plan 2002 – 2003	96557	16389	4426	117372	6
	(Actual Expenses)					
	2003-04(Revised)Approved Outlay	123348	26346	2805	152499	6
	2004-05(Approved Outlay)	165186	30447	8389	204022	13
18.	Land Degradation					Table 5.1
18.1	Area Subject to Water and Wind Erosion			103.16		<i>Million Ha.</i>
18.2	Area Affected due to other Problems					
	i) Water Logging			14.30		<i>Million Ha.</i>
	ii) Salinity / Alkacity			5.94		<i>Million Ha.</i>
	iii) Soil Acidity			16.03		<i>Million Ha.</i>
	iv) Complex Problem			7.38		<i>Million Ha.</i>
	Total Degraded Area			146.82		<i>Million Ha.</i>
19.	Districts covered under drought prone area programme (DPAP / As on April 2003)					Table 5.3
	i) No. of States			16		<i>No.</i>
	ii) No. of Districts			182		<i>No.</i>
	iii) No. of Blocks			972		<i>No.</i>
	iv) Area of Blocks			745914		<i>Sq.Km</i>
20.	Flood Damages during 2004					Table 5.12
	i) Area Affected			8.03		<i>Million Ha.</i>
	ii) Crop Damages			2.69		<i>Million Ha.</i>
	iii) Value of Damages to Crops			6151		<i>Rs. Million</i>
	iv) Population Affected			34.22		<i>Million</i>
	v) Human Lives Lost			1275		<i>No.</i>
	vi) Cattle lost			63869		<i>No</i>
1.	Expenditure under Flood Management Programme					Table 5.14
	Approved Outlay during X Plan					
	a) Total			5922		<i>Rs. Crores</i>
	b) States/UT's			4619		<i>Rs. Crores</i>
	c) Central Sector			1308		<i>Rs. Crores</i>
2.	Flood Forecasting Performance (Between 1.5.2004 and 31.10.2004)					Table 5.19
	i) No. of Flood Forecasting Stations Operated			172		
	ii) No. of Flood Forecasting Stations which			112		

	issued Forecast			
	iii) Total No. of Forecasts issued		4889	
	iv) Total No. Correct Forecasts within (+/-15cm)/(+/-20% cumecs)		4696 96.1%	
23.	Projected water demand	2000 AD	2025 AD	Table 5.21
	i) Domestic	42	73	<i>Billion Cubic Meter</i>
	ii) Irrigation	541	910	<i>Billion Cubic Meter</i>
	iii) Industry	8	23	<i>Billion Cubic Meter</i>
	iv) Energy	2	15	<i>Billion Cubic Meter</i>
	v) Other	41	72	<i>Billion Cubic Meter</i>
	Total	634	1093	<i>Billion Cubic Meter</i>

Section - 1

WATER AND RELATED RESOURCES

World's oceans cover about three fourth of earth's surface. According to the UN estimates, the total amount of water on earth is about 1400 Million BCM (Billion Cubic Metres), which is enough to cover the earth with a layer of 3000 metres depth. However, the fresh water constitutes a very small proportion of this enormous quantity. About 2.7 % of the total water available on the earth is fresh water of which about 75.2 % lies frozen in polar-regions and another 22.6 % is present as ground water. The rest is available in lakes, rivers, atmosphere, moisture, soil and vegetation. The water is effectively available for consumption and other uses is a small proportion of the quantity available in rivers, lakes and ground water. The crisis about water resources development and management thus arises because most of the water is not available for use and secondly it is characterised by its highly uneven spatial distribution. Accordingly, the importance of water has been recognised and greater emphasis is being laid on its economic use and better management.

(Table 1.1 & Chart 1.1)

Water on the earth is in motion through the hydrological cycle. The utilisation of water for most of the users i.e. human, animal or plant involves movement of water. The dynamic and renewable nature of the water resources and the recurrent need for its utilisation requires that water resources are measured in terms of its flow rates. Thus, water resources have two facets. The dynamic resource, measured, as flow is more relevant for most of developmental needs. The static or fixed nature of the resource, involving the quantity of water, the length or area of the water bodies is also relevant for some activities like pisciculture, navigation

etc. Both these aspects are discussed below.

(i) The Static Resources

Rivers

India is blessed with many rivers. As many as 12 of them are classified as major rivers whose total catchment area is 25.3 lakh Sq. Km. Of the major rivers, the Ganga - Brahmaputra - Meghna system is the largest with catchment area of about 11.0 lakh Sq. Km, which is more than 43 % of the catchment area of all the major rivers in the country. The other major rivers with catchment area more than 1 lakh Sq. Km are Indus (3.21 lakh Sq. Km), Godavari (3.13 lakh Sq. Km), Krishna (2.59 lakh Sq. Km) and Mahanadi (1.42 lakh Sq. Km). The total catchment area of medium rivers is about 2.5 lakh Sq. Km. Of the medium rivers, Subernarekha is the largest with catchment area of about 19.3 thousand Sq. Km. The other rivers with catchment area more than 10 thousand Sq. Km are Palar (including tributary cheyyar), Ponnaiyar, Baitarni and Vamsadhara.

(Tables 1.2 & 1.3)

Water Bodies

Inland Fishery Water resources of the country are classified as rivers and canals; reservoirs; tanks, lakes & ponds; beels, oxbow lakes and derelict water bodies; and brackish water. Other than rivers and canals, total water bodies cover an area of about 7.4 m.ha. Uttar Pradesh occupies the first place with the total length of rivers and canals as 28.5 thousand km., which is about 15 % of the total length of rivers and canals in the country. Other states following Uttar Pradesh are Jammu & Kashmir and Madhya Pradesh. Among the remaining forms of the inland water resources reservoirs have maximum area (2.9 m.ha) followed by tanks, lakes and ponds (2.4 m.ha). Most of the area under tanks, lakes and ponds lies in Southern States of Andhra Pradesh, Karnataka and

Tamil Nadu. These states along with West Bengal, Arunachal Pradesh, Rajasthan, Uttar Pradesh and Orissa, account for 77% of total area under tanks and ponds in the country. As far as reservoirs are concerned, states like Andhra Pradesh, Gujarat, Karnataka, Madhya Pradesh, Maharashtra, Orissa, Rajasthan, Tamil Nadu and Uttar Pradesh account for larger portion of area under reservoirs. More than 88 % of area under floodplain lakes and derelict water bodies lies in the states of Arunachal Pradesh, Assam, Kerala, Orissa and Uttar Pradesh. Orissa ranks first as regards the total area of brackish water and is followed by Kerala, West Bengal and Gujarat. The total area of inland water resources (other than rivers and canals) is, thus, unevenly distributed over seven states namely Orissa, Andhra Pradesh, Gujarat, Kerala, West Bengal, Karnataka and Arunachal Pradesh accounting for more than 59% of the country's inland water bodies.

(Table 1.4)

Navigation Waterways

The maximum total length of rivers is in West Bengal (4741 Km.) .The total navigable length is maximum in the state of West Bengal (4593 Km.) followed by Orissa.(1544 Km.)

(Table 1.5)

(ii) The Dynamic Resources

Water Resources of India

The annual precipitation including snowfall, which is the main source of the water in the country, is estimated to be of the order of 4000 BCM. The total volume of rainfall during 1.1.2005 to 31.12.2005 was 3972 BCM as against 3570 BCM recorded during the previous calendar year registering an increase of about 11.3%. For the purpose of seasonal rainfall, country has been divided into 36 meteorological sub-divisions out of which

only 19 have positive departure from normal rainfall during 2005 as against positive departure in only 9 sub-divisions during 2004. There were widespread variations among different sub-divisions in terms of rainfall received. During 1.1.2005 to 31.12.2005 maximum rainfall was recorded in Konkan and Goa (356 Cm.) followed by Coastal Karnataka (328 Cm.), Kerala (315 Cm.), Andaman & Nicobar (276 Cm.) and Sub-Himalayan West Bengal and Sikkim (267 Cm). The rainfall less than 50Cm was recorded only in Rajasthan West. However, total volume of rainfall in the country during 1.1.2003 to 31.12.2003 at 4057 BCM is still higher than that during 1.1.2005 to 31.12.2005

(Tables 1.6(A), 1.6(B), 1.6(C) & Chart 1.2)

The water resources potential of the country which occurs as natural run off in the rivers is about 1869 BCM as per the estimates of Central Water Commission (CWC), considering both surface and ground water as one system. Ganga-Brahmaputra-Meghna system is the major contributor to total water resources potential of the country. Its share is about 59 % in total water resources potential of the various rivers. The estimated per capita availability of water works out to 1678 cubic metre (cu.m.) as on 1st March 2006. Due to various constraints of topography, uneven distribution of resource over space and time, it has been estimated that only about 1123 BCM of total potential of 1869 BCM can be put to beneficial use, 690 BCM being due to surface water resources. Again about 40% of utilisable surface water resources are presently in Ganga – Brahmaputra - Meghna system.

The distribution of water resources potential in the country shows that as against the national per capita annual availability of water of 1820 cu. m. in 2001 the average availability in Brahmaputra and Barak is as high as 14057 cu. m. while it is as low as 308 cu.m. in Sabarmati basin in 2000. Brahmaputra and Barak basin with 7.7% of geographical area and 4.2 % of

population of all the basins in the country has 31 % of the annual water resources. Per capita annual availability for rest of the country excluding Brahmaputra and Barak basin works out to about 1345 cu.m. Any situation of availability of less than 1000 cu. m. per capita is considered by international agencies as scarcity conditions. Cauvery, Pennar, Sabarmati, East Flowing rivers and West Flowing rivers are some of the basins, which fall into this category.

(Table 1.7 & Chart 1.3)

Surface Storage

A total storage capacity of about 213 BCM has been created in the country due to the major & medium projects since completed. The Projects under construction will contribute to additional 76 BCM while the contribution expected from projects under consideration is 107 BCM. Thus likely storage available will be 396 BCM against the total water availability of 1869 BCM in the river basins of the country. Maximum storage again lies in the Ganga Basin, which is far ahead of other basins. The other basins where the live storage capacity of the projects (taking those constructed and under construction) is high are Krishna, Godavari, Narmada and Indus. But if projects under consideration are also taken into account, Brahmaputra & Barak basin will occupy the second place after Ganga Basin. Pennar is the leading basin in terms of storage capacities as percentage of average annual flow. The storage capacities as percentage of average annual flow exceed 50% for Tapi, Krishna, West Flowing Rivers, Narmada, Brahmani and Baitarni basins while for Ganga basin and Brahmaputra - Barak Basin, the corresponding figures are 17 % and 9 % respectively. As the Ganga & Brahmaputra are the leading basins of the country in terms of average annual flow, there is a lot of scope to increase their storage capacities.

(Table 1.8)

Major States like Andhra Pradesh, Gujarat, Karnataka, Madhya Pradesh, Maharashtra, Orissa and Uttar Pradesh together account for about 70 % of total live storage capacity in the country. The States of Arunachal Pradesh, Orissa & Uttar Pradesh account for 72 % of the total storage of projects under consideration. (Table 1.9)

Publication also gives latest year's seasonal observed runoff at CWC sites in different river basins of peninsular India namely Godavari, Krishna, East Flowing Rivers, remaining East & West Flowing Rivers, Cauvery, Narmada and Tapi. The statements give station wise details of catchment area upto that station, and average runoff for monsoon and non-monsoon periods for the latest year. Site-wise details of suspended sediment load for different basins namely Godavari, Krishna, Eastern Rivers, Tapi, Mahi, Sabarmati and other West Flowing Rivers, Cauvery and remaining East & West Flowing rivers and Narmada for each of two seasons i.e. monsoon and non-monsoon are also included. As the period of availability of data for different river systems are not uniform, the information has been presented for the latest year for which data are available.

(Tables 1.12 to 1.24)

Ground water

The status of expansion of Hydrograph network in the country can be known from the distribution of ground water hydrograph network stations over the years. Distribution of blocks/ talukas/ water-sheds/ mandals according to over exploited, dark and other categories has also been given. The maximum number in miscellaneous category of 'others' are in the state of Maharashtra (2090) followed by 960 in the state of Andhra Pradesh. In all, out of 7928 blocks in the country, about 86 % of them are in the category of others.

Number of over exploited and dark blocks is about 14% of total blocks in the country.
(Tables 1.25& 1.26)

(Table 1.28)

Total replenishable ground water potential of the country has been estimated as 433 BCM per year. Basinwise breakup of ground water is not available.

Among the States, the highest potential of ground water is in Uttar Pradesh which mostly lies in the Ganga Basin. The potential of Uttar Pradesh is 81 BCM/year. Goa with 0.22 BCM/year is at the bottom most position among the states. Development of Ground Water in Haryana in percentage is the highest followed by Punjab where about 98 % of the resources appear to have been tapped. The other States where the percentage development is more than 50 % are Gujarat(55%), Tamil Nadu (64%) and Rajasthan(86%)

(Tables 1.27)

Irrigation potential

The total ultimate irrigation potential (UIP) of the country stands at about 140 m. ha. The share of Minor Irrigation is higher by 23.07 m.ha. as compared to that of Major & Medium Irrigation. Ground Water contributes more than 79 % of the total ultimate potential through minor irrigation. Uttar Pradesh and Bihar are two largest states in term of potential due to Major & Medium sector. These two states along with Madhya Pradesh, Andhra Pradesh and Maharashtra account for about 54% of the total ultimate potential of Major & Medium Irrigation in the country. The largest UIP for Minor Irrigation (Ground Water) exists in Uttar Pradesh. Andhra Pradesh and Madhya Pradesh are two major states in which potential of Minor Irrigation (Surface Water) is much higher than the remaining states. Uttar Pradesh again occupies the first place among the states so as to have maximum potential due to all type of schemes.

The World's total annual renewable fresh water supply is estimated to be 48.6 thousand BCM. Brazil and former USSR have maximum volume of available fresh water. Bangladesh, Canada, China, Colombia, Republic of Congo, India, Indonesia, Myanmar, USA and Venezuela are other countries whose annual renewable water supply exceeds one thousand BCM. To have a better idea of availability, the per capita series has been worked out for the years 1975, 2000 and 2025. During this period the population of world is likely to grow up from 406 crores to 779 crores. The per capita water availability in world has gone down by 33 % from 1975 level, in 2000. There is a large inter-country variation in the figures of per capita availability in the country. In 1975, Iceland had the highest per capita availability of renewable fresh water which was 770.5 thousand cu. m, followed by Congo, Surinam, Guyana and Papua New Guinea in that order. The availability in Papua New Guinea was less than half of the availability of Iceland. Further idea about the skewness of distribution of water can be had from the fact that Iceland's per capita availability was 64 times the average world availability in the corresponding period.

The relative position of these countries will more or less remain same over the next 50 years, with per capita availability in Iceland in 2025 being 66% of what it was in 1975. The average world availability, however, in 2025 will be only half of 1975. On the other end of scale we have countries like Jordan, Libya, Saudi Arabia, Singapore and Yemen where per capita water availability was less than 1/20th of world average in 1975. In a span of another 25 years i.e. by 2000, the water availability in these countries reduced to 3 % of the world average, which may further reduce to 2.3 % in 2025. India's per capita availability which was about 25.7 % of

average world availability in 1975, had declined to about 23.4 % of world availability in 2000 and is likely to reduce further to about 23 % of world availability in 2025.

(Table 1.29 & Chart 1.8)

Irrigation in World

Analysing the country-wise geographical area, arable land and irrigated area in the World, it is found that among the continents largest geographical area lies in Asia which has about 24% of the world geographic area, about 38 % of world's arable land followed by North Central America having about 19 % of world's arable land. Africa has only 14.2% of world's arable land. Irrigated area in the World is about 19.8% of the arable land in 2003. During the same period, about 70% of world's irrigated area was in Asia. Also 38% of arable land of Asia was irrigated in 2003. United States of America (173.5 m.ha.) has the largest arable land followed by India (160.5 m.ha.).

(Table 1.30 & Chart 1.9)

Dams Scenario

India: As per the National Registrar of Large Dams containing data compiled up to April 2002 on 4525 Dams in the Country, Maharashtra has the maximum number of dams (1651). Decade wise distribution of dams indicates that the maximum number of dams in India were completed during the decades 1971-80 (1263) and 1981-90 (1186).

World : As per the International Water, Power and Dam Construction Year Book 2005 the World's largest dam by volume is in China (Soufengying – $739 \times 10^6 \text{ m}^3$) and the World's highest dam is in Iran (Jafar – Mashnadi (Sahid Yaqobi) – 611 meter)

Table (1.31 to 1.35 & Chart 1.10)

Chart 1 Distribution of World's Water

Ocean Water
(97.3%)

Fresh Water
(2.7%)

Sources of Fresh Water

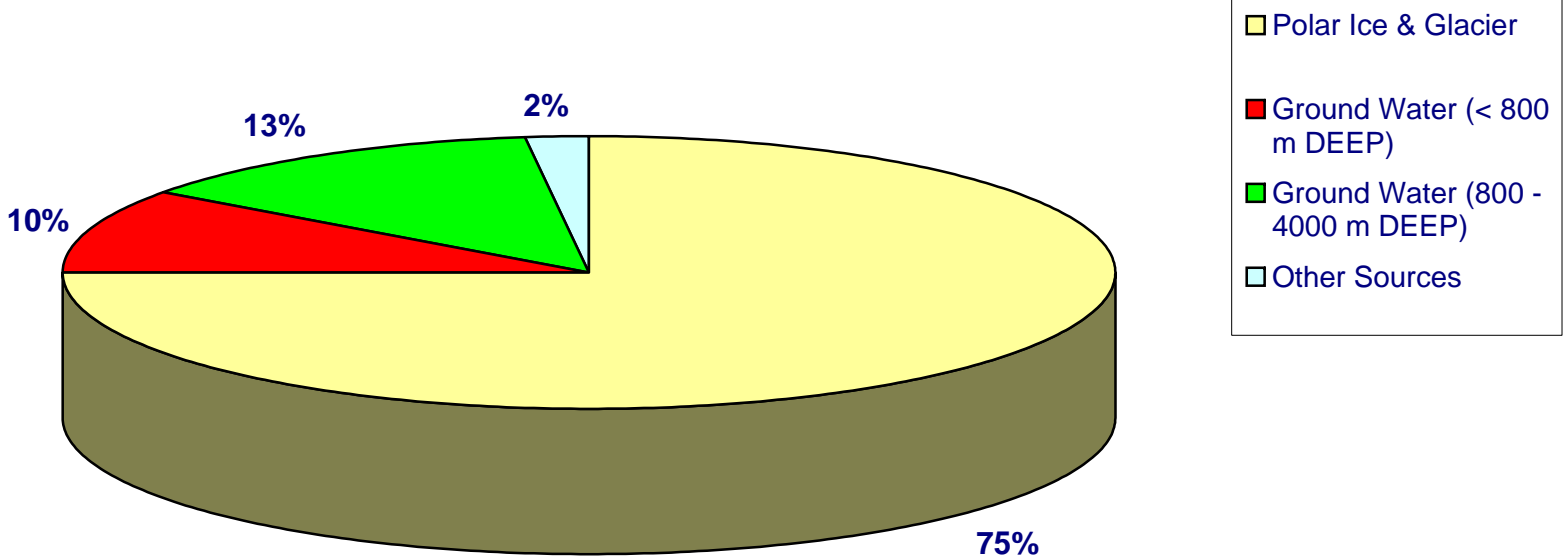


Table : 1.1 Distribution of World's Water

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 : 1.2 Catchment Area of Major River Basins

Sl. No.	Name of the River	Origin	Length (Km.)	Catchment Area(Sq.K
1	2	3	4	5
1.	Indus	Mansarovar (Tibet)	1114 (2880)	321289 (1165500)
2.	a) Ganga	Gangotri (Uttar Pradesh)	2525	861452 (1186000)
	b) Brahmaputra	Kailash Range (Tibet)	916 (2900)	194413 (580000)
	c) Barak & other rivers flowing into Meghna, like Gomti, Muhari, Fenny etc.	Manipur Hills (Manipur)		41723
3.	Sabarmati	Aravalli Hills (Rajasthan)	371	21674
4.	Mahi	Dhar (Madhya Pradesh)	583	34842
5.	Narmada	Amarkantak (Madhya Pradesh)	1312	98796
6.	Tapi	Betul (Madhya Pradesh)	724	65145
7.	Brahmani	Ranchi (Bihar)	799	39033
8.	Mahanadi	Nazri Town (Madhya Pradesh)	851	141589
9.	Godavari	Nasik (Maharashtra)	1465	312812
10.	Krishna	Mahabaleshwar (Maharashtra)	1401	258948
11.	Pennar	Kolar (Karnataka)	597	55213
12.	Cauvery	Coorg (Karnataka)	800	81155
TOTAL				2528084

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

Note : Figures within bracket indicate the total river basin in India and neighbouring countries.

Table : 1.3 Catchment Area of Medium River Basins

Sl. No.	Name of the River	Village/ Distt. (Origin)	State	Length (Km.)	Catchment Area(Sq.Km.)
1	2	3	4	5	6
WEST FLOWING RIVERS					
1.	Ozat	Kathiawar	Gujarat	128	3189
2.	Shetrunji	Dalkania	Gujarat	182	5514
3.	Bhadar	Rajkot	Gujarat	198	7094
4.	Aji	Rajkot	Gujarat	106	2139
5.	Dhadhar	Panchmahal	Gujarat	135	2770
6.	Purna	Dhulia	Maharashtra	142	2431
7.	Ambika	Dangs	Maharashtra	142	2715
8.	Vaitarna	Nasik	Maharashtra	171	3637
9.	Dammanganga	Nasik	Maharashtra	143	2357
10.	Ulhas	Raigarh	Maharashtra	145	3864
11.	Savitri	Pune	Maharashtra	99	2899
12.	Sastri	Ratnagiri	Maharashtra	64	2174
13.	Washishthi	Ratnagiri	Maharashtra	48	2239
14.	Mandvi	Belgaum	Karnataka	87	2032
15.	Kalinadi	Belgaum	Karnataka	153	5179
16.	Gangavati or Bedti (in Upper reaches)	Dharwar	Karnataka	152	3902
17.	Sharavati	Shimoga	Karnataka	122	2209
18.	Netravati	Canara	Karnataka	103	3657
19.	Chaliar or Baypore	Elamtalvi Hills	Kerala	169	2788
20.	Bharathapuzha (also known as Ponnani)	Annamalai Hills	Tamil Nadu	209	6186
21.	Periyar	Sivajini Hills	Kerala	244	5398
22.	Pamba	Devarmalai	Kerala	176	2235

Contd.

Table : 1.3 Catchment Area of Medium River Basins

Sl. No.	Name of the River	Village/ Distt. (Origin)	State	Length (Km.)	Catchment Area(Sq.Km.)
1	2	3	4	5	6
EAST FLOWING RIVERS					
23.	Burhabalang	Mayurbahanj	Orissa	164	4837
24.	Baitarni	Keonjhar	Orissa	365	12789
25.	Rushikulya	Phulbani	Orissa	146	7753
26	Vamsadhara	Kalahandi	Orissa	221	10830
27	Nagavali	Kalahandi	Orissa	217	9410
28	Sarda	Vishakhapatnam	Andhra Pradesh	104	2725
29	Yeleru	Vishakhapatnam	Andhra Pradesh	125	3809
30	Gundlakamma	Kurnool	Andhra Pradesh	220	8494
31	Musi	Nellore	Andhra Pradesh	112	2219
32	Paleru	Nellore	Andhra Pradesh	104	2483
33	Muneru	Nellore	Andhra Pradesh	122	3734
34	Swarnamukhi	Koraput	Orissa	130	3225
35	Kandleru	Vinukonda	Andhra Pradesh	73	3534
36	Kortalaiyar	Chinglepet	Tamil Nadu	131	3521
37	Palar(including tributary Cheyyar)	Kolar	Karnataka	348	17871
38	Varahanadhi	North Arcot	Tamil Nadu	94	3044
39	Ponnaiyar	Kolar	Karnataka	396	14130
40	Vellar	Chithri Hills	Tamil Nadu	193	8558
41	Vaigai	Madurai	Tamil Nadu	258	7031
42	Pambar	Madurai	Tamil Nadu	125	3104
43	Gundar	Madurai	Tamil Nadu	146	5647
44	Vaippar	Tirunelveli	Tamil Nadu	130	5288
45	Tambraparni	Tirunelveli	Tamil Nadu	130	5969
46	Subarnarekha	Nagri/Ranchi	Bihar	395	19296
TOTAL					245909

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

**Table : 1.4 Statewise Details of Inland Fishery Water Resources
of Various Tyoes (2003-04)**

Unit - Lakh Ha.

SI No.	Name of the State/UT.	Rivers & Canals (Length in Kms.)	Water Bodies				Total (4 to 7)
			Reservoirs	Tanks, Lakes & Ponds	Floodplain Lakes&Derelict Water (Lakh Ha)	Brackish Water	
1	2	3	4	5	6	7	8
STATES							
1	Andhra Pradesh	11514	2.34	5.17	-	0.60	8.11
2	Arunachal Pradesh	2000	-	2.76	0.42	-	3.18
3	Assam	4820	0.02	0.23	1.10	-	1.35
4	Bihar	3200	0.60	0.95	0.05	-	1.60
5	Jharkhand	4200	0.94	0.29			1.23
6	Goa	250	0.03	0.03	-	NEG	0.06
7	Gujarat	3865	2.43	0.71	0.12	1.00	4.26
8	Haryana	5000	NEG	0.10	0.10		0.20
9	Himachal Pradesh	3000	0.42	0.01	-	-	0.43
10	Jammu & Kashmir	27781	0.07	0.17	0.06	-	0.30
11	Karnataka	9000	4.40	2.90	-	0.10	7.40
12	Kerala	3092	0.30	0.30	2.43	2.40	5.43
13	Madhya Pradesh	17088	2.27	0.60	-	-	2.87
14	Chhatishgarh	3573	0.84	0.63	-		1.47
15	Maharashtra	16000	2.79	0.59	-	0.10	3.48
16	Manipur	3360	0.01	0.05	0.04	-	0.10
17	Meghalaya	5600	0.08	0.02	NEG	-	0.10
18	Mizoram	1395	-	0.02	-	-	0.02
19	Nagaland	1600	0.17	0.50	NEG	-	0.67
20	Orissa	4500	2.56	1.14	1.80	4.30	9.80
21	Punjab	15270	NEG	0.07	-	-	0.07
22	Rajasthan	5290	1.20	1.80	-	-	3.00
23	Sikkim	900		-	0.03	-	0.03
24	Tamil Nadu	7420	5.70	0.56	0.07	0.60	6.93
25	Tripura	1200	0.05	0.13	-	-	0.18
26	Uttar Pradesh	28500	1.38	1.61	1.33	-	4.32
27	Uttarnchal	2686	0.20	0.01	0.00	-	0.21
28	West Bengal	2526	0.17	2.76	0.42	2.10	5.45
UNION TERRITORIES							
29	Andaman & Nicobar Islands	115	0.01	0.03	-	1.20	1.24
30	Chandigarh	2	-	NEG	NEG	-	0.00
31	D & N Haveli	54	0.05	-	-	-	0.05
32	Daman & Diu	12	-	NEG	-	NEG	0.00
33	Delhi	150	0.04	-	-	-	0.04
34	Lakshadweep	-	-	-	-	-	0.00
35	Pondicherry	247	-	NEG	0.01	NEG	0.01
TOTAL		195210	29.07	24.14	7.98	12.40	73.59

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

NEG : Negligible

Table: 1.5 Statewise Total and Navigable Length of Important Rivers (2004-05)

Unit : Km

Sl. No.	Name of the State/ Rivers	Total Length	Navigable Length
1	2	3	4
1.	Andhra Pradesh	3140	464
	1. Godavari	757	171
	2. Krishna	386	35
	3. Others *	1997	258
2.	Assam	1313	1133
	1. Brahmaputra	891	891
	2. Borak	140	140
	3. Subansiri	35	20
	4. Kapali	70	30
	5. Joljoli	35	15
	6. Dhansirii	100	22
	7. Dikhow	42	15
3.	Bihar	3763	N.A.
	1. Damodar	-	-
	2. Ganga	510	510
	3. Gandak	300	300
	4. Koshi	233	160
	5. Ghagra	100	100
	6. Sone	226	31
	7. Mahananda	140	-
	8. Burhi Gandak	400	-
	9. Punpun	200	-
	10. Phaigu Harihar	300	-
	11. Kiul	100	-
	12. Kari Koshi	150	-
	13. Chandan	100	-
	14. Karmnasha	144	-
	15. Others	860	290
4.	Gujarat	430(b)	277(b)
	1. Narmada	230	160
	2. Tapti	200	45
	3. Others	-	72
5	Karnataka	2823	1308
	1. Sharavathi	250	13
	2. Tungabhadra	375	375
	3. Malaprabha	230	230
	4. Ghataprabha	160	160

Contd..

Table: 1.5 Statewise Total and Navigable Length of Important Rivers (2004-05)

Unit : Km

Sl. No.	Name of the State/ Rivers	Total Length	Navigable Length
1	2	3	4
	5. Krishna	325	325
	6. Cauvery	270	34
	7. Kabini	117	22
	8. Arkavathi	32	6
	9. Hemavathi	174	16
	10. Bheema	860	125
	11. Sita	15	1
	12. Netravathi	15	1
6	Kerala	3092	845.2
	1. Pamba	176	73.6
	2. Manimala	90	54.4
	3. Anjara Kandy	48	27.2
	4. Telcicherry	28	21.6
	5. Mahi	54	24
	6. Valappattanam	110	44.8
	7. Chaliyar	169	68.4
	8. Kuthiadi	74	9.6
	9. Vamanapuram	88	11.2
	10. Neyyar	56	-
	11. Karamana	68	-
	12. Kallada	121	40
	13. Achan Coil	128	32
	14. Korapuzha	40	24.8
	15. Kallai	22	9.6
	16. Keecheri	51	-
	17. Puzhakkal	29	-
	18. Bharathapujha	209	40
	19. Karivannur	48	24
	20. Chalakkudy	130	16
	21. Periyar	244	72
	22. Kadalundy	130	43.2
	23. Tirur	48	9.6
	24. Muvattei Puzha	121	25.6
	25. Meenachil	78	41.6
	26. Dallickal	42	2
	27. Ithikkara	56	16

Contd..

Table: 1.5 Statewise Total and Navigable Length of Important Rivers (2004-05)

Unit : Km

Sl. No.	Name of the State/ Rivers	Total Length	Navigable Length
1	2	3	4
	28.Karinggode	64	24
	29.Kavvayi	31	9.6
	30.Peruvamba	51	16
	31.Ramapuram	19	6.4
	32.Kuppam	82	24
	33.Manjeswar	16	3.2
	34.Uppala	50	-
	35.Shiriyā	67	4.8
	36.Mogral	34	-
	37.Chandragiri	105	12.8
	38.Chittari	25	-
	39.Nileswar	46	11.2
	40.Ayroor	17	1
	41.Mamon	27	1
7	MAHARASHTRA	611	453
	1.Dande River	2	1
	2.Pangere River	2	1
	3.Girye River	3	1
	4.Kajali River	35	5
	5.Kalbadevi River	10	2
	6.Are River	6	1
	7.Jog River	10	5
	8.Kelshi River	10	3
	9.Savitri River(Bankot to Mahad)	45	40
	10.Kal River	6	4
	11.Vaitarna River	24	9
	12.Ulhas River	32.5	28
	13.Mahim River(Bay)	1.5	1
	14.Amba River	23	20
	15.Pataiganga River/Creek(Aware to Kharpada)	11	6.5
	16.Kundalika River	16	16
	17.Mandad River(Rajpuri to Mandad)	14	10
	18.Mhasia River(Turmad to Mhasla)	9	5
	19.Vashisti River(Dabhol to Govalkpt)	45	38
	20.Jagbudi River(Karambavne to Khed)	20	20
	21.Shastri River/Jaigad Creek (Jaigad to Kurudunda)45	45	40

Contd..

Table: 1.5 Statewise Total and Navigable Length of Important Rivers (2004-05)

Unit : Km

Sl. No.	Name of the State/ Rivers	Total Length	Navigable Length
1	2	3	4
	22.Rajapur River(Musakazi to Rajapur)	30	30
	23.Vagothan River/Vijaydurg Creek(Vijaydurg to Kharepatan)	38	22
	24.Gad River (Kalavai Creek)	13	7
	25.Terekhol River/Creek (Terekhol to Ban)	28	28
	26.Others	129	105
8	Orissa	N.A.	1544
	1. Mahanadi	493	199
	2. Brahmani	541	277
	3. Baitarni	344	32
	4.Subamarekha	-	50
	5.Budha Balanga	-	35
	6.Dhamara	-	20
	7.Salandi	-	17
	8.Panchputra	-	21
	9.Parnel	-	45
	10.Hatel	-	30
	11.Bansagadal	-	32
	12.Hansua	-	37
	13.Tirkota	-	18
	14.Jambo	-	6
	15.Gobari	-	16
	16.Ramchandi	-	16
	17.Kaaransi	-	14
	18.Batigharia	-	14
	19.Birupa	-	110
	20.Genguti	-	45
	21.Luna	-	37
	22.Devi	-	20
	23.Pradhi	-	15

Contd..

Table: 1.5 Statewise Total and Navigable Length of Important Rivers (2004-05)

Unit : Km

Sl. No.	Name of the State/ Rivers	Total Length	Navigable Length
1	2	3	4
	24.Kadha	-	30
	25.Kusavadra	-	25
	26.Daya	-	9
	27.Rajua	-	7
	28.Makara	-	11
	29.Others	-	356
9	West Bengal	4741	4593
	1. Hooghly	580	580
	2. Mahananda	206	58
	3. Ajoy	174	174
	4. Jalangi	232	232
	5. Dwarka	129	129
	6. Bakreswar	102	102
	7. Damodar	437	437
	8. Dwarekeswar	103	103
	9. Silabati	135	135
	10. Kumari	308	308
	11. Ichamati	232	232
	12. Others @	2103	2103
10	Goa	260	202
	1. Mandovi	78	65
	2. Zuari	56	45
	3. Mapusa	26	20
	4. Chapora	34	25
	5. Tiracol	29	15
	6. Sal	20	15
	7. Cumbarjua Canal	17	17
	8. Others	-	-
11	Jammu & Kashmir #	-	-
12	Uttar Pradesh #	-	-
13	Andaman & Nicobar	-	-
14	Tamil Nadu #	-	-

Source : Transport Research Wing, Ministry of Surface Transport

* Including canals

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

(b) Relates to 1994-95

Data not received from State Government

Chart 2 Seasonwise Rainfall in India

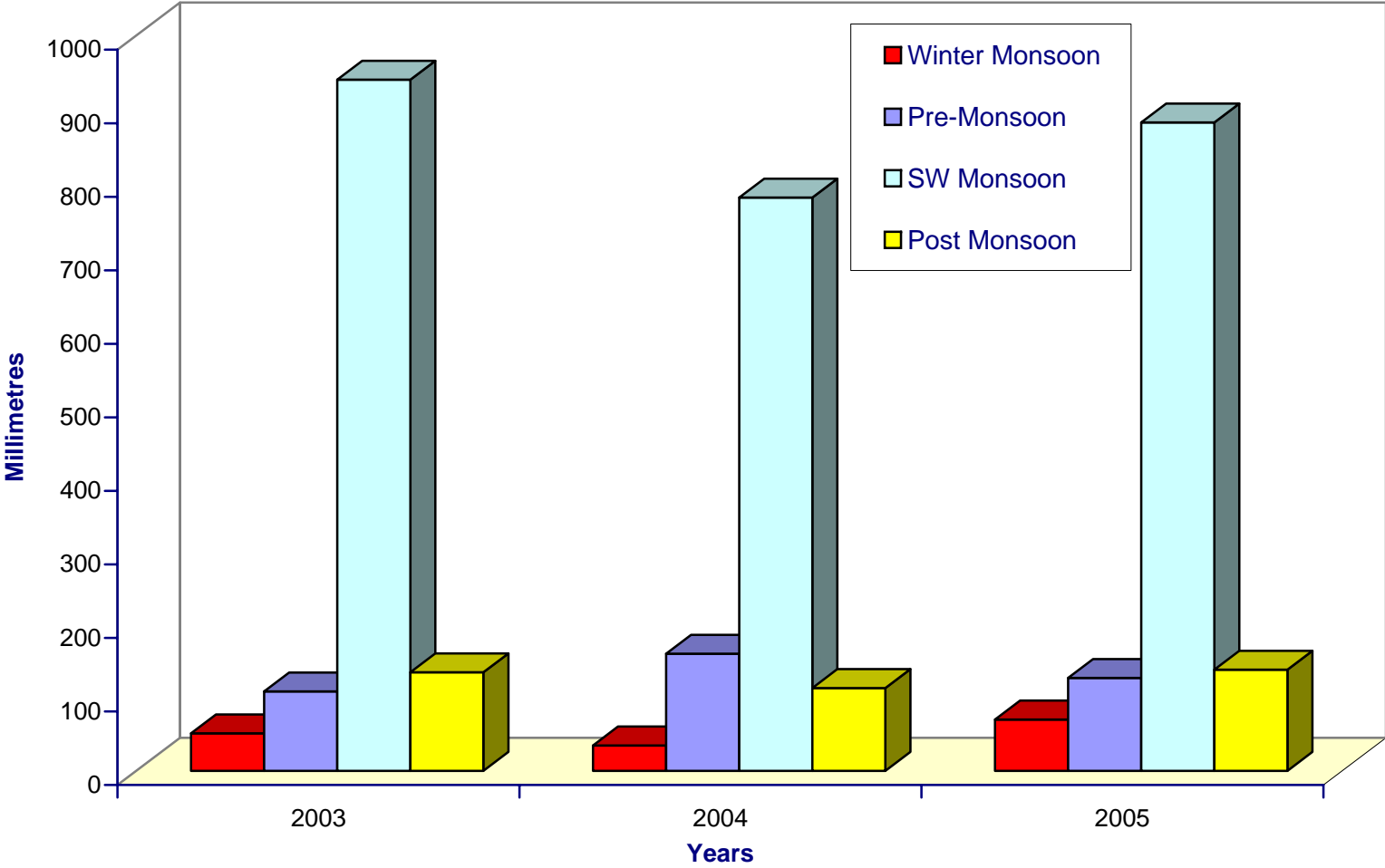


Table 1.6(A) Rainfall in Different Meteorological Sub-Divisions of the Country during 1-1-2003 to 31-12-2003

(Unit : In Milimetre)

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	% Dep.	Actual	Normal	% Dep.	Actual	Normal	% Dep.	Actual	Normal	% Dep.	Actual	Normal	% Dep.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1	A and N 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, Chandī.& 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

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Table 1.6(A) Rainfall in Different Meteorological Sub-Divisions of the Country during 1-1-2003 to 31-12-2003

(Unit : In Milimetre)

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	% Dep.	Actual	Normal	% Dep.	Actual	Normal	% Dep.	Actual	Normal	% Dep.	Actual	Normal	% Dep.	
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 % Dep. : Percentage departure from normal

Note 1. # 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 1.6.(B) Rainfall in Different Meteorological Sub-Divisions of
the Country during 1-1-2004 to 31-12-2004**

(Unit : In Milimetre)

Sl. No.	Meteorological Sub-Division	Area (Sq. Kms)	Winter Monsoon			Pre -Monsoon			South-West Monsoon			Post Monsoon			Total Rainfall			Estimated Volume of Actual Rainfall (BCM) (\$)
			(1.1.2004 to 28.2.2004)			(1.3.2004 to 31.5.2004)			(1.6.2004 to 30.09.2004)			(1.10.2004 to 31.12.2004)			(1.1.2004 to 31.12.2004)			
			Actual	Normal	% Dep.	Actual	Normal	% Dep.	Actual	Normal	% Dep.	Actual	Normal	% Dep.	Actual	Normal	% Dep.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1	A and N Island	8293	153.5	117.2	31	597.2	487.9	22	1326.3	1755.2	-24	431.1	700.4	-38	2508.1	3060.7	-18	20.80
2	Arunachal Pradesh	83578	61.9	134.2	-54	799.2	714.7	12	1791.1	1834.9	-2	270.4	243.7	11	2922.6	2927.5	0	244.27
3	Assam and Meghalaya	101012	39.4	42.2	-7	1015.1	674.8	50	1707.7	1885.3	-9	293.5	190.5	54	3055.7	2792.8	9	308.66
4	Nagaland, Mizoram, Manipur and Tripura	70447	5.9	38.7	-85	598.2	494.5	21	1321.0	1240.9	6	150.1	195.3	-23	2075.2	1969.4	5	146.19
5	Sub-Himalayan West Bengal and Sikkim	28924	37.3	56.2	-34	616.5	450.2	37	1896.2	1955.4	-3	218.2	183.1	19	2768.2	2644.9	5	80.07
6	Gangetic West Bengal	66228	4.0	30.6	-87	158.5	167.9	-6	1125.0	1136.3	-1	200.5	159.3	26	1488.0	1494.1	0	98.55
7	Orissa	155782	20.3	31.5	-36	118.5	114.1	4	1048.0	1160.0	-10	150.4	153.4	-2	1337.6	1459.0	-8	208.37
8	Jharkhand	79638	10.7	36.8	-71	140.2	86.3	62	884.2	1104.6	-20	122.7	101.1	21	1157.8	1328.8	-13	92.20
9	Bihar	94238	25.7	28.1	-9	108.6	75.9	43	906.3	1048.0	-14	36.4	78.4	-54	1077.0	1230.6	-12	101.49
10	U.P.East	146509	31.3	32.0	-2	43.5	30.8	41	738.2	913.6	-19	36.3	61.9	-41	849.3	1038.3	-18	124.43
11	U.P.West	96732	24.5	35.4	-31	61.8	28.1	120	496.9	772.8	-36	64.0	50.8	26	647.2	887.1	-27	62.60
12	Uttaranchal	51122	51.0	105.9	-52	114.0	138.1	-17	1360.4	1223.1	11	80.3	86.7	-7	1605.7	1553.8	3	82.09
13	Haryana, Chandhi.& Delhi	45821	35.2	37.6	-6	71.4	35.9	99	357.6	470.0	-24	59.8	27.4	119	524.0	570.9	-8	24.01
14	Punjab	50362	64.9	51.6	26	45.0	54.2	-17	280.4	501.8	-44	54.8	41.5	32	445.1	649.1	-31	22.42
15	Himachal Pradesh	55673	135.5	167.1	-19	89.1	200.0	-55	424.9	773.7	-45	116.9	111.5	5	766.4	1252.3	-39	42.67
16	Jammu and Kashmir	222236	196.9	177.3	11	179.5	281.0	-36	387.3	513.6	-25	155.8	152.6	2	919.5	1124.5	-18	204.35
17	Rajasthan West	195086	2.8	8.9	-69	8.4	18.3	-54	156.9	262.8	-40	22.2	8.9	151	190.3	298.9	-36	37.12
18	Rajasthan East	147128	2.4	11.3	-79	16.0	16.8	-5	570.9	623.6	-8	38.2	26.0	47	627.5	677.7	-7	92.32
19	M.P. West	229550	20.3	17.4	17	12.7	14.1	-10	764.9	904.3	-15	41.7	52.0	-20	839.6	987.8	-15	192.73
20	M.P. East	78091	28.1	43.4	-35	9.6	27.2	-65	878.7	1097.4	-20	30.5	59.1	-48	946.9	1227.1	-23	73.94

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**Table 1.6.(B) Rainfall in Different Meteorological Sub-Divisions of
the Country during 1-1-2004 to 31-12-2004**

(Unit : In Milimetre)

Sl. No.	Meteorological Sub-Division	Area (Sq. Kms)	Winter Monsoon			Pre -Monsoon			South-West Monsoon			Post Monsoon			Total Rainfall			Estimated Volume of Actual Rainfall (BCM) (\$)
			(1.1.2004 to 28.2.2004)			(1.3.2004 to 31.5.2004)			(1.6.2004 to 30.09.2004)			(1.10.2004 to 31.12.2004)			(1.1.2004 to 31.12.2004)			
			Actual	Normal	% Dep.	Actual	Normal	% Dep.	Actual	Normal	% Dep.	Actual	Normal	% Dep.	Actual	Normal	% Dep.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
21	Gujarat Region #	86597	0.0	1.5	-100	3.1	7.9	-61	978.8	933.6	5	22.3	34.7	-36	1004.2	977.7	3	86.96
22	Saurashtra & Kutch	109990	0.2	0.7	-71	18.7	5.0	274	458.8	485.7	-6	20.8	26.0	-20	498.5	517.4	-4	54.83
23	Konkan and Goa	34095	0.0	0.7	-100	20.1	43.6	-54	2847.5	2802.1	2	44.0	135.4	-68	2911.6	2981.7	-2	99.27
24	Madhya Maharashtra	115306	0.1	3.4	-97	20.2	43.9	-54	815.5	700.1	16	47.5	105.4	-55	883.3	852.7	4	101.85
25	Marathwada	64525	2.3	6.7	-66	15.8	31.8	-50	595.0	704.3	-16	63.3	96.0	-34	676.4	838.8	-19	43.64
26	Vidarbha	97537	48.2	22.2	117	30.1	31.0	-3	677.9	976.2	-31	40.0	75.3	-47	796.2	1104.7	-28	77.66
27	Chattisgarh	135200	51.0	25.4	101	48.3	49.3	-2	1020.0	1205.8	-15	55.0	82.0	-33	1174.3	1362.5	-14	158.77
28	Coastal Andhra Pradesh	93045	22.1	15.7	41	146.3	95.6	53	529.3	575.2	-8	235.9	326.2	-28	933.6	1012.7	-8	86.87
29	Telangana	114726	32.9	10.2	223	69.0	55.2	25	563.6	767.3	-27	96.2	139.6	-31	761.7	952.3	-20	87.39
30	Rayalaseema	69043	5.1	6.9	-26	177.9	79.6	123	345.9	380.9	-9	127.1	212.1	-40	655.9	679.5	-3	45.29
31	Tamil Nadu and Pondicherry	130549	14.8	37.9	-61	306.8	125.4	145	348.3	316.2	10	434.7	431.9	1	1104.6	911.4	21	144.20
32	Coastal Karnataka	18717	0.6	2.6	-77	429.0	185.8	131	2449.1	3173.9	-23	182.9	258.0	-29	3061.6	3620.2	-15	57.30
33	North Interior Karnataka	79895	4.0	4.3	-7	138.4	93.7	48	431.4	490.9	-12	70.8	136.7	-48	644.6	725.6	-11	51.50
34	South Interior Karnataka	93161	1.5	5.8	-74	269.6	153.6	76	618.9	659.3	-6	138.3	199.7	-31	1028.3	1018.4	1	95.80
35	Kerala	38864	8.9	29.2	-70	741.8	437.2	70	1722.9	2206.2	-22	437.7	486.0	-10	2911.3	3158.5	-8	113.14
36	Lakshadweep	32	8.7	36.9	-76	883.5	232.4	280	901.6	985.2	-8	303.0	328.9	-8	2096.8	1583.4	32	0.07
	All India	3287732	34.5	39.2	-12	159.2	129.6	23	779.6	893.6	-13	112.6	125.7	-10	1085.9	1187.8	-9	3570.15

Source : Indian Meterological Department

\$ Col 19 = Col.3 X Col. 16 / 1000000 BCM : Billion Cubic Metres % Dep. : Percentage departure from normal

Note 1. # 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 1.6(C). Rainfall in Different Meteorological Sub-Divisions of the Country during 1-1-2005 to 31-12-2005

(Unit : In Milimetre)

Sl. No.	Meteorological Sub-Division	Area (Sq. Kms)	Winter Monsoon (1.1.2005 to 28.2.2005)			Pre -Monsoon (1.3.2005 to 31.5.2005)			South-West Monsoon (1.6.2005 to 30.09.2005)			Post Monsoon (1.10.2005 to 31.12.2005)			Total Rainfall (1.1.2005 to 31.12.2005)			Estimated Volume of Actual Rainfall (BCM) (\$)
			Actual	Normal	% Departure from Normal	Actual	Normal	% Departure from Normal	Actual	Normal	% Departure from Normal	Actual	Normal	% Departure from Normal	Actual	Normal	% Departure from Normal	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1	A and N Island	8293	18.9	85.1	-78	294.4	461.0	-36	1554.9	1755.2	-11	894.3	700.4	28	2762.5	3001.7	-8	22.91
2	Arunachal Pradesh	83578	186.1	137.8	35	634.4	719.5	-12	1540.8	1834.9	-16	181.2	243.7	-26	2542.5	2935.9	-13	212.49
3	Assam and Meghalaya	101012	59.2	44.6	33	647.9	681.5	-5	1379.2	1885.3	-27	228.5	190.5	20	2314.8	2801.9	-17	233.83
4	Nagaland, Mizoram, Manipur and Tripura	70447	27.9	41.0	-32	464.2	443.3	5	930.5	1240.9	-25	189.7	195.3	-3	1612.3	1920.5	-16	113.58
5	Sub-Himalayan West Bengal and Sikkim	28924	47.2	48.9	-3	519.8	429.7	21	1812.1	1955.4	-7	291.7	183.1	59	2670.8	2617.1	2	77.25
6	Gangetic West Bengal	66228	41.1	32.3	27	219.7	166.7	32	973.7	1136.3	-14	350.9	159.3	120	1585.4	1494.6	6	105.00
7	Orissa	155782	36.2	32.2	12	94.9	118.5	-20	1177.8	1160.0	2	240.8	153.4	57	1549.7	1464.1	6	241.42
8	Jharkhand	79638	47.0	39.3	20	36.5	89.7	-59	724.5	1104.6	-34	51.3	101.1	-49	859.3	1334.7	-36	68.43
9	Bihar	94238	29.8	28.4	5	39.1	87.1	-55	800.8	1048.2	-24	44.0	78.4	-44	913.7	1242.1	-26	86.11
10	U.P.East	146509	28.5	33.3	-14	23.7	33.1	-28	755.1	913.6	-17	20.9	61.9	-66	828.2	1041.9	-21	121.34
11	U.P.West	96732	28.6	36.2	-21	31.5	29.0	9	690.2	772.8	-11	2.3	50.8	-95	752.6	888.8	-15	72.80
12	Uttaranchal	51122	117.2	115.8	1	55.1	157.0	-65	1297.0	1223.1	6	23.3	86.7	-73	1492.6	1582.6	-6	76.30
13	Haryana, Chandni & Delhi	45821	56.2	35.7	57	53.2	34.4	55	476.5	470.0	1	1.3	27.4	-95	587.2	567.5	3	26.91
14	Punjab	50362	106.8	51.1	109	50.8	54.4	-7	445.2	501.8	-11	0.8	41.5	-98	603.6	648.8	-7	30.40
15	Himachal Pradesh	55673	195.2	192.0	2	137.7	246.6	-44	662.2	773.7	-14	1.4	111.5	-99	996.5	1323.8	-25	55.48
16	Jammu and Kashmir	222236	514.9	234.1	120	306.6	345.7	-11	456.3	513.6	-11	32.1	152.6	-79	1309.9	1246.0	5	291.10
17	Rajasthan West	195086	13.5	8.2	65	25.4	17.1	48	221.1	262.8	-16	0.3	8.9	-97	260.3	297.0	-12	50.78
18	Rajasthan East	147128	4.1	11.3	-64	22.4	17.3	30	590.8	623.6	-5	0.0	26.0	-100	617.4	678.2	-9	90.84
19	M.P. West	229550	8.2	17.1	-52	17.7	14.4	23	757.5	904.3	-16	1.1	52.0	-98	784.5	987.8	-21	180.09
20	M.P. East	78091	52.3	44.8	17	31.2	28.1	11	1299.3	1097.4	18	25.8	59.1	-56	1408.6	1229.4	15	110.00

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**Table 1.6(C). Rainfall in Different Meteorological Sub-Divisions of
the Country during 1-1-2005 to 31-12-2005**

(Unit : In Milimetre)

Sl. No.	Meteorological Sub-Division	Area (Sq. Kms)	Winter Monsoon (1.1.2005 to 28.2.2005)			Pre -Monsoon (1.3.2005 to 31.5.2005)			South-West Monsoon (1.6.2005 to 30.09.2005)			Post Monsoon (1.10.2005 to 31.12.2005)			Total Rainfall (1.1.2005 to 31.12.2005)			Estimated Volume of Actual Rainfall (BCM) (\$)
			Actual	Normal	% Departure from Normal	Actual	Normal	% Departure from Normal	Actual	Normal	% Departure from Normal	Actual	Normal	% Departure from Normal	Actual	Normal	% Departure 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	0.0	2.1	-100	0.1	8.5	-98	1384.2	933.6	48	1.1	34.7	-97	1385.4	978.9	42	119.97
22	Saurashtra & Kutch	109990	0.0	1.9	-100	0.4	4.7	-92	637.1	485.7	31	1.2	26.0	-95	638.7	518.3	23	70.25
23	Konkan and Goa	34095	0.1	1.0	-90	3.3	40.1	-92	3500.3	2802.1	25	54.0	135.7	-60	3557.7	2978.9	19	121.30
24	Madhya Maharashtra	115306	1.0	3.6	-72	8.3	41.4	-80	1010.8	700.1	44	81.6	105.4	-23	1101.7	850.5	30	127.03
25	Marathwada	64525	7.6	6.7	13	10.5	33.4	-69	776.0	704.3	10	70.2	96.0	-27	864.3	840.4	3	55.77
26	Vidarbha	97537	89.8	21.8	312	36.9	31.3	18	1043.8	976.2	7	87.2	75.3	16	1257.8	1104.6	14	122.68
27	Chattisgarh	135200	77.9	27.3	185	45.1	53.3	-15	1080.8	1205.8	-10	101.4	82.0	24	1305.2	1368.4	-5	176.46
28	Coastal Andhra Pradesh	93045	10.8	15.4	-30	86.1	94.4	-9	630.2	575.2	10	511.9	326.2	57	1239.0	1011.2	23	115.28
29	Telangana	114726	43.8	10.2	329	43.6	55.7	-22	958.6	767.3	25	184.9	109.6	69	1230.9	942.8	31	141.21
30	Rayalaseema	69043	11.7	6.7	75	102.5	78.2	31	462.1	380.9	21	423.0	212.1	99	999.3	677.9	47	69.00
31	Tamil Nadu and Pondicherry	130549	15.0	35.1	-57	232.9	128.2	82	294.3	315.6	-7	771.8	431.8	79	1314.0	910.7	44	171.54
32	Coastal Karnataka	18717	1.0	2.0	-50	133.8	179.4	-25	2939.0	3173.9	-7	201.0	258.0	-22	3274.8	3613.3	-9	61.29
33	North Interior Karnataka	79895	9.8	4.6	113	113.5	87.9	29	607.7	490.9	24	125.3	136.7	-8	856.3	720.1	19	68.41
34	South Interior Karnataka	93161	13.7	5.4	154	184.1	150.4	22	841.5	659.3	28	317.7	199.7	59	1356.9	1014.8	34	126.41
35	Kerala	38864	25.4	26.5	-4	368.0	427.8	-14	2244.7	2143.0	5	515.0	498.5	3	3153.1	3095.8	2	122.54
36	Lakshadweep	32	28.6	36.9	-22	129.8	233.7	-44	1011.0	985.2	3	409.6	328.9	25	1579.0	1584.7	0	0.05
All India		3287735	69.8	43.8	59	126	135	-6	882	893	-1	138	126	9	1215.5	1197	2	3996.24

Source : Indian Meteorological Department

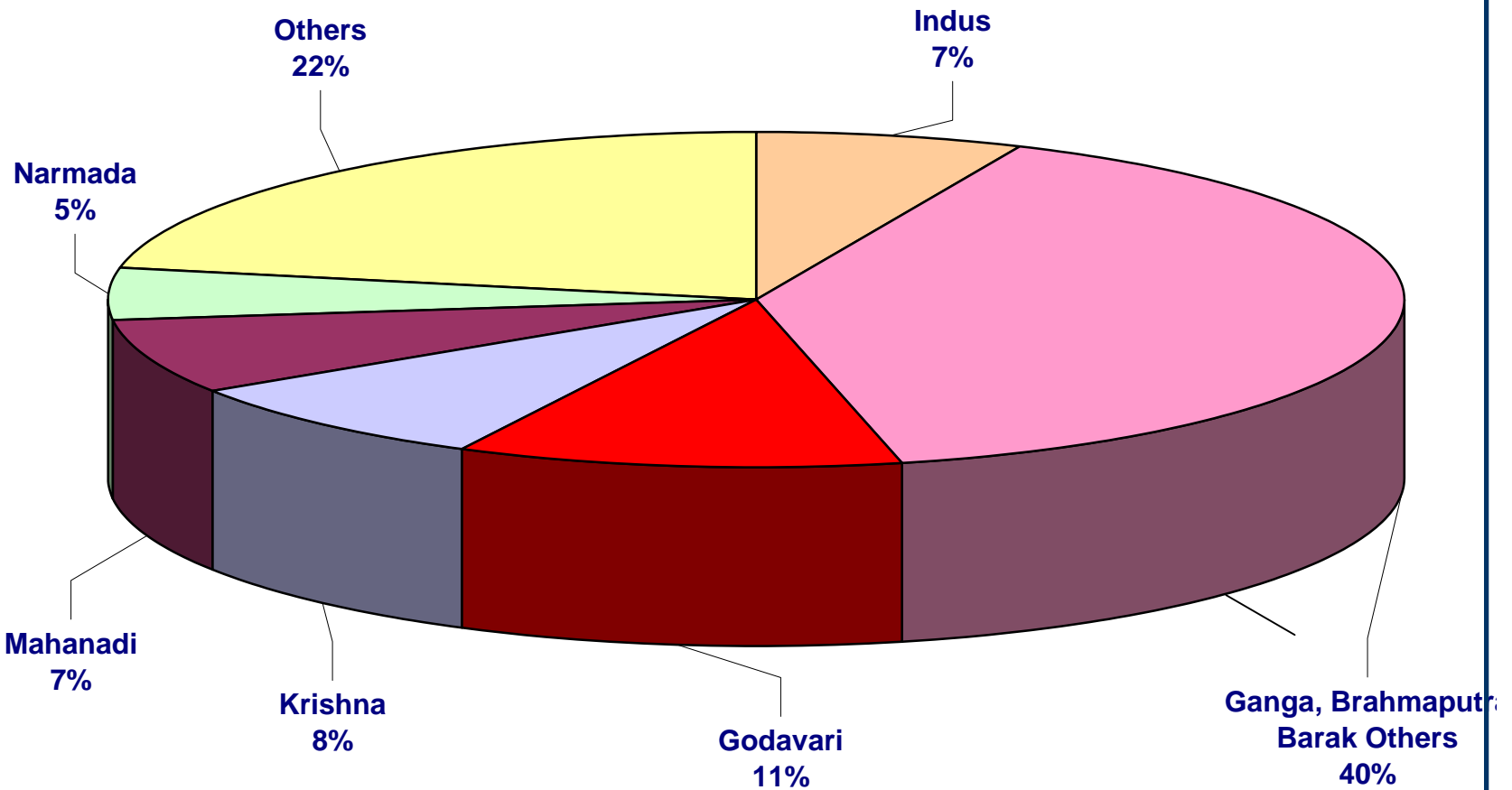
\$ Col 19 = Col.3 X Col. 16 / 1000000

BCM : Billion Cubic Metres

Note 1. # 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

**Chart 3 Basinwise Distribution of Estimated
Utilisable Surface Water**



**Table : 1.7 Water Resources Potential in the
River Basins of India**

(Unit BCM)

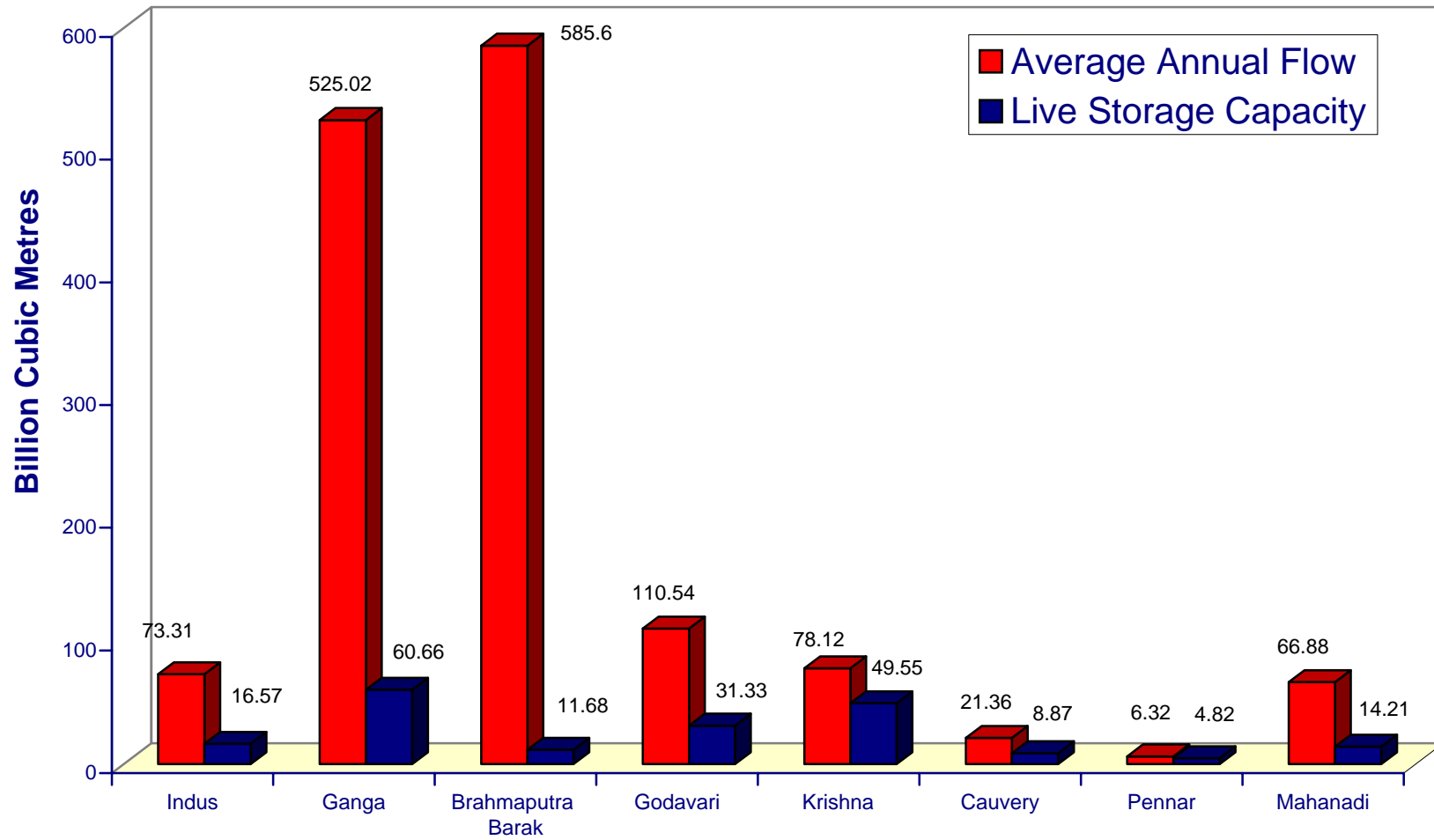
Sl. No.	Name of the River Basin	Average Annual Potential in the River	Estimated Utilisable flow excluding Ground Water
1	2	3	4
1	Indus (up to Border)	73.31	46.00
2	a) Ganga	525.02	250.00
	b) Brahmaputra, Barak & Others	585.60	24.00
3	Godavari	110.54	76.30
4	Krishna	78.12	58.00
5	Cauvery	21.36	19.00
6	Pennar	6.32	6.86
7	East Flowing Rivers Between Mahandi & Pennar	22.52	13.11
8	East Flowing Rivers Between Pennar And Kanyakumari	16.46	16.73
9	Mahanadi	66.88	49.99
10	Brahamani & Baitarni	28.48	18.30
11	Subernarekha	12.37	6.81
12	Sabarmati	3.81	1.93
13	Mahi	11.02	3.10
14	West Flowing Rivers of Kutch Saurashtra including Luni	15.10	14.98
15	Narmada	45.64	34.50
16	Tapi	14.88	14.50
17	West Flowing Rivers From Tapi To Tadri	87.41	11.94
18	West Flowing Rivers from Tadri To Kanyakumari	113.53	24.27
19	Area of Inland drainage in Rajasthan desert	NEG.	
20	Minor River Basins Draining into Bangladesh & Burma	31.00	
Total		1869.35	690.31

Source : 1. Central Water Commission (WM Directorate)

2. Major River Basins of India - An Overview, 1989 - Basin Planning & Management Organisation, Central Water Commission.

BCM:Billion Cubic Metres.

Chart 4 Basinwise Flow & Storage Potential in India



**Table: 1.8 Basinwise Storage in India
(Projects Having Live Storage Capacity of 10 MCM & above)**

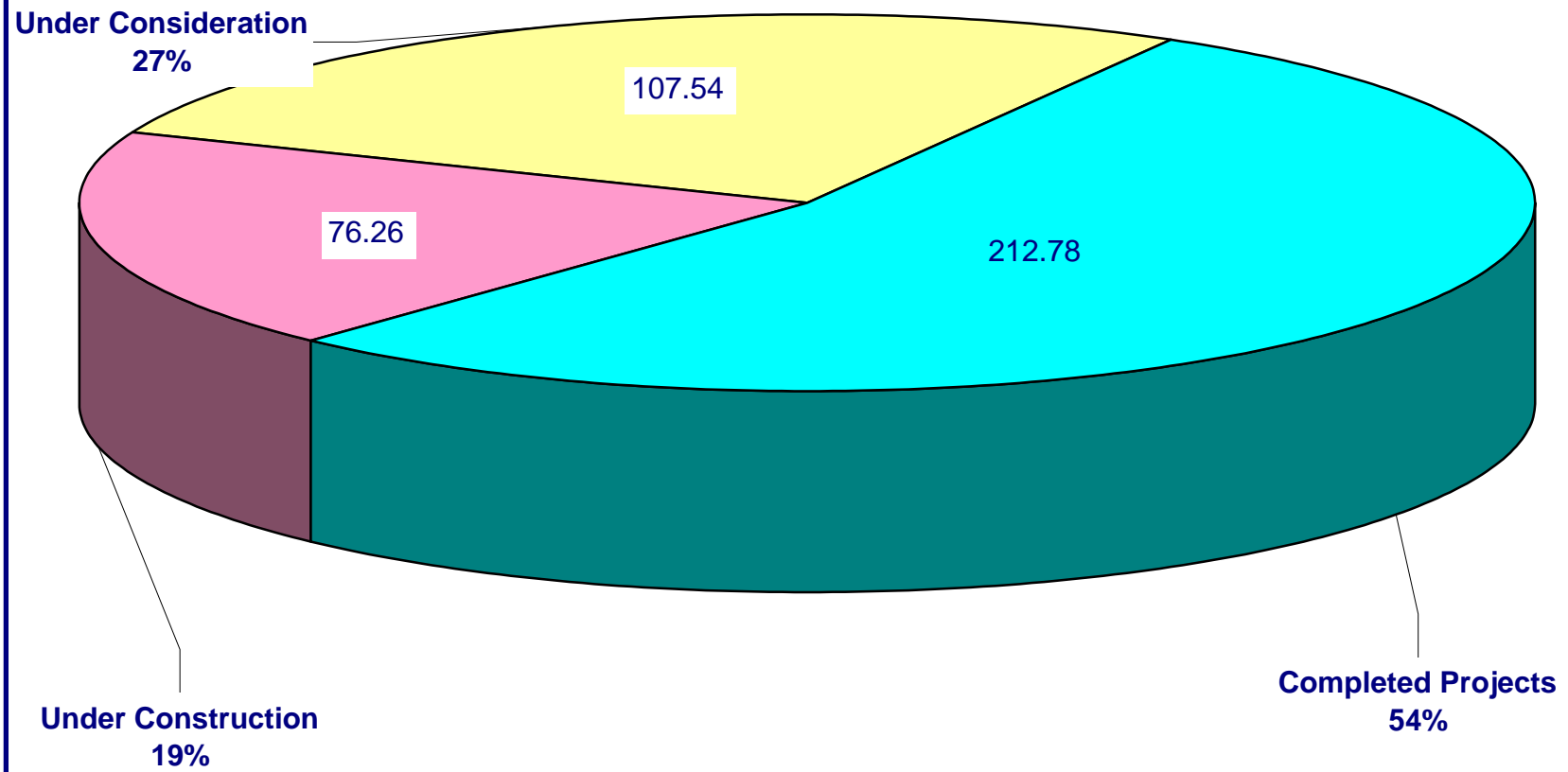
S.No.	Name of the Basin	Live Storage Capacities					(Unit MCM)	
		Average Annual Flow	Completed Projects	Projects Under Construction	Total (4 + 5)	Projects under Consideration	Percentage of Likely Average Annual Flow [(Col.6+Col.7)/Col.3]x100	
1	2	3	4	5	6	7	8	
1	Indus	73305	16285.9	282.53	16568.43	2576.39	26.12	
2(A)	Ganga	525023	39445.2	21215.18	60660.38	30083.92	17.28	
2(B)	Brahamaputra & Barak	585597	2326.92	9353.64	11680.56	41262.88	9.04	
3	Godavari	110540	25124.6	6205.79	31330.39	5841.16	33.63	
4	Krishna	78124	41803.98	7743.54	49547.52	1127.84	64.87	
5	Cauvery	21358	8597.2	269.82	8867.02	261.99	42.74	
6	Pennar	6316	2649.4	2170.71	4820.11		76.32	
7	EFR From Mahanadi to Godavari and Krishna to Pennar	22520	1601.44	1424.97	3026.41	945.29	17.64	
8	EFR B/W Pennar and Kanyakumari	16458	1838.41	68.49	1906.9		11.59	
9	Mahanadi	66879	12334.8	1873	14207.8	10094.2	36.34	
10	Brahamani & Baitarni	28477	4648.09	875.6	5523.69	8721.19	50.02	
11	Subenarekha	12368	672.02	1650.19	2322.21	1380.5	29.94	
12	Sabarmati	3809	1306.77	60.77	1367.54	99.33	38.51	
13	Mahi	11020	4722.6	261.43	4984.03	11.81	45.33	
14	WFR of Kutch, Saurashtra Including Luni	15098	4726.92	797.23	5524.15	2849.06	55.46	
15	Narmada	45639	7229.5	16375.1	23604.6	465.73	52.74	
16	Tapi	14879	9408.37	847.42	10255.79	286.92	70.86	
17	WFR from Tapi to Tadri	87411	11268.03	3464.38	14732.41	81.69	16.95	
18	WFR from Tadri to Kanyakumari	113532	10236.16	1317.54	11553.7	1453.31	11.46	
19	Area of Inland Drainage of Rajasthan	-	-	-	-	-	-	
20	Minor River Basins Draining into Myanmar and Bangladesh	31000	312		312	1.467	1.01	
TOTAL IN MCM		1869353	206538.31	76257.33	282795.64	107544.68	20.88	
IN BCM		1869.35	206.54	76.26	282.8	107.54	-	
21	Medium Projects each having Live Storage Capacity of less than 10 MCM for which basin wise breakup is not available	-	6241.000	-	6241.000	-	-	
GRAND TOTAL IN MCM		1869353	212779.31	76257.33	289036.64	107544.68	20.88	
IN BCM		1869.35	212.78	76.26	289.04	107.54	-	

Source : Central Water Commission (WM Directorate)

MCM: MILLION CUBIC METRE
BCM: BILLION CUBIC METRE

EFR : East Flowing Rivers
WFR : West Flowing Rivers

Chart 5 Live Storage Capacity of Reservoirs in India (Billion Cubic Metres)



**Table 1.9 Statewise Storages in India
(Projects Having Live Storage Capacity of 10 MCM & above)**

(Unit MCM)

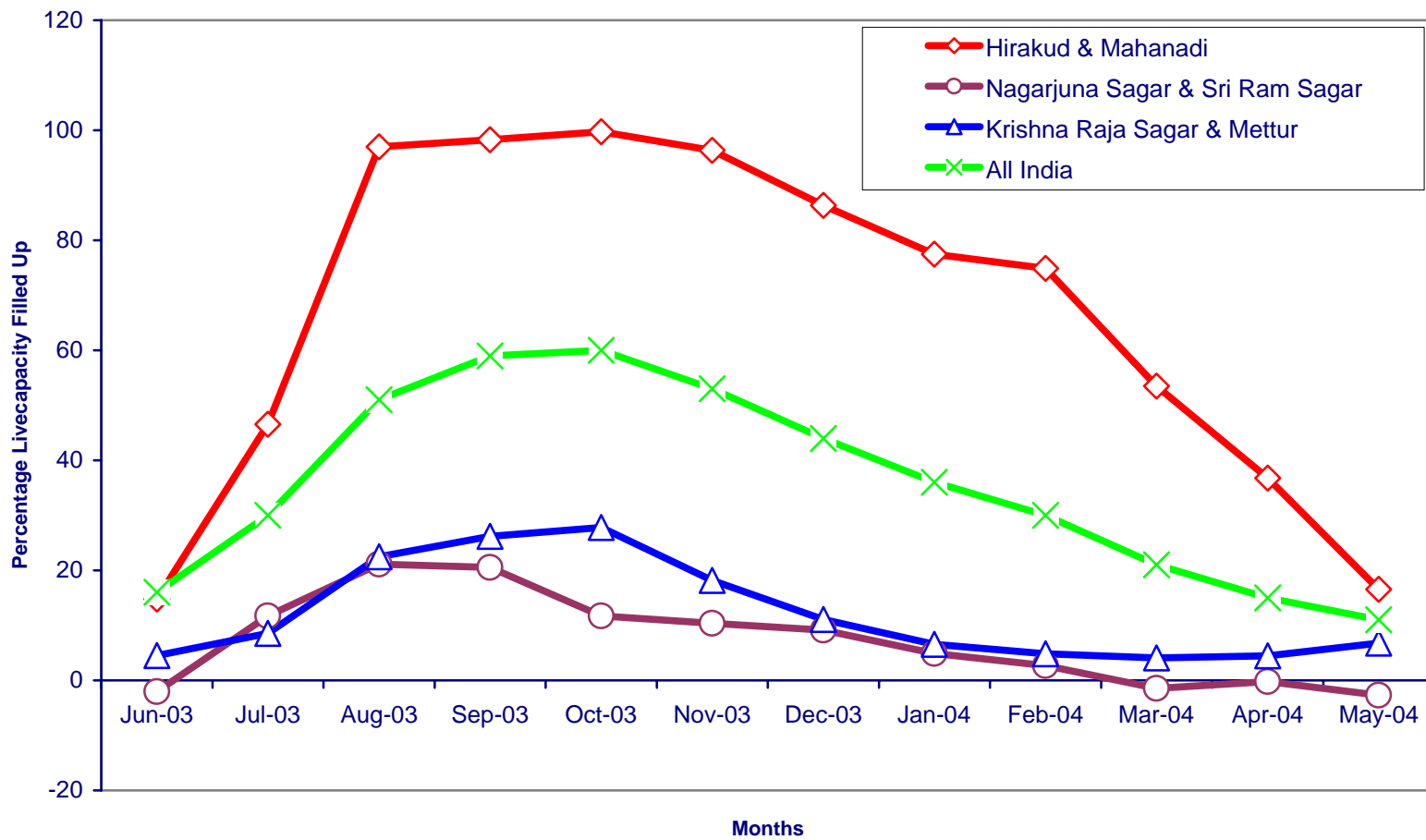
S. N O.	Name of the State	LIVE STORAGE CAPACITIES UNDER				Percentage distribution of live Storage Capacity
		Completed Projects	Ongoing Projects	Total (3 + 4)	Consid-eration Projects	
1	2	3	4	5	6	7
1	Andhra Pradesh	27305.13	6148.33	33453.46	1611.28	11.57
2	Assam	12.46	-	12.46	725.49	0.00
3	Arunachal Pradesh	-	241.06	241.06	37934.03	0.08
4	Bihar	1842.22	675.30	2517.52	5822.22	0.87
5	Chattisgarh	6217.24	787.55	7004.79	519.30	2.42
6	Goa	44.30	227.16	271.46	-	0.09
7	Gujarat	16137.80	7406.84	23544.64	3446.02	8.15
8	Haryana	-	-	-	258.00	-
9	Himachal Pradesh	13917.15	188.73	14105.88	985.80	4.88
10	Jammu & Kashmir	-	93.80	93.80	1831.59	0.03
11	Jharkhand	2472.07	6877.64	9349.71	475.53	3.23
12	Karnataka	33631.21	1413.15	35044.36	66.23	12.12
13	Kerala	5384.27	1336.22	6720.49	1686.07	2.33
14	Madhya Pradesh	17156.28	16776.46	33932.74	7335.04	11.74
15	Maharashtra	25523.01	13242.89	38765.90	763.23	13.41
16	Manipur	396.50	8449.58	8846.08	-	3.06
17	Meghalaya	697.96	-	697.96	516.26	0.24
18	Mizoram	-	663.00	663.00	1561.00	0.23
19	Nagaland	1220.00	-	1220.00	526.10	0.42
20	Orissa	17224.61	1997.66	19222.27	21099.70	6.65
21	Punjab	2368.75	-	2368.75	-	0.82
22	Rajasthan	8284.85	1425.95	9710.80	1807.02	3.36
23	Sikkim	-	-	-	1.47	-
24	Tamil Nadu	6500.47	68.49	6568.96	13.24	2.27
25	Tripura	312.00	-	312.00	-	0.11
26	Uttranchal	3056.08	5341.52	8397.60	153.63	2.91
27	Uttar Pradesh	15345.01	2711.59	18056.60	18406.45	6.25
28	West Bengal	1475.15	184.44	1659.59	-	0.57
29	Andaman & Nicobar Island	-	-	-	-	-
30	Chandigarh	-	-	-	-	-
31	D & N Haveli & Damman &	-	-	-	-	-
32	Delhi	-	-	-	-	-
33	Lakshadweep	-	-	-	-	-
34	Pondicherry	13.79	-	13.79	-	0.00
	TOTAL in MCM	206538.31	76257.36	282795.67	107544.70	97.84
	in BCM	206.54	76.26	282.80	107.54	0.10
35	Medium Projects each having Live Storage Capacity of less than 10 MCM for which State wise breakup is not available	6241.00	-	6241.00		2.16
	GRAND TOTAL IN MCM	212779.31	76257.36	289036.64	107544.70	100.00
	IN BCM	212.78	76.26	289.04	107.54	-

Source : Central Water Commission (WM Directorate).

MCM:MILLION CUBIC METRE

BCM: BILLION CUBIC METRE

Chart 6 Percentage Storage Position of Important Reservoirs in India at the end of each month during June 2003 to May 2004



**Table : 1.10(A) Storage Position of Important Reservoirs of India at the end of each month
during June 2003 to May 2004**

Sl. No.	Name of Reservoir	Location	Live Capacity at F R L in TMCum	June 2003			July 2003			Aug. 2003		
				L	LS	P	L	LS	P	L	LS	P
1	2	3	4	5	6	7	8	9	10	11	12	13
1*	Srisaillam	A.P.	8.288	233.15	0.534	48	235.30	0.617	15	251.38	2.067	33
2*	Nagarjuna Sagar	A.P.	6.841	151.46	0.400	41	151.36	0.385	22	151.09	0.339	10
3	Sriram Sagar	A.P.	2.300	318.88	-0.586	320	328.03	0.687	324	330.80	1.593	163
4	Somasila	A.P.	1.994	75.11	-0.173	-141	76.20	-0.159	-114	76.30	-0.158	-65
5	Lower Manair	A.P.	0.621	267.97	0.082	39	267.83	0.079	34	271.55	0.179	64
6	Tenughat	Jharkhand	0.821	258.10	0.264	91	258.62	0.286	99	259.38	0.315	104
7	Maiton	Jharkhand	0.471	137.04	0.075	36	140.20	0.176	54	146.29	0.471	112
8*	Panchet Hill	Jharkhand	0.184	120.68	0.027	27	123.76	0.107	83	124.62	0.167	113
9	Konar	Jharkhand	0.176	419.07	0.072	107	421.23	0.101	96	422.06	0.113	86
10	Tilaiya	Jharkhand	0.142	364.16	0.012	75	365.24	0.034	58	365.74	0.046	48
11*	Ukai	Gujarat	6.615	92.98	1.975	144	98.93	4.020	158	103.51	5.904	135
12	Sabarmati	Gujarat	0.735	173.16	0.000	0	181.32	0.148	71	183.89	0.274	94
13*	Kadana	Gujarat	1.472	114.17	0.228	47	122.25	0.693	86	126.30	1.109	132
14	Shetrunji	Gujarat	0.300	47.82	0.020	32	50.27	0.056	58	51.52	0.087	78
15	Bhadar	Gujarat	0.188	102.66	0.037	84	103.82	0.059	82	105.89	0.113	147
16	Damanganga	Gujarat	0.502	67.85	0.116	110	72.50	0.231	105	76.75	0.371	106
17	Dantiwada	Gujarat	0.399	163.16	0.004	36	171.63	0.074	101	173.74	0.109	105
18	Panam	Gujarat	0.697	114.52	0.120	41	122.75	0.405	116	124.85	0.521	136
19*	Gobind Sagar	H.P	6.229	486.30	2.745	175	495.45	3.825	116	505.71	5.240	103
20*	Pong Dam(Beas)	H.P	6.157	393.07	0.725	72	401.79	1.807	71	412.97	3.735	79
21	Krishna Raja Sagar	Karnataka	1.163	737.06	0.002	1	740.31	0.133	19	743.15	0.288	29
22*	Tungabhadra	Karnataka	3.276	482.33	0.133	30	490.78	1.129	50	494.24	1.984	68
23	Ghatprabha	Karnataka	1.391	642.84	0.272	113	652.23	0.705	78	657.53	1.009	84
24	Bhadra	Karnataka	1.785	637.01	0.174	28	644.24	0.553	47	646.72	0.726	47
25	Linganamakki	Karnataka	4.294	532.51	0.450	58	542.41	1.523	68	546.25	2.204	70
26	Naryanapur	Karnataka	0.863	490.34	0.634	166	490.37	0.637	118	491.94	0.827	125

Contd.

**Table : 1.10(A) Storage Position of Important Reservoirs of India at the end of Each Month
During June 2003 TO May 2004**

Sl. No.	Name of Reservoir	Location	Live Capacity at F R L in TMCum	June 2003			July 2003			Aug. 2003		
				L	LS	P	L	LS	P	L	LS	P
1	2	3	4	5	6	7	8	9	10	11	12	13
27	Malaprabha	Karnataka	0.972	622.17	0.076	117	625.09	0.195	54	626.34	0.266	50
28	Kabini	Karnataka	0.275	688.56	0.000	0	695.48	0.235	119	695.06	0.211	93
29	Hemavathy	Karnataka	0.927	871.99	0.000	0	879.64	0.219	33	878.90	0.191	24
30	Harangi	Karnataka	0.220	856.99	0.034	52	870.47	0.189	95	870.94	0.204	97
31	Supa	Karnataka	4.120	514.10	0.376	51	528.10	0.984	59	535.83	1.467	63
32	Vani Vilas Sagar	Karnataka	0.802	639.33	0.150	75	639.17	0.146	75	639.02	0.142	72
33*	Almatti	Karnataka	3.105	510.40	0.014	17	518.35	2.413	199	519.52	2.944	120
34	Kallada	Kerala	0.507	91.74	0.093	46	96.30	0.142	57	101.57	0.211	68
35*	Idamalayar	Kerala	1.018	122.35	0.060	23	135.14	0.222	42	145.82	0.424	57
36*	Idukki	Kerala	1.460	700.17	0.127	37	705.17	0.274	44	710.63	0.455	52
37*	Kakki	Kerala	0.447	940.13	0.065	75	948.77	0.104	53	959.92	0.182	62
38*	Periyar	Kerala	0.173	860.28	0.038	60	860.73	0.045	51	860.82	0.046	50
39*	Gandhi Sagar	M.P.	6.827	378.87	-0.185	-19	383.16	0.300	15	384.81	0.590	20
40	Tawa	M.P.	1.944	345.55	0.696	128	353.56	1.662	149	354.85	1.942	113
41*	Bargi	M.P.	3.180	406.75	0.342	69	416.30	1.600	130	421.75	2.940	122
42*	Minimata Bango	Chhatisgarh	3.046	343.74	0.822	91	346.50	1.142	86	355.34	2.279	118
43	Mahanadi	Chhatisgarh	0.767	338.93	0.102	48	342.17	0.269	76	348.83	0.767	160
44	Jayakawadi	Maharashtra	2.171	455.03	-0.069	-26	456.48	0.155	31	457.49	0.333	40
45*	Koyna	Maharashtra	2.652	635.81	0.853	118	648.58	1.786	96	655.19	2.334	98
46	Bhima	Maharashtra	1.517	486.61	-0.712	2225	488.57	-0.433	-98	490.35	-0.130	-14
47	Isapur	Maharashtra	0.965	432.20	0.283	79	434.50	0.416	89	436.00	0.517	82
48	Mula	Maharashtra	0.609	536.08	0.039	53	543.69	0.238	82	544.12	0.253	62
49	Yeldari	Maharashtra	0.809	451.55	0.109	125	452.83	0.166	104	455.40	0.291	90
50	Girna	Maharashtra	0.524	383.56	0.031	94	387.69	0.130	153	389.72	0.187	115
51	Khadkwasla	Maharashtra	0.056	580.06	0.026	289	581.44	0.042	183	579.12	0.016	43
52*	Upper Vaitarna	Maharashtra	0.331	594.79	0.087	73	600.38	0.230	104	603.02	0.316	109
53	Upper Tapi	Maharashtra	0.255	209.70	0.053	212	208.71	0.027	117	212.72	0.181	136

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**Table : 1.10(A) Storage Position of Important Reservoirs of India at the end of Each Month
During June 2003 TO May 2004**

Sl. No.	Name of Reservoir	Location	Live Capacity at F R L in TMCum	June 2003			July 2003			Aug. 2003		
				L	LS	P	L	LS	P	L	LS	P
1	2	3	4	5	6	7	8	9	10	11	12	13
54*	Hirakud	Orissa	5.378	182.73	0.805	118	187.06	2.591	125	191.70	5.194	122
55*	Balimela	Orissa	2.676	437.09	-0.105	-157	445.62	0.509	153	453.27	1.339	199
56	Salanadi	Orissa	0.558	62.13	0.077	54	67.05	0.150	92	71.81	0.248	93
57*	Rengali	Orissa	3.432	110.25	0.075	22	112.91	0.552	36	119.11	2.017	84
58*	Machkund	Orissa	0.893	818.74	0.005	3	827.52	0.239	69	834.79	0.622	122
59*	Upper Kolab	Orissa	0.935	844.65	0.021	22	848.58	0.203	81	854.21	0.592	141
60*	Upper Indravati	Orissa	1.456	626.40	0.094	22	630.95	0.413	51	641.15	1.361	127
61*	Thein Dam	Pun	2.344	505.44	0.888	3415	499.04	0.579	132	505.79	0.910	97
62*	Mahi Bajaj Sagar	Rajasthan	1.711	259.85	0.032	22	272.25	0.792	109	278.40	1.399	129
63	Jhakam	Rajasthan	0.132	344.25	0.027	270	345.85	0.034	56	347.90	0.044	55
64*	Rana Pratap Sagar	Rajasthan	1.436	345.70	0.250	60	346.22	0.326	49	347.00	0.438	52
65	Lower Bhawani	Tamil Nadu	0.792	260.82	0.073	29	262.34	0.097	23	264.40	0.143	32
66*	Mettur	Tamil Nadu	2.647	212.13	0.170	15	212.79	0.192	18	220.56	0.569	51
67	Vaigai	Tamil Nadu	0.172	266.60	0.010	14	265.42	0.007	9	264.57	0.005	5
68	Parambikulam	Tamil Nadu	0.380	538.01	0.049	38	540.23	0.082	37	541.48	0.102	37
69	Aliyar	Tamil Nadu	0.095	300.75	0.000	0	301.11	0.001	3	306.45	0.020	42
70*	Sholayar	Tamil Nadu	0.143	968.04	0.010	20	977.16	0.031	29	968.92	0.022	16
71	Gumti	Tripura	0.312	92.32	0.254	202	92.61	0.268	144	92.76	0.275	120
72	Matatila	Uttar Pradesh	0.707	301.69	0.165	375	304.31	0.319	94	306.87	0.543	82
73*	Rihand	Uttar Pradesh	5.649	253.69	0.184	16	254.91	0.529	22	259.21	1.937	54
74*	Ramganga	Uttaranchal	2.196	324.66	0.186	71	333.72	0.472	82	343.48	0.858	82
75	Mayurakshi	West Bengal	0.480	111.53	0.082	52	111.44	0.081	29	110.64	0.064	18
76	Kangsabati	West Bengal	0.914	123.64	0.075	30	126.20	0.194	44	125.00	0.126	25
Total			133.021		15.279			39.870			68.023	
PERCENTAGE					11	64		30	72		51	80

Contd..

**Table : 1.10(A) Storage Position of Important Reservoirs of India at the end of Each Month
During June 2003 TO May 2004**

Sl. No.	Name of Reservoir	Location	Live Capacity at F R L in TMCum	September,2003			October, 2003			November, 2003		
				L	LS	P	L	LS	P	L	LS	P
1	2	3	4	14	15	16	17	18	19	20	21	22
1*	Srisaillam	A.P.	8.288	255.12	2.949	45	259.70	3.861	52	254.70	2.654	40
2*	Nagarjuna Sagar	A.P.	6.841	151.30	0.575	13	151.12	0.344	6	153.16	0.696	15
3	Sriram Sagar	A.P.	2.300	330.01	1.302	76	328.21	0.729	4	325.80	0.253	21
4	Somasila	A.P.	1.994	78.00	-0.127	-34	87.88	0.314	55	86.41	0.210	33
5	Lower Manair	A.P.	0.680	271.60	0.173	56	274.05	0.278	80	274.32	0.291	80
6	Tenughat	Jharkhand	0.821	259.99	0.342	111	259.74	0.331	102	259.69	0.329	99
7	Maithon	Jharkhand	0.471	146.48	0.471	100	149.92	0.471	103	149.14	0.471	103
8*	Panchet Hill	Jharkhand	0.184	123.47	0.116	64	128.28	0.184	114	128.23	0.184	108
9	Konar	Jharkhand	0.176	424.72	0.157	95	425.64	0.173	102	424.65	0.155	93
10	Tilaiya	Jharkhand	0.142	365.27	0.035	28	366.81	0.075	64	365.78	0.047	44
11*	Ukai	Gujarat	6.615	104.68	6.407	118	103.10	5.728	111	101.96	5.239	112
12	Sabarmati	Gujarat	0.735	184.91	0.338	109	184.54	0.315	111	183.73	0.265	107
13*	Kadana	Gujarat	1.472	127.56	1.176	123	127.69	1.189	135	127.71	1.192	137
14	Shetrunji	Gujarat	0.300	51.47	0.085	64	51.27	0.080	62	50.97	0.072	61
15	Bhadar	Gujarat	0.188	106.10	0.119	157	105.92	0.113	157	105.12	0.090	155
16	Damanganga	Gujarat	0.502	79.00	0.463	103	79.85	0.495	105	79.25	0.474	105
17	Dantiwada	Gujarat	0.399	174.06	0.115	100	173.34	0.102	105	171.28	0.069	93
18	Panam	Gujarat	0.697	125.85	0.586	144	125.80	0.582	152	125.50	0.563	152
19*	Gobind Sagar	H.P	6.299	509.03	5.756	106	506.42	5.348	107	501.17	4.587	108
20*	Pong Dam(Beas)	H.P	6.157	416.41	4.466	89	413.80	3.903	84	411.07	3.362	82
21	Krishna Raja Sagar	Karnataka	1.163	740.19	0.127	13	744.19	0.356	34	740.19	0.127	14
22*	Tungabhadra	Karnataka	3.276	493.50	1.770	60	493.89	1.881	64	490.41	1.053	42
23	Ghatprabha	Karnataka	1.391	657.56	1.011	84	654.38	0.820	67	649.17	0.558	55
24	Bhadra	Karnataka	1.785	645.99	0.673	43	646.23	0.690	45	643.22	0.488	34
25	Linganamakki	Karnataka	4.294	646.60	2.275	72	546.80	2.314	74	545.35	2.028	71
26	Naryanapur	Karnataka	0.863	490.23	0.617	83	489.68	0.562	72	491.30	0.747	97

Contd..

**Table : 1.10(A) Storage Position of Important Reservoirs of India at the end of Each Month
During June 2003 TO May 2004**

Sl. No.	Name of Reservoir	Location	Live Capacity at F R L in TMCum	September,2003			October, 2003			November, 2003		
				L	LS	P	L	LS	P	L	LS	P
1	2	3	4	14	15	16	17	18	19	20	21	22
27	Malaprabha	Karnataka	0.972	626.69	0.288	57	627.18	0.322	58	624.15	0.152	34
28	Kabini	Karnataka	0.275	692.15	0.065	29	692.49	0.081	36	690.41	0.000	0
29	Hemavathy	Karnataka	0.927	874.23	0.044	6	876.33	0.097	13	873.50	0.024	4
30	Harangi	Karnataka	0.220	869.41	0.161	90	867.87	0.129	102	854.72	0.020	31
31	Supa	Karnataka	4.120	536.65	1.524	65	536.98	1.547	66	534.73	1.392	64
32	Vani Vilas Sagar	Karnataka	0.802	638.87	0.139	67	640.73	0.188	60	640.59	0.183	58
33*	Almatti	Karnataka	3.105	519.60	2.984	101	519.45	2.909	98	517.37	2.026	86
34	Kallada	Kerala	0.507	103.52	0.241	72	111.70	0.396	110	112.80	0.418	116
35*	Idamalayar	Kerala	1.018	148.34	0.479	61	152.98	0.585	73	151.51	0.550	72
36*	Idukki	Kerala	1.460	711.10	0.472	50	716.18	0.665	64	715.63	0.644	61
37*	Kakki	Kerala	0.447	960.26	0.184	60	968.42	0.260	79	969.19	0.270	83
38*	Periyar	Kerala	0.173	859.85	0.031	39	862.35	0.071	69	861.43	0.056	54
39*	Gandhi Sagar	M.P.	6.827	387.94	1.303	35	387.75	1.296	36	385.92	0.826	27
40	Tawa	M.P.	1.944	355.31	1.944	106	355.31	1.944	107	353.78	1.736	109
41*	Bargi	M.P	3.180	422.85	3.180	110	422.50	3.125	117	421.00	2.730	122
42*	Minimata Bango	Chhatisgarh	3.046	359.61	3.033	132	359.57	3.026	134	359.36	2.989	158
43	Mahanadi	Chhatisgarh	0.767	348.68	0.765	158	348.68	0.765	180	348.81	0.767	179
44	Jayakawadi	Maharashtra	2.171	457.64	0.361	35	457.66	0.366	31	457.30	0.293	27
45*	Koyna	Maharashtra	2.652	656.94	2.538	104	656.54	2.372	100	651.76	2.049	93
46	Bhima	Maharashtra	1.517	490.56	-0.090	-9	490.21	-0.156	-14	490.87	-0.031	-3
47	Isapur	Maharashtra	0.965	436.30	0.536	77	436.43	0.548	76	435.52	0.485	70
48	Mula	Maharashtra	0.608	544.28	0.254	52	544.24	0.257	51	543.57	0.234	51
49	Yeldari	Maharashtra	0.809	457.40	0.410	98	457.80	0.446	93	456.03	0.326	71
50	Girna	Maharashtra	0.524	390.38	0.206	98	390.63	0.213	89	390.46	0.208	96
51	Khadkwasla	Maharashtra	0.056	380.52	0.031	103	577.75	0.004	13	581.77	0.047	276
52*	Upper Vaitarna	Maharashtra	0.331	603.50	0.331	109	603.00	0.329	109	603.11	0.322	109
53	Upper Tapi	Maharashtra	0.255	212.63	0.177	73	214.00	0.255	104	213.97	0.254	104

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**Table : 1.10(A) Storage Position of Important Reservoirs of India at the end of Each Month
During June 2003 TO May 2004**

SI. No.	Name of Reservoir	Location	Live Capacity at F R L in TMCum	September,2003			October, 2003			November,2003		
				L	LS	P	L	LS	P	L	LS	P
1	2	3	4	14	15	16	17	18	19	20	21	22
54*	Hirakud	Orissa	5.378	191.84	5.274	103	192.00	5.365	108	191.63	5.152	108
55*	Balimela	Orissa	2.676	455.70	1.653	176	458.63	2.050	199	458.73	2.170	219
546	Salandina	Orissa	0.558	74.32	0.309	89	79.15	0.442	150	79.07	0.439	150
57*	Rengali	Orissa	3.432	123.55	3.432	111	124.24	3.432	110	123.06	3.295	114
58*	Machkund	Orissa	0.893	837.65	0.847	138	838.08	0.882	139	837.47	0.833	136
59*	Upper Kolab	Orissa	0.935	856.73	0.815	153	857.52	0.890	164	857.06	0.845	165
60*	Upper Indravati	Orissa	1.456	641.42	1.391	119	641.38	1.387	125	640.59	1.299	128
61*	Thein Dam	Pun	2.344	507.72	0.999	95	505.44	0.888	120	502.67	0.752	132
62*	Mahi Bajaj Sagar	Rajasthan	1.711	281.40	1.711	142	281.50	1.711	151	279.80	1.592	164
63	Jhakam	Rajasthan	0.132	351.30	0.063	71	351.20	0.062	71	347.30	0.041	55
64*	Rana Pratap Sagar	Rajasthan	1.436	347.61	0.524	57	348.40	0.649	80	348.58	0.669	90
65	Lower Bhawani	Tamil Nadu	0.792	264.56	0.147	40	268.01	0.247	60	269.80	0.312	68
66*	Mettur	Tamil Nadu	2.647	224.85	0.871	86	222.55	0.702	43	220.48	0.566	30
67	Vaigai	Tamil Nadu	0.172	264.39	0.004	4	273.10	0.060	50	274.78	0.084	65
68	Parambikulam	Tamil Nadu	0.380	539.67	0.074	25	542.96	0.127	42	541.65	0.105	34
69	Aliyar	Tamil Nadu	0.095	302.57	0.005	11	304.40	0.013	24	301.72	0.002	3
70*	Sholayar	Tamil Nadu	0.143	969.29	0.022	17	975.70	0.027	21	976.96	0.041	37
71	Gumti	Tripura	0.312	92.90	0.282	117	92.68	0.272	117	91.88	0.235	112
72	Matatila	Uttar Pradesh	0.707	308.46	0.707	100	308.40	0.706	109	308.27	0.688	128
73*	Rihand	Uttar Pradesh	8.967	265.61	4.518	93	265.42	4.440	96	264.26	3.943	94
74*	Ramganga	Uttaranchal	2.196	350.08	1.181	83	351.32	1.250	84	351.37	1.253	86
75	Mayurakshi	West Bengal	0.487	113.29	0.127	31	119.05	0.356	96	119.48	0.378	105
76	Kangsabati	West Bengal	0.914	125.90	0.177	27	129.77	0.425	82	131.23	0.539	99
Total			133.021		78.701			79.661			70.407	
PERCENTAGE					59	81		60	82		53	80

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**Table : 1.10(A) Storage Position of Important Reservoirs of India at the end of Each Month
During June 2003 TO May 2004**

Sl. No.	Name of Reservoir	Location	Live Capacity at F R L in TMCum	December, 2003			January, 2004			February, 2004		
				L	LS	P	L	LS	P	L	LS	P
1	2	3	4	23	24	25	26	27	28	29	30	31
1*	Srisailem	A.P.	8.288	245.85	1.330	22	244.40	1.197	24	235.83	0.638	18
2*	Nagarjuna Sagar	A.P.	6.841	153.77	0.806	23	153.44	0.745	28	153.62	0.779	35
3	Sriram Sagar	A.P.	2.300	324.52	0.031	3	322.20	-0.299	-52	319.61	-0.532	-633
4	Somasila	A.P.	1.994	83.87	0.075	12	79.71	-0.087	-15	77.79	-0.132	-31
5	Lower Manair	A.P.	0.680	272.61	0.218	59	272.25	0.204	55	271.60	0.181	62
6	Tenughat	Jharkhand	0.821	259.63	0.326	102	259.51	0.321	102	259.38	0.215	70
7	Maithon	Jharkhand	0.471	149.35	0.471	103	149.60	0.471	103	148.55	0.471	107
8*	Panchet Hill	Jharkhand	0.184	128.47	0.184	105	128.25	0.184	106	125.97	0.184	118
9	Konar	Jharkhand	0.176	423.18	0.131	82	422.27	0.117	81	420.79	0.094	72
10	Tilaiya	Jharkhand	0.142	364.02	0.010	12	364.06	0.012	19	363.46	0.001	3
11*	Ukai	Gujarat	6.615	100.80	4.772	112	99.68	4.296	116	98.19	3.746	116
12	Sabarmati	Gujarat	0.735	182.61	0.206	101	181.08	0.138	83	178.90	0.065	56
13*	Kadana	Gujarat	1.472	127.71	1.192	138	127.38	1.158	138	127.71	1.192	151
14	Shetrunji	Gujarat	0.300	49.42	0.042	44	47.72	0.019	25	47.37	0.016	28
15	Bhadar	Gujarat	0.188	103.34	0.048	126	101.56	0.022	88	100.64	0.013	76
16	Damanganga	Gujarat	0.502	78.45	0.441	106	77.30	0.394	103	76.10	0.347	100
17	Dantiwada	Gujarat	0.399	167.91	0.032	65	164.29	0.009	31	164.16	0.008	42
18	Panam	Gujarat	0.697	125.95	0.592	167	124.30	0.488	139	123.65	0.451	128
19*	Gobind Sagar	H.P	6.299	493.47	3.571	107	485.59	2.669	110	477.37	1.857	116
20*	Pong Dam(Beas)	H.P	6.157	408.94	2.963	85	406.10	2.475	82	404.71	2.243	89
21	Krishna Raja Sagar	Karnataka	1.163	738.38	0.050	6	737.84	0.029	5	737.58	0.020	5
22*	Tungabhadra	Karnataka	3.276	485.35	0.342	127	483.65	0.211	15	482.87	0.162	20
23	Ghatprabha	Karnataka	1.391	641.96	0.278	37	641.68	0.268	54	640.06	0.217	76
24	Bhadra	Karnataka	1.785	643.27	0.491	34	641.62	0.395	32	640.03	0.313	32
25	Linganamakki	Karnataka	4.294	543.85	1.758	70	541.97	1.460	70	540.07	1.193	71
26	Naryanapur	Karnataka	0.863	490.74	0.680	94	490.24	0.618	93	488.93	0.485	88

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**Table : 1.10(A) Storage Position of Important Reservoirs of India at the end of Each Month
During June 2003 TO May 2004**

Sl. No.	Name of Reservoir	Location	Live Capacity at F R L in TMCum	December, 2003			January, 2004			February, 2004		
				L	LS	P	L	LS	P	L	LS	P
1	2	3	4	23	24	25	26	27	28	29	30	31
27	Malaprabha	Karnataka	0.972	621.50	0.056	19	621.17	0.046	28	620.41	0.026	31
28	Kabini	Karnataka	0.275	688.96	0.000	0	688.14	0.000	0	687.10	0.000	0
29	Hemavathy	Karnataka	0.927	872.67	0.007	1	872.30	0.000	0	871.83	0.000	0
30	Harangi	Karnataka	0.220	848.52	0.000	0	850.72	0.002	5	851.32	0.004	14
31	Supa	Karnataka	4.120	532.42	1.242	64	528.85	1.028	60	524.13	0.776	55
32	Vani Vilas Sagar	Karnataka	0.802	640.47	0.180	59	639.69	0.158	55	639.11	0.144	58
33*	Almatti	Karnataka	3.105	515.76	1.497	83	513.78	1.002	78	511.62	0.544	78
34	Kallada	Kerala	0.507	111.47	0.391	122	108.78	0.339	122	105.30	0.269	113
35*	Idamalayar	Kerala	1.018	149.80	0.511	75	146.27	0.434	73	142.31	0.354	73
36*	Idukki	Kerala	1.460	713.96	0.576	62	711.62	0.490	62	708.84	0.393	61
37*	Kakki	Kerala	0.447	967.32	0.248	86	963.84	0.215	89	959.68	0.180	88
38*	Periyar	Kerala	0.173	861.07	0.050	60	859.73	0.029	56	859.09	0.020	56
39*	Gandhi Sagar	M.P.	6.827	383.43	0.344	13	382.55	0.205	9	381.38	0.048	3
40	Tawa	M.P.	1.944	351.62	1.391	108	349.15	1.058	108	345.92	0.726	103
41*	Bargi	M.P.	3.180	418.70	2.104	114	416.50	1.640	104	413.95	1.183	100
42*	Minimata Bango	Chhatisgarh	3.046	358.90	2.908	168	357.50	2.651	168	356.05	2.398	164
43	Mahanadi	Chhatisgarh	0.767	348.80	0.767	178	348.76	0.767	179	348.70	0.767	208
44	Jayakawadi	Maharashtra	2.171	456.96	0.234	23	456.50	0.157	18	456.13	0.098	12
45*	Koyna	Maharashtra	2.652	648.09	1.743	88	645.21	1.510	87	641.86	1.217	82
46	Bhima	Maharashtra	1.517	489.64	-0.258	-30	489.33	-0.310	-42	489.03	-0.361	-64
47	Isapur	Maharashtra	0.965	434.61	0.422	66	433.81	0.373	63	432.82	0.316	65
48	Mula	Maharashtra	0.608	540.57	0.145	36	540.00	0.127	38	539.50	0.114	43
49	Yeldari	Maharashtra	0.809	455.37	0.287	70	454.58	0.245	71	453.77	0.205	81
50	Girna	Maharashtra	0.524	389.15	0.171	89	388.37	0.149	99	387.99	0.139	109
51	Khadkwasla	Maharashtra	0.056	578.88	0.020	154	578.88	0.014	127	578.57	0.011	110
52*	Upper Vaitarna	Maharashtra	0.331	603.03	0.317	120	601.86	0.279	123	600.49	0.233	118
53	Upper Tapi	Maharashtra	0.255	213.46	0.222	99	212.97	0.196	95	212.39	0.166	93

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**Table : 1.10(A) Storage Position of Important Reservoirs of India at the end of Each Month
During June 2003 TO May 2004**

SI. No.	Name of Reservoir	Location	Live Capacity at F R L in TMCum	December, 2003			January, 2004			February, 2004		
				L	LS	p	L	LS	P	L	LS	P
1	2	3	4	23	24	65	26	27	28	29	30	31
54*	Hirakud	Orissa	5.378	190.55	4.538	103	189.59	3.993	104	189.31	3.836	119
55*	Balimela	Orissa	2.676	458.33	2.013	234	455.68	1.650	234	454.77	1.534	277
56	Salandina	Orissa	0.558	79.00	0.445	155	77.74	0.406	168	76.66	0.375	182
57*	Rengali	Orissa	3.432	120.63	2.522	99	118.40	1.796	81	117.96	1.664	91
58*	Machkund	Orissa	0.893	837.19	0.811	148	836.11	0.718	154	834.89	0.631	162
59*	Upper Kolab	Orissa	0.935	856.42	0.785	176	855.17	0.667	175	854.21	0.592	178
60*	Upper Indravati	Orissa	1.456	639.39	1.174	127	638.18	1.056	119	636.65	0.907	124
61*	Thein Dam	Punjab	2.344	498.34	0.558	138	495.23	0.440	159	491.74	0.307	301
62	Mahi Bajaj Sagar	Rajasthan	1.711	277.95	1.350	172	276.30	1.172	189	274.30	0.980	190
63	Jhakam	Rajasthan	0.132	341.00	0.017	31	337.75	0.010	26	336.55	0.007	27
64*	Rana Pratap Sagar	Rajasthan	1.436	346.40	0.352	55	344.65	0.083	15	344.68	0.101	21
65	Lower Bhawani	Tamil Nadu	0.792	269.81	0.313	72	257.86	0.036	10	259.33	0.052	18
66*	Mettur	Tamil Nadu	2.647	217.01	0.371	23	213.57	0.221	19	211.95	0.164	14
67	Vaigai	Tamil Nadu	0.172	273.22	0.062	60	268.25	0.017	21	266.60	0.010	15
68	Parambikulam	Tamil Nadu	0.380	538.73	0.059	20	537.24	0.038	15	536.49	0.027	14
69	Aliyar	Tamil Nadu	0.095	304.19	0.011	18	301.14	0.001	2	300.38	-0.001	-4
70*	Sholayar	Tamil Nadu	0.143	962.58	0.010	11	960.22	0.007	10	961.15	0.008	17
71	Gumti	Tripura	0.312	91.09	0.203	113	90.37	0.173	120	89.81	0.151	128
72	Matatila	Uttar Pradesh	0.707	307.85	0.647	156	308.15	0.677	210	307.76	0.637	360
7*	Rihand	Uttar Pradesh	8.967	262.77	3.327	92	260.91	2.602	85	259.14	1.914	78
74*	Ramganga	Uttaranchal	2.196	348.67	1.108	99	346.71	1.010	97	341.35	0.767	96
75	Mayurakshi	West Bengal	0.487	119.51	0.379	106	119.40	0.374	107	117.66	0.285	96
76	Kangsabati	West Bengal	0.914	130.04	0.446	969	128.93	0.362	97	126.86	0.230	89
Total			133.021		58.116			47.827			39.375	
PERCENTAGE					44	77		36	76		30	79

Contd..

**Table : 1.10(A) Storage Position of Important Reservoirs of India at the end of Each Month
During June 2003 TO May 2004**

Sl. No.	Name of Reservoir	Location	Live Capacity at F R L in TMCum	March, 2004			April, 2004			May, 2004		
				L	LS	P	L	LS	P	L	LS	P
1	2	3	4	32	33	34	35	36	37	38	39	40
1*	Srisaillam	A.P.	8.288	237.85	0.721	37	226.55	0.309	28	232.40	0.506	58
2*	Nagarjuna Sagar	A.P.	6.841	151.55	0.416	30	152.25	0.533	49	151.06	0.333	31
3	Sriram Sagar	A.P.	2.300	319.43	-0.547	251	319.31	-0.555	137	318.97	-0.580	134
4	Somasila	A.P.	1.994	76.44	-0.155	-44	74.70	-0.178	-69	76.67	-0.152	-101
5	Lower Manair	A.P.	0.680	268.62	0.096	38	268.13	0.085	38	267.85	0.080	37
6	Tenughat	Jharkhand	0.821	258.79	0.292	100	258.47	0.279	105	258.32	0.273	113
7	Maitthon	Jharkhand	0.471	146.73	0.471	130	142.43	0.267	121	142.09	0.252	177
8*	Panchet Hill	Jharkhand	0.184	123.86	0.132	176	121.80	0.056	622	121.80	0.056	431
9	Konar	Jharkhand	0.176	419.41	0.075	66	418.51	0.065	64	417.09	0.050	65
10	Tilaiya	Jharkhand	0.142	363.39	0.000	0	363.36	0.000	0	363.16	-0.004	-50
11*	Ukai	Gujarat	6.615	96.59	3.161	119	93.71	2.189	114	91.70	1.608	130
12	Sabarmati	Gujarat	0.735	177.43	0.029	31	176.85	0.018	34	176.34	0.008	36
13*	Kadana	Gujarat	1.472	127.56	1.176	179	126.97	1.116	215	124.11	0.846	208
14	Shetrunji	Gujarat	0.300	46.82	0.011	28	46.37	0.006	25	46.17	0.006	32
15	Bhadar	Gujarat	0.188	100.06	0.010	83	99.39	0.006	67	102.72	0.037	740
16	Damanganga	Gujarat	0.502	74.55	0.295	95	73.00	0.245	92	71.60	0.205	164
17	Dantiwada	Gujarat	0.399	163.98	0.007	54	163.77	0.007	100	163.41	0.005	250
18	Panam	Gujarat	0.697	122.65	0.400	132	121.50	0.345	127	120.30	0.295	120
19*	Gobind Sagar	H.P	6.299	463.86	0.864	98	455.99	0.464	68	450.45	0.198	23
20*	Pong Dam(Beas)	H.P	6.157	399.60	1.494	71	396.72	1.126	63	391.65	0.535	42
21	Krishna Raja Sagar	Karnataka	1.163	736.19	0.000	0	735.98	0.000	0	738.10	0.039	63
22*	Tungabhadra	Karnataka	3.276	479.16	0.033	12	478.29	0.020	29	479.23	0.034	45
23	Ghatprabha	Karnataka	1.391	636.56	0.124	70	632.29	0.043	33	630.09	0.012	13
24	Bhadra	Karnataka	1.785	638.56	0.240	31	634.66	0.089	17	635.03	0.101	28
25	Linganamakki	Karnataka	4.294	537.41	0.883	73	534.96	0.644	80	533.27	0.506	110
26	Naryanapur	Karnataka	0.863	488.19	0.408	103	484.76	0.154	56	485.20	0.177	92

Contd..

**Table : 1.10(A) Storage Position of Important Reservoirs of India at the end of Each Month
During June 2003 TO May 2004**

Sl. No.	Name of Reservoir	Location	Live Capacity at F R L in TMCum	March, 2004			April, 2004			May, 2004		
				L	LS	P	L	LS	P	L	LS	P
1	2	3	4	32	33	34	35	36	37	38	39	40
27	Malaprabha	Karnataka	0.972	619.97	0.015	33	629.68	0.008	26	619.81	0.011	44
28	Kabini	Karnataka	0.275	685.57	0.000	0	684.57	0.000	0	688.47	0.000	0
29	Hemavathy	Karnataka	0.927	871.26	0.000	0	870.71	0.000	0	871.63	0.000	0
30	Harangi	Karnataka	0.220	851.39	0.005	29	851.65	0.006	86	853.60	0.015	750
31	Supa	Karnataka	4.120	517.40	0.493	43	516.12	0.446	50	515.79	0.434	68
32	Vani Vilas Sagar	Karnataka	0.802	638.88	0.138	58	638.65	0.134	61	637.51	0.106	52
33*	Almatti	Karnataka	3.105	507.80	0.087	28	506.41	0.000	0	506.25	0.000	0
34	Kallada	Kerala	0.507	100.99	0.202	111	97.22	0.154	108	98.91	0.178	144
35*	Idamalayar	Kerala	1.018	137.81	0.268	74	133.59	0.199	78	133.27	0.194	121
36*	Idukki	Kerala	1.460	706.61	0.317	64	704.66	0.259	73	705.37	0.283	110
37*	Kakki	Kerala	0.447	951.87	0.122	79	943.63	0.079	68	943.09	0.076	107
38*	Periyar	Kerala	0.173	858.96	0.018	51	859.18	0.021	49	860.18	0.036	71
39*	Gandhi Sagar	M.P.	6.827	379.59	-0.125	-8	379.51	-0.134	-11	379.21	-0.158	-15
40	Tawa	M.P.	1.944	343.94	0.557	106	343.72	0.539	113	343.75	0.541	118
41*	Bargi	M.P.	3.180	410.30	0.711	77	407.50	0.405	61	404.70	0.168	37
42*	Minimata Bango	Chhatisgarh	3.046	354.33	2.114	168	353.54	1.994	196	352.65	1.870	227
43	Mahanadi	Chhatisgarh	0.767	344.44	0.741	255	348.22	0.722	321	347.81	0.682	421
44	Jayakwadi	Maharashtra	2.171	455.68	0.022	4	455.32	-0.025	-6	454.87	-0.091	-32
45*	Koyna	Maharashtra	2.652	637.57	0.950	83	633.30	0.723	85	628.24	0.536	90
46	Bhima	Maharashtra	1.517	487.51	-0.592	-176	486.87	-0.679	-738	486.51	-0.725	522
47	Isapur	Maharashtra	0.965	0.00	0.000	0	430.08	0.180	45	428.72	0.114	36
48	Mula	Maharashtra	0.608	537.32	0.064	30	536.65	0.050	36	535.23	0.022	37
49	Yeldari	Maharashtra	0.809	452.04	0.133	64	450.30	0.072	56	448.15	0.015	23
50	Girna	Maharashtra	0.524	386.91	0.109	125	386.97	0.086	156	384.86	0.059	236
51	Khadkwasla	Maharashtra	0.056	578.82	0.013	130	578.48	0.010	111	578.05	0.007	70
52*	Upper Vaitarna	Maharashtra	0.331	598.61	0.180	113	596.65	0.132	111	595.00	0.092	103
53	Upper Tapi	Maharashtra	0.255	211.57	0.129	86	210.62	0.086	80	209.29	0.043	81

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**Table : 1.10(A) Storage Position of Important Reservoirs of India at the end of Each Month
During June 2003 TO May 2004**

Sl. No.	Name of Reservoir	Location	Live Capacity at F R L in TMCum	March, 2004			April, 2004			May, 2004		
				L	LS	P	L	LS	P	L	LS	P
1	2	3	4	32	33	34	35	36	37	38	39	40
54*	Hirakud	Orissa	5.378	186.98	2.545	105	184.78	1.539	105	181.11	0.337	49
55*	Balimela	Orissa	2.676	449.52	0.993	284	445.71	0.526	179	443.67	0.353	350
56	Salandina	Orissa	0.558	75.31	0.336	207	74.11	0.304	225	73.67	0.293	244
57*	Rengali	Orissa	3.432	116.41	1.295	100	114.90	0.949	121	112.07	0.389	158
58*	Machkund	Orissa	0.893	832.79	0.498	161	831.63	0.428	192	829.48	0.319	193
59*	Upper Kolab	Orissa	0.935	852.83	0.489	205	851.40	0.307	190	848.74	0.215	197
60*	Upper Indravati	Orissa	1.456	634.00	0.664	112	631.10	0.425	96	628.95	0.264	83
61*	Thein Dam	Punjab	2.344	493.59	0.000	0	498.54	0.567	319	0.00	0.000	0
62	Mahi Bajaj Sagar	Rajasthan	1.711	272.05	0.773	230	270.40	0.632	285	268.80	0.509	401
63	Jhakam	Rajasthan	0.132	336.20	0.007	44	335.85	0.006	43	335.50	0.006	55
64*	Rana Pratap Sagar	Rajasthan	1.436	345.11	0.164	42	344.92	0.138	29	344.59	0.089	21
65	Lower Bhawani	Tamil Nadu	0.792	258.72	0.045	20	257.88	0.036	20	264.94	0.157	93
66*	Mettur	Tamil Nadu	2.647	211.68	0.156	13	212.16	0.171	14	213.54	0.220	18
67	Vaigai	Tamil Nadu	0.172	265.76	0.007	10	264.49	0.004	6	265.42	0.007	11
68	Parambikulam	Tamil Nadu	0.380	235.85	0.018	11	536.02	0.021	15	536.19	0.023	20
69	Aliyar	Tamil Nadu	0.095	299.28	-0.004	-17	300.59	-0.001	-4	302.82	0.006	27
70*	Sholayar	Tamil Nadu	0.143	961.41	0.009	30	961.70	0.009	47	968.69	0.021	131
71	Gumti	Tripura	0.312	88.54	0.108	126	88.01	0.093	139	88.00	0.091	132
72	Matatila	Uttar Pradesh	0.707	307.91	0.652	490	307.36	0.594	413	306.51	0.508	627
73*	Rihand	Uttar Pradesh	8.967	257.01	1.158	52	255.67	0.749	48	254.39	0.382	37
74*	Ramganga	Uttaranchal	2.196	332.14	0.417	76	324.80	0.194	49	319.14	0.047	19
75	Mayurakshi	West Bengal	0.487	113.71	0.118	52	108.05	0.025	19	107.82	0.022	16
76	Kangsabati	West Bengal	0.914	124.74	0.118	70	123.44	0.070	84	123.40	0.068	85
Total			133.021		27.873			20.586			14.260	
PERCENTAGE					21	75		15	76		11	73

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

FRL : Full Reservoir Level, TMCuM : Thousand Million Cubic Metre.

L : Level in Metre, LS : Live Storage in TMCuM, 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 on last Day of the month

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

Chart 7 Percentage Storage Position of Important Reservoirs in India at the end of each month during June 2004 to May 2005

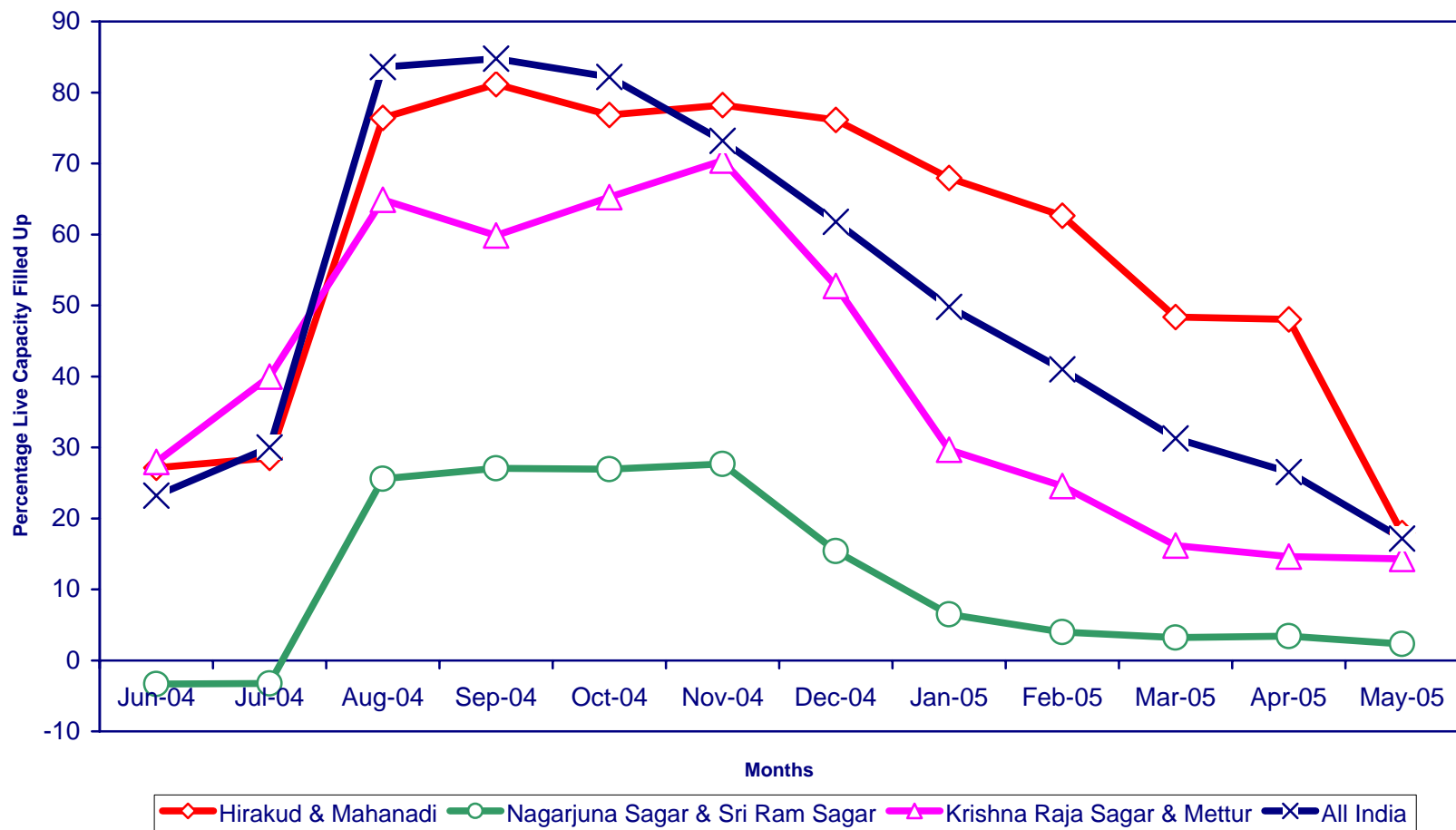


Table : 1.10(B) Storage Position of Important Reservoirs of India at the end of each month during June 2004 to May 2005

Sl. No.	Name of Reservoir	Location	Live Capacity at F R L in TMCum	June 2004			July 2004			Aug. 2004		
				L	LS	P	L	LS	P	L	LS	P
1	2	3	4	5	6	7	8	9	10	11	12	13
1*	Srisailem	A.P.	8.288	238.69	0.762	72	240.80	0.886	25	269.28	8.016	141
2*	Nagarjuna Sagar	A.P.	6.841	150.78	0.288	32	150.69	0.273	17	163.59	2.736	91
3	Sriram Sagar	A.P.	2.300	318.76	-0.594	332	318.94	-0.571	-166	321.23	-0.397	-36
4	Somasila	A.P.	1.994	76.59	-0.153	-125	75.43	-0.169	-132	74.23	-0.182	-79
5	Lower Manair	A.P.	0.680	267.64	0.076	37	267.49	0.073	32	267.40	0.071	25
6	Tenughat	Jharkhand	0.821	257.82	0.254	87	258.79	0.291	100	259.13	0.305	100
7	Maithon	Jharkhand	0.471	143.25	0.305	150	140.53	0.188	57	143.71	0.305	69
8*	Panchet Hill	Jharkhand	0.184	119.69	0.004	4	119.58	-0.002	-1	125.13	0.184	126
9	Konar	Jharkhand	0.176	416.57	0.044	57	416.14	0.039	34	422.61	0.122	85
10	Tilaiya	Jharkhand	0.142	365.19	0.033	194	363.69	0.005	8	365.72	0.045	46
11*	Ukai	Gujarat	6.615	89.96	1.176	84	88.58	0.891	35	101.09	4.891	109
12	Sabarmati	Gujarat	0.735	176.72	0.016	26	176.32	0.008	5	178.92	0.066	27
13*	Kadana	Gujarat	1.472	121.29	0.619	138	118.57	0.442	59	126.90	1.109	136
14	Shetrunji	Gujarat	0.300	46.77	0.010	16	47.82	0.020	20	51.77	0.094	80
15	Bhadar	Gujarat	0.188	102.81	0.038	86	103.08	0.043	61	104.63	0.077	94
16	Damanganga	Gujarat	0.502	66.45	0.086	80	70.15	0.168	75	75.15	0.314	89
17	Dantiwada	Gujarat	0.399	163.30	0.005	50	162.90	0.004	7	167.14	0.025	27
18	Panam	Gujarat	0.697	120.35	0.295	107	120.36	0.296	83	126.80	0.650	163
19*	Gobind Sagar	H.P	6.229	454.95	0.396	23	468.99	1.161	34	484.50	2.502	48
20*	Pong Dam(Beas)	H.P	6.157	388.99	0.325	34	397.34	1.109	47	409.25	2.894	61
21	Krishna Raja Sagar	Karnataka	1.163	746.10	0.498	281	746.57	0.537	82	751.85	1.083	120
22*	Tungabhadra	Karnataka	3.276	488.58	0.734	178	492.01	1.395	63	497.74	3.158	113
23	Ghatprabha	Karnataka	1.391	645.80	0.416	168	649.98	0.598	69	662.89	1.387	119
24	Bhadra	Karnataka	1.785	642.49	0.444	80	645.76	0.657	59	654.33	1.405	98
25	Linganamakki	Karnataka	4.294	539.84	1.165	167	543.92	1.770	83	551.12	3.333	112
26	Naryanapur	Karnataka	0.863	488.44	0.435	108	490.97	0.702	125	491.77	0.800	115

Contd.

**Table : 1.10(B) Storage Position of Important Reservoirs of India at the end of Each Month
During June 2004 to May 2005**

Sl. No.	Name of Reservoir	Location	Live Capacity at F R L in TMCum	June2004			July2004			Aug.2004		
				L	LS	P	L	LS	P	L	LS	P
1	2	3	4	5	6	7	8	9	10	11	12	13
27	Malaprabha	Karnataka	0.972	622.96	0.105	164	624.36	0.163	48	629.98	0.546	111
28	Kabini	Karnataka	0.275	695.63	0.243	221	695.71	0.248	122	695.47	0.234	101
29	Hemavathy	Karnataka	0.927	884.07	0.442	251	883.41	0.407	67	889.23	0.804	108
30	Harangi	Karnataka	0.220	864.33	0.084	133	871.10	0.209	106	871.12	0.210	100
31	Supa	Karnataka	4.120	519.45	0.573	86	520.20	0.936	61	544.20	2.081	96
32	Vani Vilas Sagar	Karnataka	0.802	639.05	0.143	73	638.88	0.139	73	638.72	0.135	71
33*	Almatti	Karnataka	3.105	516.87	1.849	3852	518.70	2.623	145	519.31	2.907	108
34	Kallada	Kerala	0.507	107.14	0.306	170	111.53	0.393	174	114.82	0.461	156
35*	Idamalayar	Kerala	1.018	147.81	0.471	204	156.16	0.660	133	162.13	0.824	118
36*	Idukki	Kerala	1.460	713.28	0.548	180	717.58	0.722	128	724.03	1.011	125
37*	Kakki	Kerala	0.447	960.88	0.198	233	963.83	0.215	116	971.67	0.300	106
38*	Periyar	Kerala	0.173	864.33	0.084	140	864.33	0.084	100	861.65	0.066	76
39*	Gandhi Sagar	M.P.	6.827	379.08	-0.168	-18	379.08	-0.168	-9	395.38	4.124	147
40	Tawa	M.P.	1.944	343.99	0.562	97	345.74	0.709	63	353.75	1.732	101
41*	Bargi	M.P.	3.180	406.15	0.283	59	409.60	0.629	47	420.15	2.492	99
42*	Minimata Bango	Chhatisgarh	3.046	351.85	1.753	196	352.77	1.882	144	357.07	2.574	131
43	Mahanadi	Chhatisgarh	0.767	347.98	0.698	346	348.45	0.743	211	348.64	0.761	146
44	Jayakawadi	Maharashtra	2.171	454.70	-0.113	-45	454.79	-0.101	-21	461.84	1.431	176
45*	Koyna	Maharashtra	2.652	638.91	1.026	136	646.71	1.633	88	657.91	2.652	113
46	Bhima	Maharashtra	1.517	486.89	-0.676	578	486.96	-0.669	-217	496.74	1.486	198
47	Isapur	Maharashtra	0.965	428.21	0.089	24	428.30	0.090	19	428.76	0.118	18
48	Mula	Maharashtra	0.608	535.56	0.028	38	538.31	0.086	30	549.80	0.482	122
49	Yeldari	Maharashtra	0.809	448.15	0.011	12	448.34	0.016	10	448.82	0.030	9
50	Girna	Maharashtra	0.524	383.93	0.039	111	383.77	0.035	37	396.08	0.419	239
51	Khadkwasla	Maharashtra	0.056	577.66	0.003	27	578.14	0.008	32	582.41	0.055	162
52*	Upper Vaitarna	Maharashtra	0.331	595.20	0.097	85	597.71	0.159	73	603.38	0.328	113
53	Upper Tapi	Maharashtra	0.255	208.33	0.016	53	210.65	0.051	213	212.39	0.167	127

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**Table : 1.10(B) Storage Position of Important Reservoirs of India at the end of Each Month
During June 2004 to May 2005**

Sl. No.	Name of Reservoir	Location	Live Capacity at F R L in TMCum	June 2004			July 2004			Aug.2004		
				L	LS	P	L	LS	P	L	LS	p
1	2	3	4	5	6	7	8	9	10	11	12	13
54*	Hirakud	Orissa	5.378	183.96	0.969	143	183.40	1.009	46	189.49	3.936	91
55*	Balimela	Orissa	2.676	445.68	0.523	769	444.46	0.418	109	450.96	1.000	125
56	Salandina	Orissa	0.558	74.20	0.306	213	75.04	0.320	195	79.39	0.450	169
57*	Rengali	Orissa	3.432	110.15	0.062	21	109.82	0.017	1	120.99	2.410	99
58*	Machkund	Orissa	0.893	831.71	0.433	247	831.55	0.424	119	835.73	0.690	125
59*	Upper Kolab	Orissa	0.935	851.39	0.381	377	851.87	0.417	159	854.49	0.612	134
60*	Upper Indravati	Orissa	1.456	631.30	0.441	130	631.45	0.454	63	640.50	1.289	113
61*	Thein Dam	Pun	2.344	503.91	0.813	411	503.91	0.813	174	504.82	0.856	92
62	Mahi Bajaj Sagar	Rajasthan	1.711	269.00	0.520	382	269.20	0.538	80	281.45	1.711	162
63	Jhakam	Rajasthan	0.132	335.35	0.005	42	336.50	0.007	13	359.80	0.132	186
64	Rana Pratap Sagar	Rajasthan	1.436	344.41	0.064	15	344.64	0.097	15	349.40	0.809	93
65	Lower Bhawani	Tamil Nadu	0.792	272.67	0.438	196	272.77	0.443	114	275.00	0.540	130
66*	Mettur	Tamil Nadu	2.647	220.50	0.567	57	226.30	0.986	97	230.68	1.389	131
67	Vaigai	Tamil Nadu	0.172	271.05	0.038	59	269.34	0.024	34	270.55	0.029	33
68	Parambikulam	Tamil Nadu	0.380	540.95	0.094	74	544.02	0.145	68	551.58	0.283	106
69	Aliyar	Tamil Nadu	0.095	310.50	0.039	195	307.45	0.024	77	317.94	0.082	167
70*	Sholayar	Tamil Nadu	0.143	999.82	0.128	256	999.40	0.126	124	1000.18	0.134	108
71	Gumti	Tripura	0.312	90.72	0.182	150	92.41	0.259	142	92.04	0.241	107
72	Matatila	Uttar Pradesh	0.707	305.41	0.410	695	299.74	0.224	61	308.05	0.630	98
73*	Rihand	Uttar Pradesh	8.967	253.51	0.135	13	253.26	0.063	3	258.17	1.551	42
74*	Ramganga	Uttaranchal	2.196	314.21	-0.048	-20	323.51	0.154	29	338.11	0.638	61
75	Mayurakshi	West Bengal	0.480	116.92	0.253	164	114.91	0.177	66	114.15	0.152	46
76	Kangsabati	West Bengal	0.914	123.95	0.089	37	125.68	0.166	39	131.95	0.610	125
Total			133.021		23.213			30.021			83.597	
PERCENTAGE					17	100		23	56		63	100

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**Table : 1.10(B) Storage Position of Important Reservoirs of India at the end of Each Month
During June 2004 to May 2005**

Sl. No.	Name of Reservoir	Location	Live Capacity at F R L in TMCum	September,2004			October, 2004			November, 2004		
				L	LS	P	L	LS	P	L	LS	P
1	2	3	4	14	15	16	17	18	19	20	21	22
1*	Srisaillam	A.P.	8.288	268.50	7.559	124	266.60	6.548	93	263.82	5.297	86
2*	Nagarjuna Sagar	A.P.	6.841	163.49	2.714	71	167.34	2.557	55	163.25	2.664	66
3	Sriram Sagar	A.P.	2.300	322.66	-0.241	-14	323.70	-0.094	-6	323.36	-0.135	-11
4	Somasila	A.P.	1.994	85.30	0.158	46	90.95	0.573	102	91.19	0.596	102
5	Lower Manair	A.P.	0.680	268.50	0.095	31	268.27	0.088	24	267.42	0.071	20
6	Tenughat	Jharkhand	0.821	259.29	0.312	100	259.38	0.315	97	259.35	0.314	95
7	Maithon	Jharkhand	0.471	147.61	0.471	100	148.22	0.471	103	148.19	0.471	103
8*	Panchet Hill	Jharkhand	0.184	124.60	0.166	96	124.64	0.168	104	125.12	0.184	108
9	Konar	Jharkhand	0.176	424.97	0.161	96	369.57	0.165	97	424.16	0.147	88
10	Tilaiya	Jharkhand	0.142	368.74	0.138	121	369.57	0.142	128	368.31	0.124	125
11*	Ukai	Gujarat	6.615	100.75	4.752	88	100.64	4.705	93	99.39	4.198	90
12	Sabarmati	Gujarat	0.735	178.73	0.061	21	178.88	0.065	25	178.44	0.053	23
13*	Kadana	Gujarat	1.472	126.42	1.060	111	126.49	1.068	120	126.77	1.096	125
14	Shetrunji	Gujarat	0.300	51.52	0.087	69	51.57	0.088	73	50.62	0.064	58
15	Bhadar	Gujarat	0.188	104.67	0.077	95	104.45	0.072	94	104.01	0.063	103
16	Damanganga	Gujarat	0.502	79.30	0.476	107	79.70	0.495	105	79.15	0.470	105
17	Dantiwada	Gujarat	0.399	166.62	0.022	21	166.45	0.021	23	166.07	0.018	28
18	Panam	Gujarat	0.697	127.10	0.673	158	127.10	0.673	166	126.44	0.620	158
19*	Gobind Sagar	H.P	6.299	487.34	2.798	50	486.87	2.614	51	481.89	2.097	48
20*	Pong Dam(Beas)	H.P	6.157	409.29	2.915	58	408.88	2.835	61	406.79	2.459	60
21	Krishna Raja Sagar	Karnataka	1.163	750.73	0.945	106	750.65	0.937	98	749.26	0.785	93
22*	Tungabhadra	Karnataka	3.276	497.13	2.936	104	495.95	2.528	91	493.75	1.840	79
23	Ghatprabha	Karnataka	1.391	662.58	1.363	116	661.19	1.259	108	656.98	0.975	103
24	Bhadra	Karnataka	1.785	653.60	1.330	92	652.18	1.189	83	651.13	1.090	82
25	Linganamakki	Karnataka	4.294	550.92	3.281	108	550.00	3.044	101	548.66	2.719	100
26	Naryanapur	Karnataka	0.863	492.09	0.846	116	491.05	0.716	94	491.54	0.772	100

Contd..

**Table : 1.10(B) Storage Position of Important Reservoirs of India at the end of Each Month
During June 2004 to May 2005**

Sl. No.	Name of Reservoir	Location	Live Capacity at F R L in TMCum	September,2004			October, 2004			November, 2004		
				L	LS	P	L	LS	P	L	LS	P
1	2	3	4	14	15	16	17	18	19	20	21	22
27	Malaprabha	Karnataka	0.972	630.03	0.550	114	629.68	0.518	97	627.23	0.325	78
28	Kabini	Karnataka	0.275	694.32	0.173	81	694.11	0.161	75	693.66	0.138	90
29	Hemavathy	Karnataka	0.927	886.60	0.606	87	882.84	0.377	55	878.56	0.178	32
30	Harangi	Karnataka	0.220	869.20	0.157	89	866.53	0.104	81	859.28	0.052	85
31	Supa	Karnataka	4.120	544.17	2.079	95	542.60	1.954	90	540.56	1.808	90
32	Vani Vilas Sagar	Karnataka	0.802	638.79	0.137	68	638.90	0.139	47	638.78	0.136	46
33*	Almatti	Karnataka	3.105	519.60	3.043	103	519.98	2.735	93	517.21	2.015	92
34	Kallada	Kerala	0.507	112.85	0.419	132	113.31	0.429	119	113.70	0.439	122
35*	Idamalayar	Kerala	1.018	159.43	0.744	98	158.14	0.709	91	155.89	0.653	88
36*	Idukki	Kerala	1.460	723.82	1.002	113	724.33	1.024	103	722.96	0.961	97
37*	Kakki	Kerala	0.447	971.15	0.293	100	972.73	0.314	98	972.35	0.309	97
38*	Periyar	Kerala	0.173	861.22	0.059	80	864.14	0.109	110	865.12	0.132	135
39*	Gandhi Sagar	M.P.	6.827	394.79	3.814	106	394.17	3.559	103	392.62	2.867	96
40	Tawa	M.P.	1.944	354.03	1.781	96	354.00	1.784	98	351.86	1.429	90
41*	Bargi	M.P.	3.180	421.10	2.758	94	420.95	2.716	101	419.05	2.184	98
42*	Minimata Bango	Chhatisgarh	3.046	356.00	2.390	101	354.18	2.090	89	353.69	2.015	100
43	Mahanadi	Chhatisgarh	0.767	346.18	0.547	108	344.26	0.398	90	346.04	0.534	119
44	Jayakawadi	Maharashtra	2.171	462.84	1.778	179	463.69	2.089	190	463.22	1.910	187
45*	Koyna	Maharashtra	2.652	658.19	2.652	109	656.79	2.520	107	654.81	2.302	106
46	Bhima	Maharashtra	1.517	496.83	1.517	170	496.83	1.517	157	496.34	1.355	157
47	Isapur	Maharashtra	0.965	428.97	0.131	19	429.04	0.134	18	428.95	0.130	18
48	Mula	Maharashtra	0.608	550.99	0.540	117	552.29	0.609	128	551.41	0.562	129
49	Yeldari	Maharashtra	0.809	449.00	0.035	8	449.54	0.050	10	449.40	0.045	10
50	Girna	Maharashtra	0.524	397.32	0.479	215	398.03	0.521	211	396.86	0.457	204
51	Khadkwasla	Maharashtra	0.056	582.33	0.054	193	580.98	0.037	137	580.25	0.028	147
52*	Upper Vaitarna	Maharashtra	0.331	603.50	0.331	109	603.47	0.331	109	603.32	0.326	110
53	Upper Tapi	Maharashtra	0.255	213.94	0.251	107	214.00	0.255	104	213.70	0.237	97

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**Table : 1.10(B) Storage Position of Important Reservoirs of India at the end of Each Month
During June 2004 to May 2005**

Sl. No.	Name of Reservoir	Location	Live Capacity at F R L in TMCum	September,2004			October, 2004			November,2004		
				L	LS	P	L	LS	P	L	LS	P
1	2	3	4	14	15	16	17	18	19	20	21	22
54*	Hirakud	Orissa	5.378	190.38	4.441	87	190.17	4.324	87	190.08	4.272	89
55*	Balimela	Orissa	2.676	452.54	1.243	115	453.46	1.363	113	452.30	1.214	103
56	Salandina	Orissa	0.558	76.56	0.375	110	75.71	0.348	114	74.23	0.307	102
57*	Rengali	Orissa	3.432	121.23	2.710	87	121.94	2.910	93	120.39	2.444	83
58*	Machkund	Orissa	0.893	836.28	0.729	109	837.09	0.792	114	836.16	0.428	64
59*	Upper Kolab	Orissa	0.935	854.81	0.638	110	856.05	0.751	127	855.48	0.697	123
60*	Upper Indravati	Orissa	1.456	640.10	1.244	102	639.45	1.180	100	637.58	0.997	92
61*	Thein Dam	Pun	2.344	501.09	0.625	60	502.32	0.735	96	499.60	0.602	99
62*	Mahi Bajaj Sagar	Rajasthan	1.711	281.05	1.711	142	281.15	1.711	149	279.85	1.599	160
63	Jhakam	Rajasthan	0.132	359.60	0.132	161	359.50	0.132	163	357.95	0.117	172
64*	Rana Pratap Sagar	Rajasthan	1.436	349.37	0.804	85	348.94	0.732	85	349.22	0.778	99
65	Lower Bhawani	Tamil Nadu	0.792	272.44	0.427	120	273.27	0.468	116	276.69	0.663	155
66*	Mettur	Tamil Nadu	2.647	230.13	1.335	126	231.96	1.549	100	235.20	1.897	110
67	Vaigai	Tamil Nadu	0.172	271.05	0.038	45	275.23	0.091	78	277.47	0.133	111
68	Parambikulam	Tamil Nadu	0.380	551.56	0.283	100	552.43	0.300	103	553.93	0.331	114
69	Aliyar	Tamil Nadu	0.095	313.21	0.053	118	313.34	0.054	100	316.06	0.070	113
70*	Sholayar	Tamil Nadu	0.143	999.60	0.127	106	997.77	0.117	100	992.90	0.096	95
71	Gumti	Tripura	0.312	92.70	0.273	114	92.83	0.278	121	92.20	0.249	121
72	Matatila	Uttar Pradesh	0.707	308.43	0.702	99	308.24	0.686	106	308.09	0.621	114
73*	Rihand	Uttar Pradesh	8.967	257.62	1.365	28	257.16	1.209	26	256.98	1.147	27
74*	Ramganga	Uttaranchal	2.196	346.47	0.995	73	349.47	1.150	81	349.74	1.162	84
75	Mayurakshi	West Bengal	0.487	120.32	0.423	111	118.92	0.350	98	118.52	0.327	93
76	Kangsabati	West Bengal	0.914	132.07	0.622	104	131.20	0.538	111	130.59	0.487	94
Total			133.021		84.770			82.193			73.217	
PERCENTAGE					64	89		62	86		55	85

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**Table : 1.10(B) Storage Position of Important Reservoirs of India at the end of Each Month
During June 2004 to May 2005**

Sl. No.	Name of Reservoir	Location	Live Capacity at F R L in TMCum	December, 2004			January, 2005			February, 2005		
				L	LS	P	L	LS	P	L	LS	P
1	2	3	4	23	24	25	26	27	28	29	30	31
1*	Srisailem	A.P.	8.288	261.77	4.516	83	259.20	3.714	80	256.68	3.073	91
2*	Nagarjuna Sagar	A.P.	6.841	158.34	1.660	54	154.53	0.973	43	153.98	0.845	40
3	Sriram Sagar	A.P.	2.300	322.57	-0.254	-27	321.41	-0.380	-62	320.16	-0.481	-306
4	Somasila	A.P.	1.994	89.03	0.409	72	85.86	0.188	39	82.39	0.005	1
5	Lower Manair	A.P.	0.680	269.34	0.095	26	269.18	0.109	31	268.82	0.100	32
6	Tenughat	Jharkhand	0.821	259.25	0.310	96	259.06	0.302	95	259.19	0.308	104
7	Maithon	Jharkhand	0.471	148.25	0.471	103	148.48	0.471	103	147.57	0.471	108
8*	Panchet Hill	Jharkhand	0.184	125.10	0.184	105	124.98	0.184	106	123.65	0.123	77
9	Konar	Jharkhand	0.176	423.40	0.134	86	422.51	0.120	85	421.66	0.108	86
10	Tilaiya	Jharkhand	0.142	366.70	0.072	99	364.23	0.014	27	363.94	0.009	31
11*	Ukai	Gujarat	6.615	98.29	3.783	88	96.93	3.282	89	95.54	2.781	85
12	Sabarmati	Gujarat	0.735	176.85	0.019	10	176.16	0.005	3	175.86	0.000	0
13*	Kadana	Gujarat	1.472	127.12	1.132	130	126.42	1.060	126	125.27	0.945	120
14	Shetrunji	Gujarat	0.300	49.32	0.040	48	48.82	0.033	49	48.12	0.024	42
15	Bhadar	Gujarat	0.188	102.07	0.029	74	101.50	0.022	92	101.19	0.018	120
16	Damanganga	Gujarat	0.502	78.30	0.435	105	77.05	0.384	102	75.80	0.335	98
17	Dantiwada	Gujarat	0.399	165.80	0.017	39	165.43	0.014	56	165.19	0.013	68
18	Panam	Gujarat	0.697	125.25	0.544	142	125.25	0.544	149	124.40	0.493	142
19*	Gobind Sagar	H.P	6.299	475.95	1.687	49	469.08	1.032	41	466.70	0.882	52
20*	Pong Dam(Beas)	H.P	6.157	403.69	1.979	57	401.74	1.690	56	402.80	1.843	71
21	Krishna Raja Sagar	Karnataka	1.163	748.08	0.708	99	746.46	0.527	99	743.73	0.332	88
22*	Tungabhadra	Karnataka	3.276	491.45	1.259	70	487.99	0.646	53	484.84	0.299	40
23	Ghatprabha	Karnataka	1.391	651.57	0.673	99	645.09	0.387	87	639.98	0.213	80
24	Bhadra	Karnataka	1.785	650.66	1.047	80	649.06	0.909	81	645.90	0.666	73
25	Linganamakki	Karnataka	4.294	547.17	2.389	101	545.45	2.045	104	543.65	1.725	111
26	Naryanapur	Karnataka	0.863	491.73	0.800	112	491.13	0.726	111	490.51	0.654	125

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**Table : 1.10(B) Storage Position of Important Reservoirs of India at the end of Each Month
During June 2004 to May 2005**

Sl. No.	Name of Reservoir	Location	Live Capacity at F R L in TMCum	December, 2004			January, 2005			February, 2005		
				L	LS	P	L	LS	P	L	LS	P
1	2	3	4	23	24	25	26	27	28	29	30	31
27	Malaprabha	Karnataka	0.972	623.32	0.123	47	621.54	0.056	37	620.95	0.039	46
28	Kabini	Karnataka	0.275	693.13	0.112	84	693.40	0.125	95	692.58	0.085	104
29	Hemavathy	Karnataka	0.927	876.60	0.108	26	876.37	0.098	25	876.05	0.089	27
30	Harangi	Karnataka	0.220	854.43	0.018	62	855.70	0.026	79	856.00	0.028	108
31	Supa	Karnataka	4.120	537.95	1.615	90	534.16	1.355	87	531.58	1.189	92
32	Vani Vilas Sagar	Karnataka	0.802	638.61	0.132	46	637.84	0.114	43	636.93	0.092	38
33*	Almatti	Karnataka	3.105	515.17	1.334	81	513.02	0.848	74	510.40	0.417	55
34	Kallada	Kerala	0.507	112.25	0.408	131	110.33	0.369	139	106.60	0.295	138
35*	Idamalayar	Kerala	1.018	153.17	0.589	88	149.19	0.502	86	145.31	0.413	87
36*	Idukki	Kerala	1.460	120.27	0.835	95	117.01	0.699	94	713.14	0.543	89
37*	Kakki	Kerala	0.447	969.17	0.269	95	964.89	0.225	94	962.84	0.206	102
38*	Periyar	Kerala	0.173	861.65	0.066	83	859.79	0.036	72	858.91	0.023	64
39*	Gandhi Sagar	M.P.	6.827	390.61	2.120	81	388.10	1.353	60	386.12	0.874	45
40	Tawa	M.P.	1.944	349.06	1.047	82	345.31	0.673	69	340.37	0.286	39
41*	Bargi	M.P.	3.180	416.45	1.630	89	413.75	1.157	73	411.90	0.908	75
42*	Minimata Bango	Chhatisgarh	3.046	352.99	1.912	103	352.23	1.806	106	351.81	1.748	114
43	Mahanadi	Chhatisgarh	0.767	346.84	0.599	133	346.64	0.579	127	346.63	0.583	156
44	Jayakawadi	Maharashtra	2.171	462.75	1.747	184	462.16	1.544	196	461.59	1.357	202
45*	Koyna	Maharashtra	2.652	651.03	1.988	103	648.30	1.735	102	645.41	1.527	105
46	Bhima	Maharashtra	1.517	495.62	1.132	161	495.08	0.972	171	494.00	0.675	168
47	Isapur	Maharashtra	0.965	428.15	0.084	13	427.88	0.073	12	427.71	0.067	13
48	Mula	Maharashtra	0.608	549.55	0.470	127	547.88	0.392	127	545.09	0.287	117
49	Yeldari	Maharashtra	0.809	447.80	0.001	0	445.39	-0.033	-10	445.30	-0.034	-12
50	Girna	Maharashtra	0.524	394.70	0.357	181	392.75	0.283	181	391.11	0.228	184
51	Khadkwasla	Maharashtra	0.056	579.33	0.018	138	578.21	0.008	67	578.69	0.012	109
52*	Upper Vaitarna	Maharashtra	0.331	602.32	0.292	109	601.71	0.273	120	600.21	0.225	117
53	Upper Tapi	Maharashtra	0.255	213.11	0.205	93	212.55	0.174	86	211.88	0.142	79

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**Table : 1.10(B) Storage Position of Important Reservoirs of India at the end of Each Month
During June 2004 to May 2005**

Sl. No.	Name of Reservoir	Location	Live Capacity at F R L in TMCum	December, 2004			January, 2005			February, 2005		
				L	LS	p	L	LS	P	L	LS	P
1	2	3	4	23	24	65	26	27	28	29	30	31
54*	Hirakud	Orissa	5.378	189.74	4.079	93	188.88	3.597	93	188.29	3.266	100
55*	Balimela	Orissa	2.676	451.14	1.082	103	449.49	0.901	105	447.18	0.661	95
56	Salandina	Orissa	0.558	73.70	0.286	96	70.50	0.222	86	67.19	0.152	67
57*	Rengali	Orissa	3.432	119.57	2.168	84	118.55	1.844	82	117.90	1.654	87
58*	Machkund	Orissa	0.893	834.89	0.631	104	832.91	0.506	97	831.01	0.394	89
59*	Upper Kolab	Orissa	0.935	854.91	0.645	127	854.00	0.576	132	852.85	0.491	133
60*	Upper Indravati	Orissa	1.456	636.55	0.897	91	634.05	0.742	81	633.95	0.618	78
61*	Thein Dam	Punjab	2.344	499.60	0.602	138	497.00	0.507	164	498.68	0.571	984
62*	Mahi Bajaj Sagar	Rajasthan	1.711	277.90	1.345	165	275.75	1.123	171	273.35	0.878	169
63	Jhakam	Rajasthan	0.132	355.30	0.093	190	352.45	0.072	218	348.55	0.047	224
64*	Rana Pratap Sagar	Rajasthan	1.436	349.41	0.811	124	349.96	0.904	170	349.74	0.867	194
65*	Lower Bhawani	Tamil Nadu	0.792	274.43	0.529	128	271.65	0.390	129	269.73	0.310	123
66	Mettur	Tamil Nadu	2.647	229.30	1.302	91	221.07	0.603	58	221.09	0.604	58
67	Vaigai	Tamil Nadu	0.172	271.59	0.043	46	267.09	0.012	17	264.91	0.005	8
68	Parambikulam	Tamil Nadu	0.380	550.84	0.270	103	546.59	0.200	91	542.06	0.112	63
69	Aliyar	Tamil Nadu	0.095	307.94	0.026	48	302.91	0.006	17	300.50	-0.001	-4
70*	Sholayar	Tamil Nadu	0.143	981.91	0.056	68	964.04	0.014	23	961.05	0.008	19
71	Gumti	Tripura	0.312	91.43	0.217	124	90.73	0.188	133	89.69	0.147	131
72	Matatila	Uttar Pradesh	0.707	306.48	0.448	104	304.40	0.278	79	302.79	0.157	71
73*	Rihand	Uttar Pradesh	8.967	256.95	1.137	31	256.74	1.309	43	256.58	0.969	38
74*	Ramganga	Uttaranchal	2.196	348.21	1.084	100	342.42	0.813	80	340.54	0.735	94
75	Mayurakshi	West Bengal	0.487	118.52	0.327	93	118.14	0.308	89	115.91	0.212	76
76	Kangsabati	West Bengal	0.914	129.01	0.367	83	127.69	0.275	76	125.93	0.179	73
Total			133.021		61.794			49.833			41.134	
PERCENTAGE					46	84		37	81		31	83

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**Table : 1.10(B) Storage Position of Important Reservoirs of India at the end of Each Month
During June 2004 to May 2005**

Sl. No.	Name of Reservoir	Location	Live Capacity at F R L in TMCum	March, 2005			April, 2005			May, 2005		
				L	LS	P	L	LS	P	L	LS	P
1	2	3	4	32	33	34	35	36	37	38	39	40
1*	Srisaillam	A.P.	8.288	249.42	1.774	92	247.85	1.563	143	242.32	0.994	109
2*	Nagarjuna Sagar	A.P.	6.841	154.08	0.862	66	154.28	0.894	82	153.74	0.803	77
3	Sriram Sagar	A.P.	2.300	319.13	-0.569	282	318.97	-0.580	152	318.82	-0.590	143
4	Somasila	A.P.	1.994	80.16	-0.070	-25	79.91	-0.074	-36	79.46	-0.089	-77
5	Lower Manair	A.P.	0.621	267.63	0.075	30	267.19	0.067	31	266.88	0.062	30
6	Tenughat	Jharkhand	0.821	258.58	0.279	95	258.06	0.263	99	257.33	0.236	96
7	Maithon	Jharkhand	0.471	145.59	0.400	108	142.48	0.256	112	140.64	0.180	118
8*	Panchet Hill	Jharkhand	0.184	122.44	0.076	88	120.93	0.033	206	120.21	0.018	112
9	Konar	Jharkhand	0.176	420.49	0.090	84	418.90	0.069	71	417.01	0.049	68
10	Tilaiya	Jharkhand	0.142	363.87	0.007	47	363.75	0.006	50	363.53	0.002	29
11*	Ukai	Gujarat	6.615	93.52	2.130	80	90.70	1.355	72	87.65	0.702	59
12	Sabarmati	Gujarat	0.735	175.67	0.000	0	175.27	0.000	0	174.45	0.000	0
13*	Kadana	Gujarat	1.472	124.03	0.839	123	123.83	0.822	145	123.44	0.790	178
14	Shetrunji	Gujarat	0.300	47.57	0.018	47	46.62	0.009	39	46.12	0.005	28
15	Bhadar	Gujarat	0.188	100.61	0.013	118	100.08	0.010	125	99.42	0.006	75
16	Damanganga	Gujarat	0.502	74.60	0.296	98	72.45	0.229	89	65.00	0.057	41
17	Dantiwada	Gujarat	0.399	164.77	0.011	85	164.38	0.009	129	163.95	0.007	350
18	Panam	Gujarat	0.697	0.00	0.000	0	122.30	0.381	137	121.15	0.330	132
19*	Gobind Sagar	H.P	6.299	467.05	0.904	104	466.05	0.841	129	468.40	0.989	129
20*	Pong Dam(Beas)	H.P	6.157	405.17	2.203	106	404.27	2.067	119	401.06	1.596	134
21	Krishna Raja Sagar	Karnataka	1.163	739.01	0.075	34	736.27	0.000	0	735.98	0.000	0
22*	Tungabhadra	Karnataka	3.276	478.37	0.022	9	478.63	0.025	45	479.36	0.037	53
23	Ghatprabha	Karnataka	1.391	635.90	0.109	69	633.12	0.057	53	630.05	0.012	18
24	Bhadra	Karnataka	1.785	641.84	0.407	59	637.12	0.178	39	634.39	0.078	26
25	Linganamakki	Karnataka	4.294	540.74	1.283	115	537.92	0.935	126	533.42	0.517	120
26	Naryanapur	Karnataka	0.863	487.98	0.391	99	486.47	0.264	103	486.32	0.253	128

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**Table : 1.10(B) Storage Position of Important Reservoirs of India at the end of Each Month
During June 2004 to May 2005**

Sl. No.	Name of Reservoir	Location	Live Capacity at F R L in TMCum	March, 2005			April, 2005			May, 2005		
				L	LS	P	L	LS	P	L	LS	P
1	2	3	4	32	33	34	35	36	37	38	39	40
27	Malaprabha	Karnataka	0.972	620.44	0.025	58	619.97	0.014	50	619.63	0.006	25
28	Kabini	Karnataka	0.275	690.90	0.009	41	690.34	0.000	0	688.49	0.000	0
29	Hemavathy	Karnataka	0.927	874.72	0.056	24	870.84	0.000	0	869.99	0.000	0
30	Harangi	Karnataka	0.220	856.06	0.028	187	856.35	0.030	500	850.01	0.000	0
31	Supa	Karnataka	4.120	526.50	0.898	87	524.00	0.771	98	517.70	0.504	90
32	Vani Vilas Sagar	Karnataka	0.802	636.54	0.087	39	636.75	0.089	44	635.44	0.066	35
33*	Almatti	Karnataka	3.105	507.48	0.055	28	506.64	-0.020	0	506.40	-0.039	0
34	Kallada	Kerala	0.507	99.70	0.189	117	96.10	0.139	116	93.15	0.108	100
35*	Idamalayar	Kerala	1.018	139.68	0.303	87	135.54	0.228	93	128.56	0.128	79
36*	Idukki	Kerala	1.460	709.43	0.413	88	706.38	0.310	93	701.70	0.170	67
37*	Kakki	Kerala	0.447	951.60	0.120	79	948.81	0.104	92	931.19	0.035	49
38*	Periyar	Kerala	0.173	858.69	0.020	61	859.76	0.033	80	859.88	0.037	74
39*	Gandhi Sagar	M.P.	6.827	383.60	0.374	24	382.78	0.239	19	382.69	0.227	21
40	Tawa	M.P.	1.944	338.60	0.196	37	338.54	0.193	41	338.45	0.188	41
41*	Bargi	M.P.	3.180	409.45	0.612	68	407.95	0.446	70	405.35	0.218	53
42*	Minimata Bango	Chhatisgarh	3.046	350.90	1.624	121	350.05	1.521	137	348.83	1.387	149
43	Mahanadi	Chhatisgarh	0.767	346.39	0.564	178	346.14	0.544	213	346.22	0.550	282
44	Jayakawadi	Maharashtra	2.171	460.87	1.140	211	460.12	0.925	230	459.12	0.679	268
45*	Koyna	Maharashtra	2.652	641.12	1.177	104	636.90	0.912	108	630.73	0.600	99
46	Bhima	Maharashtra	1.517	493.10	0.451	244	491.61	0.117	254	490.43	-0.115	45
47	Isapur	Maharashtra	0.965	427.54	0.059	12	425.97	-0.001	0	425.15	-0.036	-11
48	Mula	Maharashtra	0.609	543.82	0.243	125	541.81	0.178	141	537.31	0.064	112
49	Yeldari	Maharashtra	0.809	145.15	-0.037	-18	445.00	-0.039	-29	444.55	-0.045	-68
50	Girna	Maharashtra	0.524	389.34	0.176	189	388.51	0.153	255	387.15	0.115	371
51	Khadkwasla	Maharashtra	0.056	578.51	0.011	100	578.60	0.011	110	578.21	0.008	80
52*	Upper Vaitarna	Maharashtra	0.331	598.58	0.180	117	596.42	0.128	112	595.39	0.100	118
53	Upper Tapi	Maharashtra	0.255	210.95	0.099	68	209.51	0.059	57	208.22	0.013	25

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**Table : 1.10(B) Storage Position of Important Reservoirs of India at the end of Each Month
During June 2004 to May 2005**

Sl. No.	Name of Reservoir	Location	Live Capacity at F R L in TMCum	March, 2005			April, 2005			May, 2005		
				L	LS	P	L	LS	P	L	LS	P
1	2	3	4	32	33	34	35	36	37	38	39	40
54*	Hirakud	Orissa	5.378	186.70	2.409	98	186.70	2.409	161	181.87	0.553	84
55*	Balimela	Orissa	2.676	444.01	0.380	83	444.01	0.380	106	439.83	0.093	61
56	Salandina	Orissa	0.558	62.13	0.077	43	58.30	0.043	27	57.79	0.037	26
57*	Rengali	Orissa	3.432	115.92	1.185	84	115.92	1.185	135	111.05	0.207	70
58*	Machkund	Orissa	0.893	828.92	0.294	82	828.93	0.294	109	821.06	0.046	23
59*	Upper Kolab	Orissa	0.935	851.00	0.352	123	851.00	0.352	183	847.01	0.130	100
60*	Upper Indravati	Orissa	1.456	631.11	0.426	70	628.79	0.254	58	626.38	0.119	39
61*	Thein Dam	Punjab	2.344	507.90	1.008	1600	510.69	1.153	474	509.06	1.065	510
62*	Mahi Bajaj Sagar	Rajasthan	1.711	271.45	0.722	193	269.75	0.576	219	267.60	0.429	258
63	Jhakam	Rajasthan	0.132	346.05	0.035	250	345.85	0.034	243	345.55	0.033	254
64*	Rana Pratap Sagar	Rajasthan	1.436	350.18	0.943	239	350.43	0.989	209	350.16	0.940	215
65	Lower Bhawani	Tamil Nadu	0.792	266.76	0.207	106	264.86	0.154	103	267.25	0.022	145
66*	Mettur	Tamil Nadu	2.647	220.08	0.541	53	220.33	0.557	53	220.13	0.544	50
67	Vaigai	Tamil Nadu	0.172	265.72	0.007	11	267.00	0.011	18	266.45	0.010	18
68	Parambikulam	Tamil Nadu	0.380	538.55	0.056	41	537.59	0.043	38	536.66	0.030	32
69	Aliyar	Tamil Nadu	0.095	300.80	0.002	11	303.66	0.008	44	303.89	0.009	56
70*	Sholayar	Tamil Nadu	0.143	960.52	0.007	28	960.56	-0.002	-12	961.36	0.009	53
71	Gumti	Tripura	0.312	88.47	0.106	129	87.50	0.077	124	89.18	0.129	195
72	Matatila	Uttar Pradesh	0.707	302.61	0.149	79	302.42	0.141	73	300.17	0.013	10
73*	Rihand	Uttar Pradesh	5.649	256.43	0.927	47	255.36	0.624	43	254.27	0.338	36
74*	Ramganga	Uttaranchal	2.196	334.00	0.500	95	332.90	0.409	109	322.10	0.119	51
75	Mayurakshi	West Bengal	0.480	113.81	0.142	68	110.29	0.057	48	110.44	0.060	47
76	Kangsabati	West Bengal	0.914	123.64	0.077	49	121.23	-0.004	-5	121.23	-0.004	-5
Total			133.021		31.249			26.507			17.143	
PERCENTAGE					23	86		20	100		13	90

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

FRL : Full Reservoir Level, TMCuM : Thousand Million Cubic Metre.

L : Level in Metre LS : Live Storage in TMCuM, 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 on last Day of the month

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

Table : 1.11 Basinwise Details of Hydrological Observation Stations

S. No.	River/Basin	STATE	G	GD	GDS	GDQ	GDSQ	TOTAL
1	2	3	4	5	6	7	8	9
1.	Indus	Himachal	-	1	1	-	2	4
		Jammu & Kashmir	1	12	1	3	5	22
2	Ganga Brahmaputra Meghna/Barak	Uttar Pradesh	35	27	4	17	35	118
		Uttaranchal	5	12	1	3	4	25
		Himanchal 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
		Jharkhand	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
Tripura	2	6	5	-	-	13		
Sikkim	2	10	7	-	-	19		
3	Godavari	Madhya Pradesh	4	8	-	-	5	17
		Orissa	-	4	-	-	1	5
		Andhra pradesh	10	4	-	1	4	19
		Marharashtra	13	12	-	2	14	41
		Karnataka	-	-	-	-	1	1
4	Krishna	Andhra Pradesh	3	4	-	5	8	20
		Maharashtra	3	11	-	3	5	22
		Karnataka	5	9	-	5	12	31
5.	Cauvery	Karnataka	-	-	-	2	12	14
		Tamil Nadu	-	-	-	10	9	19
		Pondicherry	-	-	-	1	-	1
6	Subarnarekha	Jharkhand	1	-	-	1	3	5
		West Bengal	-	1	-	-	-	1
		Orissa	2	-	-	-	-	2
7	Brahmani-Baitarni	Jharkhand	-	-	-	-	1	1
		Orissa	4	1	-	-	7	12
8	Mahanadi	Orissa	7	1	-	-	5	13
		Chhattisgarh	6	3	-	1	11	21

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Table : 1.11 Basinwise Details of Hydrological Observation Stations

S. No.	River/Basin	STATE	G	GD	GDS	GDQ	GDSQ	TOTAL
1	2	3	4	5	6	7	8	9
9	Pennar	Andhra pradesh	-	-	-	6	2	8
10	Mahi	Madhya Pradesh	-	-	-	-	1	1
		Rajasthan	4	1	-	1	1	7
		Gujarat	3	1	-	-	1	5
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 rivers 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 rivers from Tadri to Kanya Kumari	Kerala	-	-	-	4	17	21
16	East flowing rivers between Mahanadi and Pennar	Orissa	10	3	-	-	2	15
		Andhra Pradesh	1	2	-	-	1	4
		Tamil Nadu	-	-	-	7	-	7
17	East flowing rivers between Pennar and Kanyakumari	Tamil Nadu	-	-	-	5	5	10
18	West flowing rivers of Kutch and Saurashtra including Luni	Rajasthan	1	2	-	1	-	4
		Gujarat	2	3	-	1	3	9
19	Area of Inland Drainage in Rajasthan Desert		-	-	-	-	-	-
20	Minor rivers Draining into Myanmar (Burma) and Bangladesh		-	-	-	-	-	-
TOTAL			246	282	41	115	261	945

Source : R.M. Coordn. Dte. Central Water Commission

G - Gauge, GD - Gauge & Discharge

GDS - Gauge, Discharge & Silt

GDQ - Gauge, Discharge & Water Quality

GDSQ - Gauge, Discharge, Silt & Water Quality

Table : 1.12 Seasonal Average Observed Runoff at C.W.C. Sites in Godavari Basin.(1999-2004)

Unit : B.C.M.

Sl. No.	Name of the Site	Name of the Stream	Catchment Area (Sq.Km.)	1999-2004		2003-2004	
				Monsoon	Non-monsoon	Monsoon	Non-monsoon
1	2	3	4	5	6	7	8
1	Polavaram	Godavari	307800	401.57	24.10	442.81	36.68
2	Koida	Godavari	305460	457.80	25.88	445.03	32.22
3	Konta	Sabari	19550	60.64	15.92	73.95	23.10
4	Injaram	Sabari	12925	53.00	8.42	73.22	12.54
5	Potteru	Potteruvagu	1120	7.32	4.65	9.44	6.27
6	Saradaput	Sabari	4800	23.40	3.10	26.99	5.41
7	Sangam	Murredu	1565	1.30	0.03	1.30	0.08
8	Perur	Godavari	268200	330.30	8.52	345.05	10.90
9	Pathagudem	Indravati	40000	132.11	1.84	172.61	3.71
10	Medapalli	Nibra	2031	5.06	0.06	9.39	0.12
11	Mirdapalli	Indravathi	24210	93.55	14.18	183.83	27.30
12	Tumnar	Dantewada	1700	6.44	0.22	9.07	0.45
13	Chindnar	Indravati	17270	34.33	0.64	48.46	1.86
14	Cherribeda	Bardha	890	3.71	0.07	6.07	0.16
15	Amabal	Narengi	1968	4.53	0.03	6.18	0.09
16	Sonarpal	Markandi	1523	4.31	0.03	7.09	0.14
17	Jagdapur	Indravati	7380	13.80	0.31	17.39	0.50
18	Kosagumda	Baskel	1635	4.64	0.07	6.26	0.18
19	Murthahandi	Journala	N.A.	7.14	0.66	7.16	0.91
20	Nowrangpur	Indravati	3545	7.36	0.27	8.39	0.45
21	Tekra	Pranhita	108780	168.50	4.53	167.82	5.99
22	Bhatpalli	Peddavagu	3100	5.44	0.30	4.97	0.34
23	Sirpur	Wardha	47500	68.29	1.03	50.14	1.28
24	Bamni	Wardha	46020	58.17	1.30	47.09	1.04
25	Penganga Bridge	Penganga	18441	26.70	0.36	19.22	0.13
26	Mangrul	Aran	2500	2.68	0.07	0.24	0.05
27	Marlegaon	Penganga	7410	7.77	0.21	2.02	0.07

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Table : 1.12 Seasonal Average Observed Runoff at C.W.C. Sites in Godavari Basin.(1999-2004)

Unit : B.C.M.

Sl. No.	Name of the Site	Name of the Stream	Catchment Area (Sq.Km.)	1999-2004		2003-2004	
				Monsoon	Non-monsoon	Monsoon	Non-monsoon
1	2	3	4	5	6	7	8
28	Kanhargaon	Penganga	3515	4.02	0.00	0.63	0.00
29	Ghugus	Wardha	21429	18.73	10.68	12.54	0.54
30	Nandgaon	Wunna	4580	2.96	0.38	3.04	0.42
31	Hivra	Wardha	10240	6.70	0.32	2.24	0.22
32	Bhisnur	Wardha	5000	2.19	0.47	0.87	0.68
33	Ashti	Wainganga	50990	109.18	2.35	112.29	3.20
34	Rajoli	Mul	1900	3.88	0.01	3.18	0.01
35	Wairagarh	Khobragarhi	2600	19.78	0.01	6.25	0.02
36	Salebardi	Chulband	1800	3.49	0.00	2.93	0.00
37	Pauni	Wainganga	35520	55.87	2.09	62.34	2.99
38	Satrapur	Kanhan	11100	9.71	0.53	9.93	0.81
39	Ramkona	Kanhan	2500	3.81	0.05	4.74	0.04
40	Rajagaon	Bagh	5380	13.86	0.10	16.69	0.31
41	Kumhari	Wainganga	8070	18.27	0.60	20.48	0.60
42	Keolari	Wainganga	2970	5.29	0.41	5.86	0.48
43	Somanpalli	Maner	12691	4.25	0.38	1.31	0.09
44	Mancherial	Godavari	102900	28.57	1.59	16.48	0.64
45	Gandlapet	Peddavagu	1360	0.42	0.00	0.01	0.00
46	Betmogra	Manar	2105	1.41	0.00	1.22	0.00
47	Degloor	Lendi	1900	1.48	0.00	1.19	0.00
48	Saigaon	Manjira	9960	2.64	0.00	0.51	0.00
49	Bhatkheda	Manjira	4650	1.13	0.01	0.17	0.00
50	Yelli	Godavari	53630	16.90	0.11	6.91	0.00
51	Purna	Purna	15000	7.47	0.05	2.64	0.09
52	Zari	Dudhna	5550	2.10	0.01	0.58	0.00
53	G R Bridge	Godavari	33934	5.23	0.00	0.74	0.00
54	Dhalegaon	Godavari	30840	3.25	0.03	0.32	0.00
55	Pachegaon	Pravara	5800	0.64	0.00	0.20	0.00
56	Ghargaon	Mula	626	3.15	0.00	3.38	0.00

Source : Hydrology Data Directorate (ISO), Central Water Commission

Table : 1.13 Seasonal Average Observed Runoff at C.W.C.
Sites in Krishna Basin (1998-2003)

(Unit : B.C.M.)

Sl. No.	Name of the Site	Name of the Stream	Catchment Area (Sq.Km.)	1998-2003		2002-2003	
				Monsoon	Non-monsoon	Monsoon	Non-monsoon
1	2	3	4	5	6	7	8
1	Vijayawada	Krishna	251360	17.86	4.33	1.72	0.34
2	Keesara	Munneru	9854	5.32	0.47	1.22	0.00
3	Madhira	Wyra	1850	1.22	0.17	0.33	0.00
4	P.S.Gudem	Akeru	2720	0.71	0.01	0.01	0.00
5	Paleru	Paleru Bridge	2928	1.06	0.20	0.21	0.00
6	Wadenapalli	Krishna	235544	27.08	11.03	19.16	3.74
7	Dameracherla	Musi	11501	1.84	0.61	0.05	0.04
8	Pondugala	Krishna	221220	32.98	15.76	33.54	5.48
9	Hallia	Hallia	3100	0.35	0.02	0.01	0.00
10	Lakshmipuram	Hundri	2400	0.43	0.01	0.01	0.00
11	Bawapuram	Tungabhadra	67180	15.78	0.54	4.20	0.30
12	Mantralayam	Tungabhadra	60630	18.45	1.29	5.97	0.29
13	T.Ramapuram	Hagari	23500	3.47	0.28	1.28	0.15
14	Amkundi Bridge	Chikka Hagari	1725	0.00	0.00	0.00	0.00
15	Bhupasamudram	Vedavathi	15026	0.10	0.00	0.00	0.00
16	Kelloodu	Vedavathi	4320	0.37	0.02	0.06	0.00
17	Oollenur	Tungabhadra	33018	10.86	2.61	4.23	3.16
18	Marol	Varada	4901	5.96	0.01	4.36	0.00
19	Hariahali	Tungabhadra	14522	24.70	1.63	19.45	0.66
20	Bylalahalli	Haridra	2300	1.17	0.17	0.69	0.02
21	Kuppelur	Kumadvathi	1850	0.96	0.01	0.27	0.00
22	Honnali	Tungabhadra	7075	29.28	2.88	20.34	1.23
23	Shimoga	Tungabhadra	2831	20.08	0.53	19.22	0.42
24	K.Agraharam	Krishna	132920	56.69	3.67	26.10	8.77
25	Yadgir	Bhima	69863	11.03	0.66	3.96	0.83
26	Malkhed	Kegna	7650	2.40	0.13	1.17	0.10
27	Chincholi	Bennithora	830	0.10	0.00	0.00	0.00
28	Jewangi	Kegna	1920	0.71	0.02	0.18	0.00

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**Table : 1.13 Seasonal Average Observed Runoff at C.W.C.
Sites in Krishna Basin (1998-2003)**

(Unit : B.C.M.)

Sl. No.	Name of the Site	Name of the Stream	Catchment Area (Sq. Km.)	1998-2003		2002-2003	
				Monsoon	Non-monsoon	Monsoon	Non-monsoon
1	2	3	4	5	6	7	8
29	Boriomerga	Bori	1640	1.29	0.03	0.00	0.00
30	Wadakbal	Sina	12092	5.32	0.05	0.09	0.02
31	Takli	Bhima	33916	13.12	0.10	0.22	0.04
32	Kokangaon	Bornala	1640	0.43	0.00	0.00	0.00
33	Shirdhon	Doddahalla	630	0.24	0.00	0.00	0.00
34	Narsingpur	Bhima	22856	9.99	0.72	1.60	1.11
35	Sarati	Nira	7200	3.25	0.00	0.39	0.00
36	Dhond	Bhima	11660	10.41	0.04	9.52	0.00
37	Phulgaon	Bhima	2205	4.71	0.02	5.15	0.00
38	Huvinhedgi	Krishna	55150	37.82	3.02	20.23	5.03
39	Talikot	Don	2486	1.77	0.06	0.86	0.00
40	Chotachgudda	Malaprabha	9373	3.46	0.72	1.74	0.25
41	Navalgund	Bennihalla	2952	1.00	0.21	0.26	0.12
42	Bagalkot/Mudhol	Ghatprabha	8610	4.81	0.38	0.00	0.00
43	Gokakfalls	Ghatprabha	2770	5.10	0.22	3.03	0.00
44	Gotur	Hianyakeshi	1100	5.46	0.03	4.52	0.00
45	Daddi	Ghatprabha	1150	8.99	0.05	7.24	0.00
46	Galgali	Krishna	22507	44.49	0.67	0.00	0.00
47	Pandegaon	Agrani	690	0.21	0.00	0.01	0.00
48	Sadalga	Doodhganga	2322	8.85	0.05	8.51	0.00
49	Bastewad	Vedhganga	640	5.58	0.03	4.29	0.00
50	Vandur	Doodhganga	550	2.61	1.25	2.03	0.81
51	Terwad	Panchganga	2425	16.57	0.09	17.06	0.00
52	Kurundwad	Krishna	15190	38.67	0.18	32.03	0.00
53	Arjunwad	Krishna	12660	24.25	0.10	17.47	0.00
54	Samdoli	Varna	69425	9.55	0.04	7.37	0.00
55	Karad	Krishna	5462	14.43	2.93	11.39	2.73
56	Warunji	Koyna	1890	9.46	2.64	8.23	2.78
57	Koynanagar	Koyna	920	3.40	2.21	2.30	2.39

Source : Hydrology Data Directorate (ISO), Central Water Commission

**Table No.1.14 Seasonal Average Observed Runoff
at CWC sites in Eastern Rivers (1998-2003)**

(Unit : BCM)

Sl. No.	Name of the Site	Name of the Stream	Catchment Area (Sq.Km.)	1998-2003		2002-2003	
				Monsoon	Non-Monsoon	Monsoon	Non-Monsoon
1	2	3	4	5	6	7	8
MAHANADI BASIN							
1	Baronda	Pairi	3225	0.05	0.00	0.01	0.00
2	Rajim	Mahanadi	8760	0.11	0.00	0.04	0.00
3	Seorinarayan	Mahanadi	48050	0.57	0.01	0.39	0.00
4	Basantpur	Mahanadi	57780	0.98	0.09	0.50	0.03
5	Kotni	Seonath	6990	0.09	0.00	0.03	0.00
6	Patherdhi	Kharun	2511	0.07	0.00	0.02	0.00
7	Simga	Seonath	16060	0.23	0.00	0.12	0.00
8	Andhiyar Kore	Hamp	2210	0.02	0.00	0.02	0.00
9	Ghatora	Arpa	3035	0.05	0.00	0.02	0.00
10	Jondhra	Seonath	29645	0.36	0.01	0.19	0.00
11	Rampur	Jonk	2920	0.05	0.00	0.03	0.00
12	Manendragarh	Hasdeo	1110	0.02	0.00	0.02	0.00
13	Bamnidhi	Hasdeo	9730	0.24	0.07	0.16	0.03
14	Kurubhata	Mand	4625	0.16	0.00	0.12	0.00
15	Sundergarh	Ib	5870	0.23	0.01	0.14	0.00
16	Salebhata	Ong	4650	0.08	0.00	0.06	0.00
17	Kesinga	Tel	11960	0.33	0.05	0.13	0.03
18	Kantamal	Tel	19600	0.49	0.06	0.23	0.03
19	Sukma	Tel	1365	0.02	0.00	0.01	0.00
20	Tikarpara	Mahanadi	41000	1.88	0.36	1.24	0.26
BRAHAMANI BASIN							
1	Tilga	Sankh	3160	0.13	0.01	0.09	0.00
2	Jaraikela	Koel	9160	0.28	0.01	0.19	0.01
3	Panposh	Brahmani	19448	0.64	0.02	0.48	0.02
4	Gomlai	Brahmani	19820	0.68	0.03	0.47	0.04
5	Jenapur	Brahmani	33955	0.94	0.17	0.50	0.18
SUBARNAREKHA / BURHABALANGA &							
BAITARANI BASIN							
1	Adityapur	Kharkai	6309	0.13	0.00	0.11	0.01
2	Ghatsila	Subarnarekha	14176	0.31	0.02	0.28	0.02
3	N.H.5 Govindpur	Burhabalang	4495	0.16	0.01	0.13	0.01
4	Champua	Baitarani	1710	0.05	0.01	0.03	0.00
5	Anadpur	Baitarani	8570	0.23	0.01	0.00	0.00
RUSHIKULYA / VAMSADHARA /							
SARDA & NAGAVALI BASIN							
1	Purushottampur	Rushikulya	7112	0.10	0.00	0.05	0.00
2	Gunupur	Vamsadhara	6740	0.08	0.01	0.04	0.00
3	Kashinagar	Vamsadhara	7820	0.08	0.01	0.04	0.00
4	Ankapalli	Sarda	2090	0.03	0.00	0.00	0.00
5	Srikakulam	Nagavali	9500	0.09	0.01	0.03	0.00

Source : Hydrology Data Directorate (ISO), Central Water Commission.

**Table No.1.15 Seasonal Average Observed Runoff
at CWC Sites in West Flowing Rivers (1994-99)**

(Unit:'000 Metric Tonnes)

Sl. No.	Site Name	Name of Tributary/ Stream	Catchment (Sq.Km.)	1994-99		1998-99	
				Monsoon	Non-monsoon	Monsoon	Non-monsoon
1	2	3	4	5	6	7	8
1	Badalpur	Ulhas	785	2.53	0.10	2.50	0.12
2	Mangaon	Savitri/Kal	259	0.98	-	0.91	0.00
3	Anjanari	Kajvi	313	0.82	0.00	0.58	0.00
4	Adavali	Gad	835	2.86	0.01	2.43	0.03
5	Ganjim	Mandovi/Madai	880	3.30	0.06	3.05	0.03
6	Collem	Mandovi/ Khandepar	117	0.48	0.01	0.46	0.01
7	Kolad	Kundalika	294	0.16	0.00	0.00	0.00
8	Nagothane	Amba	420	0.62	0.00	1.25	0.00
9	Pen	Bhogeshwari	125	0.13	0.00	0.30	0.00
10	Ambaram palayam	Bharathapuzha	950	0.21	0.19	0.24	0.26
11	Santeguli	Aghnashini	1090	4.96	0.12	5.64	0.19
12	Haladi	Haladi	583	1.66	0.38	1.67	0.44
13	Yennehole	Swarna/Yennehole	327	1.62	0.03	1.75	0.03
14	Bantwal	Nethravathi	3184	11.40	0.30	12.04	0.31
15	Erinjipuzha	Payaswani	957	2.43	0.08	2.32	0.14
16	Perumannu	Valapatanam	1070	3.83	0.12	4.08	0.19
17	Kuniyil	Chaliyar	1876	4.53	0.26	5.10	0.61
18	Karathodu	Kadalundi	750	1.39	0.04	1.14	0.04
19	Kumbidi	Bharathapuzh	5755	4.56	0.35	4.73	0.66
20	Pulamanthole	Bharathapuzh	940	1.84	0.11	2.03	0.15
21	Mankara	Bharathapuzh	2775	0.89	0.11	1.45	0.23
22	Pudur	Bharathapuzh	131	0.25	0.07	0.28	0.14
23	Arangaly	Chalakudy	1342	1.76	0.14	2.36	0.28
24	Neeleswaram	Periyar	4234	6.27	1.08	7.34	1.35
25	Ramamangalam	Muvatthupuzh	1208	4.16	1.41	4.84	1.82
26	Kalampur	Kaliyar	405	1.21	0.09	1.41	0.15
27	Kidangoor	Meenachil	615	1.71	0.21	1.96	0.33
28	Kallooppara	Manimala/Pamba	731	1.81	0.21	1.87	0.30
29	Malakkara	Pamba	1713	3.74	0.56	4.34	0.91
30	Thumpamon	Achankovil	810	1.15	0.14	1.11	0.21
31	Pattazhy	Kallada	1210	1.18	0.40	1.51	0.53
32	Ayilam	Vamanapuram	540	0.60	0.08	0.74	0.17

Source : Hydrology Data Directorate (ISO), Central Water Commission.

**Table : 1.16 Seasonal Average Observed Runoff
at C.W.C. Sites in Cauvery Basin. (1996-2001)**

Unit : B.C.M.

Sl. No.	Name of the Site	Name of the Stream	Catchment Area (Sq.Km.)	1996-2001		2000-2001	
				Monsoon	Non-monsoon	Monsoon	Non-monsoon
1	2	3	4	5	6	7	8
1	Musiri	Cauvery	66243	35.80	10.77	35.86	10.82
2	Nallamaranpatty	Amaravathi	9080	1.32	0.59	1.30	0.61
3	Kudumudi	Cauvery	53233	36.92	12.39	36.86	12.56
4	Savandapur	Bhawani	5776	2.53	1.60	2.47	1.60
5	Thengumarahada	Moyar	1370	1.21	0.55	1.20	0.55
6	Nellithurai	Bhawani	1475	7.14	1.91	7.09	1.81
7	Urachikottai	Cauvery	44100	31.57	9.42	31.79	9.25
8	Billigundulu	Cauvery	36682	36.22	7.19	36.19	7.31
9	Kanakpura	Akravati	3425	0.93	0.12	1.04	0.15
10	T.K. Halli	Shimsha	7890	3.09	0.70	3.28	0.72
11	Kollegal	Cauvery	21082	34.17	5.67	33.86	5.75
12	T.Narsipur	Kalini	7000	14.54	2.38	14.39	2.38
13	Muthankera	Hemavathi	1260	12.97	0.75	12.90	0.76
14	Kattemalalvadi	Lakshmanathi	1330	1.76	0.04	1.76	0.04
15	Mukundur Hosah	Hemavathi	3050	6.34	2.23	6.09	2.14
16	Kudige	Cauvery	1934	14.60	0.84	14.47	0.85

Source : Hydrology Data Directorate (ISO), Central Water Commission.

**Table 1.17 :Seasonal Average Observed Runoff at C.W.C. Sites in
Narmada Basin.(1995-2000)**

Unit : B.C.M.

Sl. No.	Name of the Site	Name of the Stream	Catchment Area (Sq.Km.)	1995-2000		1999-2000	
				Monsoon	Non-monsoon	Monsoon	Non-monsoon
1	2	3	4	5	6	7	8
1	Chandwada	Orsang	3846	7.39	0.02	5.85	0.00
2	Garudeshwar	Narmada	87892	142.54	26.95	232.56	31.39
3	Rajghat	Narmada	77674	163.32	26.13	296.65	23.76
4	Mandleshwar	Narmada	72809	156.50	24.58	287.97	19.33
5	Kogaon	Kundi	3919	6.31	0.10	3.07	0.01
6	Handia	Narmada	54027	119.33	22.97	246.02	17.88
7	Chhidgaon	Ganjal	1729	6.07	0.26	9.35	0.19
8	Hoshangabad	Narmada	44548	101.07	23.28	220.69	17.90
9	Sandia	Narmada	33954	75.33	19.37	158.29	15.55
10	Gadarwara	Shakkar	2270	6.50	0.45	19.01	0.36
11	Barmanghat	Narmada	26453	54.92	16.82	111.49	13.86
12	Belkheri	Sher	1508	3.61	0.32	7.91	0.07
13	Patan	Hiran	3950	7.86	0.68	15.93	0.36
14	Jamtara	Narmada	17157	39.49	17.45	70.04	14.83
15	Hirdayanagar	Banjar	3133	9.63	0.33	17.87	0.24
16	Mohgaon	Burhner	4090	11.41	0.93	15.78	0.37
17	Manot	Narmada	4667	15.50	1.56	21.53	0.54
18	Dindori	Narmada	2292	5.85	0.85	6.21	0.55
19	Bijora	Narmada	14561	24.82	14.62	49.59	13.21
20	Mortakka	Narmada	67184	125.96	25.82	235.20	21.41

Source : Hydrology Data Directorate (ISO), Central Water Commission

**Table 1.18 Seasonal Average Observed Runoff
at CWC Sites in Tapi Basin (1995-99)**

(Unit : BCM)

Sl. No.	Name of the Site	Name of the Stream	Catchment Area (Sq.Km.)	1995-99		1998-99	
				Monsoon	Non Monsoon	Monsoon	Non Monsoon
1	2	3	4	5	6	7	8
1	Dedtalai	Tapi	3860	4.2	0.1	4.7	0.0
2	Burhanpur	Tapi	8487	6.2	0.2	7.2	0.1
3	Lakhpuri	Purna	3560	0.6	0.0	0.9	0.0
4	Gopalkheda	Purna	9500	1.1	0.1	1.7	0.0
5	Yerli	Purna	16517	1.8	0.1	3.0	0.1
6	Dapuri	Girna	8901	0.5	0.0	1.0	0.0
7	Savkheda	Tapi	48136	7.8	0.2	11.4	0.1
8	Malkheda	Bori	1830	0.1	0.0	0.4	0.0
9	Morane	Panjhra	1933	0.2	0.0	0.2	0.0
10	Gidhada	Tapi	54750	7.0	0.2	11.1	0.1
11	Sarangkheda	Tapi	58400	8.9	0.3	14.3	0.1
12	Ghala	Tapi	63325	5.3	1.3	6.3	1.2

Source : Hydrology Data Directorate (ISO), Central Water Commission.

**Table 1.19 Seasonal Average Observed Suspended Sediment Load
at CWC sites in Godavari Basin. (1999-2004)**

(Unit:'000 Metric Tonnes)

Sl. No.	Site Name	Name of Tributary/ Stream	1999-2004		2003-2004	
			Monsoon	Non-monsoon	Monsoon	Non-monsoon
1	2	3	4	5	6	7
1	Polavaram	Godavari	49155.32	84.45	42850.10	218.13
2	Konta	Sabri	6010.52	80.72	8939.53	123.16
3	Perur	Godavari	51553.74	26.29	44204.10	91.33
4	Pathaguudam	Indravati	13850.04	4.96	22819.99	12.27
5	Jagdapur	Indravati	2184.30	1.27	3714.30	1.40
6	Nowrangpur	Indravati	591.51	0.03	642.22	0.00
7	Tekra	Pranhita	28650.90	3.39	35425.55	5.04
8	Bhatpalli	Peddavagu	1766.42	0.53	2176.51	0.58
9	Bamni	Wardha	16385.30	2.66	7954.09	2.52
10	P.G.Bridge	Penganga	4894.73	1.18	2027.51	0.47
11	Nandagaon	Wunna	467.87	0.07	113.16	0.13
12	Hivra	Wardha	721.90	0.38	107.77	1.08
13	Bishnur	Wardha	52.05	1.90	16.75	0.00
14	Ashti	Wainganga	11969.76	1.28	14202.66	3.02
15	Pauni	Wainganga	6726.61	5.41	8139.76	9.88
16	Satrapur	Kanhan	1183.48	5.17	1702.60	5.94
17	Rajegaon	Bagh	2663.02	1.97	2343.95	9.33
18	Kumhari	Wainganga	1420.04	1.17	1710.76	0.50
19	Mancharial	Godavari	877.24	2.72	524.37	3.38
20	Degloor	Lendi	11.69	0.00	11.67	0.00
21	Saigaon	Manjira	167.96	0.00	20.92	0.00
22	Yelli	Godavari	2459.31	0.01	488.64	0.00
23	Purna	Purna	1069.57	0.01	102.23	0.00
24	G.R.Bridge	Godavari	113.84	0.00	19.14	0.00
25	Dhalegaon	Godavari	205.67	0.05	99.82	0.00

Source : Hydrology Data Directorate (ISO), Central Water Commission.

**Table 1.20 Seasonal Average observed Suspended Sediment Load
at CWC sites in Krishna Basin. (1997-2001)**

(Unit:'000 Metric Tonnes)

Sl. No.	Site Name	Name of Tributary/ Stream	1997-2001		2000-2001	
			Monsoon	Non-monsoon	Monsoon	Non-monsoon
1	2	3	4	5	6	7
1	Vijayawada	Krishna	1103.57	8688.86	572.87	27.27
2	Keesara	Munneru	310.05	1240.67	496.44	9.75
3	Wadenapalli	Krishna	469.94	23662.10	309.66	58.12
4	Pondugala	Krishna	434.16	21804.52	234.80	86.83
5	Bawapuram	Tungabhadra	1394.15	7065.12	1537.36	47.57
6	Mantralayam	Tungabhadra	1927.25	12666.44	1689.06	27.79
7	Oollenur	Tungabhadra	281.93	5721.73	206.09	17.95
8	Marol	Varada	620.86	210.10	516.65	0.90
9	Harlahalli	Tungabhadra	942.19	15628.49	712.93	28.06
10	Bylardahalli	Haridra	19.74	342.12	29.45	5.09
11	Honnali	Tungabhadra	468.35	18230.48	440.64	46.49
12	Shimoga	Tunga	745.59	2115.32	1051.30	4.41
13	Krishna Agraharam	Krishna	28733.58	5623.33	1564.41	18.06
14	Yadgir	Bhima	5924.86	1639.08	1727.24	8.77
15	Malkhed	Kagna	394.32	237.79	404.13	0.93
16	Wadakbal	Sina	1230.26	90.77	666.66	0.05
17	Takli	Bhima	528.83	401.17	10.52	1.22
18	Sarati	Nira	31.91	6.28	0.10	0.00
19	Huvinhedgi	Krishna	3324.81	10482.47	1557.92	35.75
20	Cholachagudda	Malaprabha	3866.55	22881.71	3803.81	74.71
21	Bagalkot	Ghataprabha	415.35	3263.52	2.76	0.00
22	Galgali	Krishna	2519.04	2375.76	1244.65	0.69
23	Karad	Krishna	677.82	1471.05	146.72	3.41
24	Warunji	Koyna	422.16	1107.20	115.77	5.50

Source : Hydrology Data Directorate (ISO), Central Water Commission.

**Table 1.21 Seasonal Average Observed Suspended Sediment Load
at CWC sites in Easter Rivers Basin (1998-2003)**

(Unit:'000 Metric Tonnes)

Sl. No.	Site Name	Name of Tributary/ Stream	1998-2003		2002-2003	
			Monsoon	Non-Monsoon	Monsoon	Non-Monsoon
1	2	3	4	5	6	7
1	Tikrapara	Mahanadi	5889	485	1985	180
2	Kantamal	Tel	6951	1000	2328	8
3	Salebhata	Ong	582	1	222	0
4	Sundergarh	Ib	3422	20	2319	5
5	Kurubhata	Mand	2262	14	1804	4
6	Basantpur	Mahanadi	4430	10860	2400	61
7	Bamnidhi	Hasdeo	491	33	134	15
8	Manendragarh	Hasdeo	69	0	50	0
9	Rampur	Jonk	1343	1	78	0
10	Jondhra	Seonath	1992	11	1129	2
11	Andhiyarkore	Hamp	479	3	558	0
12	Shimga	Seonath	53047	3	574	0
13	Rajim	Mahanadi	646	1	84	0
14	Baronda	Pairi	7760	0	66	0
15	Jenapur	Brahmani	5373	164	1678	7
16	Gomlai	Brahmani	6527	57	3430	4
17	Panposh	Brahmani	7161	38	4804	8
18	Tilga	Sankh	1826	25	1107	1
19	Jaraikele	Koel	3031	39	990	0
20	Anandapur	Baitarani	1990	80	496	12
21	Ghatsila	Subernarekha	1667	73	1236	18
22	Adityapur	Kharkai	805	15	504	4
23	Kashinagar	Vamsadhara	1059	31	476	0
24	Purushotampur	Rushikulya	1174	12	705	0
25	Srikakulam	Nagavali	1060	14	366	3

Source : Hydrology Data Directorate ,(ISO), Central Water Commission

**Table 1.22 Seasonal Average observed Suspended Sediment Load
at CWC sites in Cauvery Basin. (1996-2001)**

(Unit:'000 Metric Tonnes)

Sl. No.	Site Name	Name of Tributary/ Stream	1996-2001		2000-2001	
			Monsoon	Non-monsoon	Monsoon	Non-monsoon
1	2	3	4	5	6	7
1	Musiri	Cauvery	287.19	153.23	792.28	131.59
2	Nallamaranpatty	Amaravathi	5.36	46.64	3.99	2.26
3	Kudumudi	Cauvery	188.95	69.47	218.36	64.49
4	Savandapur	Bhawani	7.66	7.47	7.52	5.54
5	Urachikottai	Cauvery	0.00	0.34	0.00	1.72
6	Billigundulu	Cauvery	663.70	46.61	939.22	38.42
7	T.K. Halli	Shimsha	18.47	2.86	74.57	6.65
8	Kollegal	Cauvery	229.77	34.15	287.87	52.58
9	T.Narsipur	Kabini	100.71	12.84	120.32	20.41
10	Muthankera	Kabini	147.47	13.00	104.75	8.19
11	Mukundur Hosahalli	Hemavathy	15.33	3.63	18.31	0.51
12	Kudige	Cauvery	121.50	6.71	86.85	3.45

Source : Hydrology Data Directorate (ISO), Central Water Commission.

Table 1.23 Seasonal Average Observed Suspended Sediment Load at CWC Sites on Tapi,Mahi, Sabarmati and other West Flowing Rivers.(1993-98)
(Unit : '000 Metric Tonnes)

Sl. No.	Name of Sites	Name of the Tributary/ Stream	1993-98		1997-98	
			Monsoon	Non-Monsoon	Monsoon	Non-Monsoon
1	2	3	5	6	7	8
1	Khanpur	Mahi	2790.6	2.2	3355.0	2.7
2	Paderdibadi	Mahi	353.2	0.6	17.1	1.3
3	Mataji	Mahi	2419.7	0.0	1568.5	11.9
4	Sarangkheda	Tapi	11672.5	166.1	6158.8	828.2
5	Morane	Panjhra	99.9	0.0	280.1	0.0
6	Savkheda	Tapi	11668.4	571.8	5366.9	2852.0
7	Dapuri	Girna	128.3	0.6	61.2	2.9
8	Yerli	Purna	1127.9	5.1	344.6	19.4
9	Gopalkheda	Purna	1775.8	114.1	908.5	565.5
10	Burhanpur	Tapi	10709.9	20.0	15661.6	85.6
11	Dedtalai	Tapi	4850.3	7.1	4737.1	33.4
12	Kamalpur	Banas	2805.3	0.4	863.9	0.0
13	Ganod	Bhadar	143.5	0.0	9.2	0.0
14	Lowera	Shetrunji	509.3	0.0	16.5	0.0
15	Mahuwa	Purna	1055.6	0.1	143.2	0.0
16	Gadat	Ambika	1632.3	0.1	542.1	0.0
17	Durvesh	Vaitarna	581.0	0.4	667.4	0.6
18	Derol Bridge	Sabarmati	70.9	0.5	0.0	0.0

Source : Hydrology Data Directorate, (ISO), Central Water Commission.

Table 1.24 Seasonal Average Observed Suspended Sediment Load at CWC sites in Narmada Basin. (1995-2000)

(Unit: '000 Metric Tonnes)

Sl. No.	Site Name	Name of Tributary/ Stream	1995-2000		1999-2000	
			Monsoon	Non- monsoon	Monsoon	Non- monsoon
1	2	3	4	5	6	7
1	Chandwada	Orsang	1499.11	0.22	1697.77	0.00
2	Garudeshwar	Narmada	7460.43	76.72	15146.12	179.31
3	Rajghat	Narmada	28051.53	185.07	63658.94	101.51
4	Mandleshwar	Narmada	35927.40	101.20	72906.14	233.70
5	Ginnore	Chhota Tawa	1710.88	0.44		
6	Handia	Narmada	24245.05	362.96	60419.48	126.22
7	Hoshangabad	Narmada	12607.82	553.00	27853.54	951.60
8	Sandia	Narmada	12238.20	278.00	35148.22	250.43
9	Gadarwara	Shakkar	1447.95	27.55	3559.45	0.85
10	Barmanghat	Narmada	6667.90	173.01	12354.03	38.17
11	Jamtara	Narmada	2462.13	69.82	8390.30	59.44
12	Hirdayanagar	Banjar	750.12	3.07	1843.67	6.67
13	Mohgaon	Burhner	2952.24	12827.90	2877.41	48.00
14	Manot	Narmada	4333.76	185.57	7256.80	4.41

Source : Hydrology Data Directorate (ISO), Central Water Commission.

Table : 1.25 Status of Ground Water Hydrograph Network Statios

(Unit : Nos.)

Sl. No.	Name of the State/U.T.	As On				
		31.3.85	31.3.95	31.3.98	31.3.2002	31-3-03
1	2	3	4	5	6	7
STATES						
1.	Andhra Pradesh	309	1042	1028	1013	970
2.	Arunachal Pradesh	7	17	18	19	19
3.	Assam	195	371	365	379	379
4.	Bihar	173	599	569	365	373
5.	Chattishgarh	-	-	-	484	477
6.	Gujarat	267	974	1045	1116	986
7.	Goa	17	53	53	53	53
8.	Haryana	434	521	550	552	539
9.	Himachal Pradesh	71	78	79	81	86
10.	Jammu & Kashmir	110	162	203	217	201
11.	Jharkhand	-	-	-	208	208
12.	Karnataka	257	1349	1311	1132	1132
13.	Kerala	187	651	731	864	864
14.	Madhya Pradesh	412	1350	1343	1323	1307
15.	Maharashtra	475	1409	1289	1456	1456
16.	Manipur	6	25	25	25	25
17.	Meghalaya	24	37	35	38	38
18.	Mizoram	0	0	NA	NA	N.A
19.	Nagaland	4	8	8	17	17
20.	Orissa	200	1122	1122	1068	1068
21.	Punjab	383	497	485	413	399
22.	Rajasthan	597	1414	1456	1337	1337
23.	Sikkim	0	0	NA	NA	N.A
24.	Tamil Nadu	265	766	765	1039	1010
25.	Tripura	26	37	37	37	42
26.	Uttar Pradesh	636	1514	1477	1210	1232
27.	West Bengal	303	836	831	721	726
TOTAL STATES		5358	14832	14825	15167	14944
UNION TERRITORIES						
1.	Andaman & Nichobar Island	4	29	29	-	N.A
2.	Chandigarh	21	14	14	21	22
3.	Dadra & Nagar Haveli	2	7	7	10	10
4.	Delhi	76	61	82	87	100
5.	Daman & Diu	0	6	5	6	4
6.	Lakshadweep	0	30	30	-	N.A
7.	Pondicherry	0	16	19	22	21
TOTAL U.Ts.		103	163	186	146	157
TOTAL ALL INDIA		5461	14995	15011	15313	15101

Source : Ground Water Statistics, 2003 (Central Ground Water Board)
Ministry of Water Resources.

Table : 1.26 Categorisation of Blocks/Talukas/Watersheds

Sl. No.	State	No. of Distt.	No. of Assessment Units Blocks/ Talukas/ Water-sheds/	NUMBER OF BLOCKS					
				Over exploited		Dark/Critical		Others	
				No.	%	No.	%	No.	%
1	2	3	4	5	6	7	8	9	10
1	Andhra Pradesh	22	1157	118	10.20	79	6.83	960	82.97
2	Arunachal Pradesh	3	59	0	0.00	0	0.00	59	100.00
3	Assam	23	219	0	0.00	0	0.00	219	100.00
4	Bihar	42	394	6	1.52	14	3.55	374	94.92
5	Chhattisgarh		145	0	0.00	0	0.00	145	100.00
6	Delhi		6	3	50.00	1	16.67	2	33.33
7	Goa	3	12	0	0.00	0	0.00	12	100.00
8	Gujarat	19	180	41	22.78	19	10.56	120	66.67
9	Haryana	17	111	30	27.03	13	11.71	68	61.26
10	Himachal Pradesh	12	69	0	0.00	0	0.00	69	100.00
11	Jammu & Kashmir	14	69	0	0.00	0	0.00	69	100.00
12	Jharkhand		193	0	0.00	0	0.00	193	100.00
13	Karnataka	19	175	7	4.00	9	5.14	159	90.86
14	Kerala	14	151	3	1.99	6	3.97	142	94.04
15	Madhya Pradesh	45	312	2	0.64	1	0.32	309	99.04
16	Maharashtra	29	2316	154	6.65	72	3.11	2090	90.24
17	Manipur	6	29	0	0.00	0	0.00	29	100.00
18	Meghalaya	5	39	0	0.00	0	0.00	39	100.00
19	Mizoram	3	12	0	0.00	0	0.00	12	100.00
20	Nagaland	7	52	0	0.00	0	0.00	52	100.00
21	Orissa	30	314	0	0.00	0	0.00	314	100.00
22	Punjab	17	138	81	58.70	12	8.70	45	32.61
23	Rajasthan	32	237	86	36.29	80	33.76	71	29.96
24	Sikkim	4	4	0	0.00	0	0.00	4	100.00
25	Tamil Nadu	27	385	138	35.84	37	9.61	210	54.55
26	Tripura	3	38	0	0.00	0	0.00	38	100.00
27	Uttar Pradesh & Uttaranchal	58	819	2	0.24	20	2.44	797	97.31
28	West Bengal	16	275	0	0.00	61	22.18	214	77.82
	Total		7910	671	8.48	424	5.36	6815	86.16
	Total Uts		18	2	11.11	1	5.56	15	83.33
	Grand Total		7928	673	8.49	425	5.36	6830	86.15

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

Table : 1.27 Ground Water Potential in the States and Union Territories of India (As on 31.03.2003)

(Unit : BCM per Year)

S.No.	Name of the States/UTs.	Total Replenishable Ground Water Resource	Provision For Domestic Industrial and other Uses	Available Ground Water Resources for Irrigation	Net Draft	Balance Ground Water Potential Available for Exploitation	Level of Ground Water Development (%)
1	2	3	4	5	6	7	8
STATES							
1	Andhra Pradesh	35.29	5.29	30.00	8.57	21.43	28.56
2	Arunachal Pradesh	1.44	0.22	1.22	Negl.	1.22	Negl.
3	Assam	24.72	3.71	21.01	1.84	19.17	8.75
4	Bihar	26.99	4.05	22.94	10.63	12.31	46.33
5	Chattisgarh	16.07	2.41	13.66	0.81	12.85	5.93
6	Delhi	0.29	0.18		0.12		
7	Goa	0.22	0.03	0.19	0.02	0.17	8.30
8	Gujarat	20.38	3.06	17.32	9.55	7.77	55.16
9	Haryana	8.53	1.28	7.25	8.13	0.00	112.18
10	Himachal Pradesh	0.37	0.07	0.29	0.03	0.26	10.72
11	Jammu & Kashmir	4.43	0.66	3.76	0.03	3.73	0.81
12	Jharkhand	6.53	0.98	5.55	1.84	3.71	33.13
13	Karnataka	16.19	2.43	13.76	4.76	9.00	34.60
14	Kerala	7.90	1.31	6.59	1.46	5.13	22.17
15	Madhya Pradesh	34.82	5.22	29.60	8.02	21.58	27.09
16	Maharashtra	37.87	12.40	25.47	9.44	16.04	37.04
17	Manipur	3.15	0.47	2.68	Negl.	2.68	Negl.
18	Meghalaya	0.54	0.08	0.46	0.02	0.44	3.97
19	Mizoram	1.40	0.21	1.19	Negl.	1.19	Negl.
20	Nagaland	0.72	0.11	0.62	Negl.	0.62	Negl.
21	Orissa	20.00	3.00	17.00	3.61	13.39	21.23
22	Punjab	18.66	1.87	16.79	16.40	0.00	97.66
23	Rajasthan	12.71	1.99	10.71	9.26	1.45	86.42
24	Sikkim	0.07	0.01	0.06	Negl.	0.06	Negl.
25	Tamil Nadu	26.39	3.96	22.43	14.45	7.98	64.43
26	Tripura	0.66	0.10	0.56	0.19	0.38	33.43
27	Uttar Pradesh	81.12	12.17	68.95	32.33	36.62	46.89
28	Uttaranchal	2.70	0.41	2.29	0.82	1.47	35.78
29	West Bengal	23.09	3.46	19.63	7.50	12.13	38.19
ALL STATES		433.24*	71.14*	361.98*	149.82	212.78*	41.53
		(431.77)	(70.92)	(360.73)		(211.53)	
UNION TERRITORIES							
1	Andaman & Nicobar	0.33	0.01	0.31	Negl.	0.31	Negl.
2	Chandigarh	0.03	-	-	0.03	-	-
3	Dadar & Nagar Heveli	0.04	0.01	0.04	0.00	0.03	12.81
4	Daman & Diu	0.01	0.00	0.01	0.01	0.00	70.00
5	Lakshadweep	0.00	0.00	0.00	0.01	0.00	-
6	Pondicherry	0.03	0.00	0.02	0.12	0.00	-
ALL UTs.		0.442*	0.025*	0.384*	0.16	0.348*	-
		(0.12)	(0.01)	(0.07)		(0.04)	
ALL INDIA		433.88*	71.16*	362.36*	149.97	213.13*	41.57
		(431.89)	(70.93)	(360.80)		(211.56)	

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

* Total Replenishable Gropund Water Resources of the country was estimated to be 433.68 BCM. However, as per decision taken in 1995, the agreed gigureof 432 BCM is retained as rounded off figure of 431.88 BCM .The discrepancy actually has crept in due to inclusion of figures in respect of states Mizoram.Sikkim and U.T of Andaman & Nicobar at a later stage.

Note : 1)Totals may not tally due to rounding off

2) As pet the latest information from CGWB the Annual Replenishable Ground Wate Resources for the country is 433 BCM

Table 1.28. Statewise Ultimate Irrigation Potential

(Unit : '000 Hactares)

Sl. No.	State/U.T.	Major & Medium Surface Water	Minor Irrigation			Total (Major, Medium & Minor)
			Surface Water	Ground Water	Total	
1	2	3	4	5	6	7
1	Andhra Pradesh	5000	2300	3960	6260	11260
2	Arunachal Pradesh	0	150	18	168	168
3	Assam	970	1000	900	1900	2870
4	Bihar	5224	1900	4947	6847	13347
5	Goa	62	25	29	54	116
6	Jarkhand	1276	Included in Bihar			
7	Gujarat	3000	347	2756	3103	6103
8	Haryana	3000	50	1462	1512	4512
9	Himachal Pradesh	50	235	68	303	353
10	Jammu & Kashmir	250	400	708	1108	1358
11	Karnataka	2500	900	2574	3474	5974
12	Kerala	1000	800	879	1679	2679
13	Madhya Pradesh	4853	2200	9732	11932	17932
14	Maharashtra	4100	1200	3652	4852	8952
15	Chattisgarh	1147	Included in Madhya Pradesh			
16	Manipur	135	100	369	469	604
17	Meghalaya	20	85	63	148	168
18	Mizoram	0	70	5	75	75
19	Nagaland	10	75	5	80	90
20	Orissa	3600	1000	4203	5203	8803
21	Punjab	3000	50	2917	2967	5967
22	Rajasthan	2750	600	1778	2378	5128
23	Sikkim	20	50	\$	50	70
24	Tamil Nadu	1500	1200	2832	4032	5532
25	Tripura	100	100	81	181	281
26	Uttar Pradesh	12154	1200	16799	17999	30499
27	Uttranchal	346	Included in Uttar Pradesh			
28	West Bengal	2300	1300	3318	4618	6918
Total States		58367	17337	64055	81392	139759
Total U.Ts.		98	35	116	151	249
Grand Total		58465	17372	64171	81543	140008

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

\$: Not Assessed

Chart 8 Per Capita Water Availability in Selected Countries ('000 CU.M)

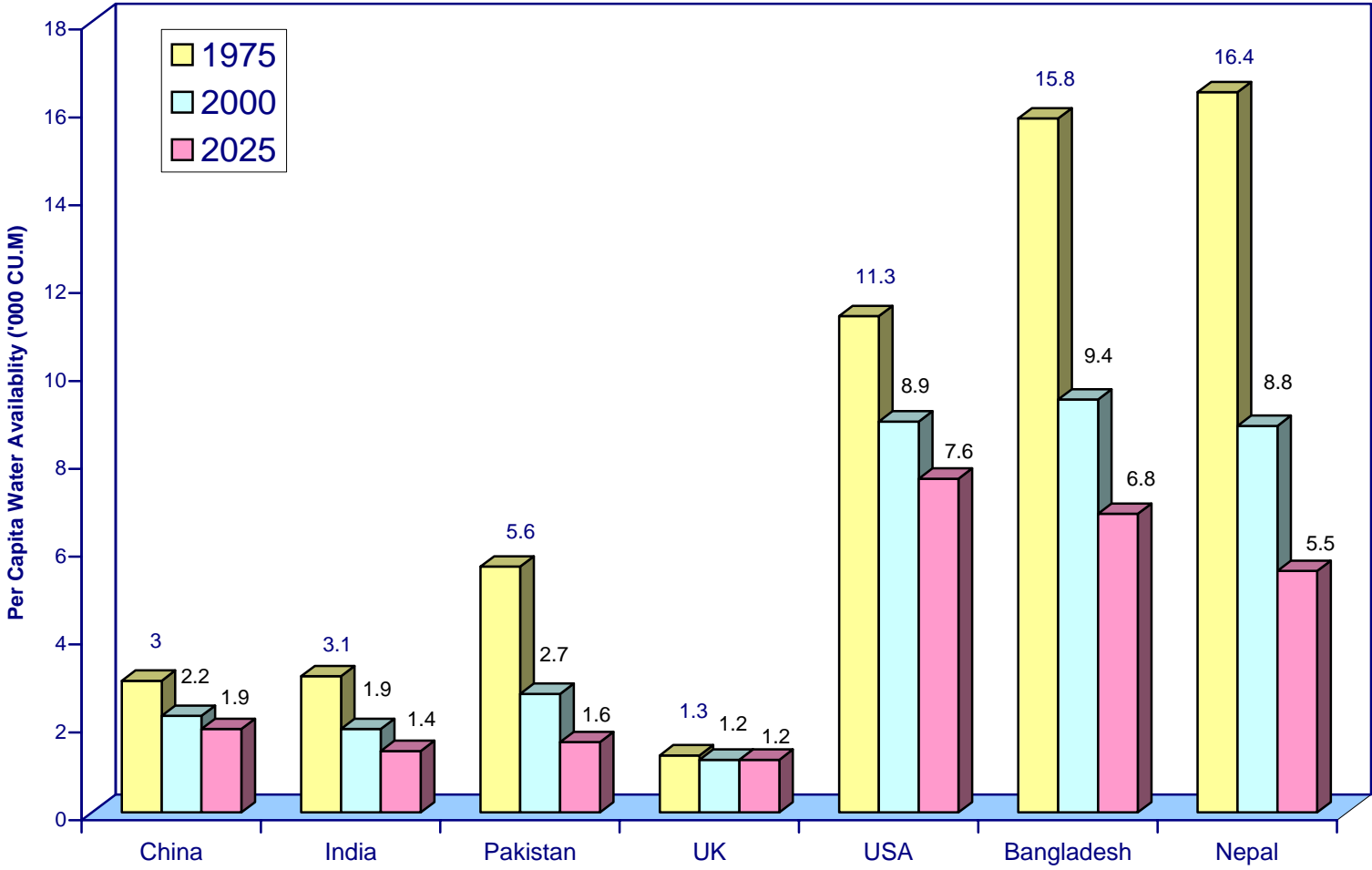


Table : 1.29 Countrywise Availability of Interl Renewable Fresh Water

Sl. No.	Country	Annual Internal Renewable Water Resources (BCM)	1975		2000		2025	
			Population ('000 No.)	Renewable Water Per Capita (Cu.M.)	Population ('000 No.)	Renewable Water Per Capita (Cu.M.)	Population ('000 No.)	Renewable Water Per Capita (Cu.M.)
1	2	3	4	5	6	7	8	9
1	Afghanistan	65	15378	4227	22720	2861	44934	1447
2	Albania	56	2424	23020	3113	17922	3820	14608
3	Algeria	14	16018	893	31471	454	46611	307
4	Aangola	184	6123	30051	12878	14288	25107	7329
5	Argentina	994	26049	38158	37032	26842	47160	21077
6	Armenia	11	2826	3715	3520	2983	3946	2661
7	Australia	343	13900	24675	18886	18162	23098	14850
8	Austria	90	7579	11915	8211	10998	8186	11031
9	Azerbaijan	30	5689	5326	7734	3918	9403	3223
10	Bahrain	-	272	-	617	-	858	-
11	Bangladesh	1211	76582	15808	129155	9373	178751	6773
12	Belarus	58	9367	6192	10236	5666	9496	6108
13	Belgium	13	9796	1276	10161	1230	9918	1260
14	Belize	16	134	119644	241	66470	370	43239
15	Benin	26	3046	8470	6097	4232	11109	2322
16	Bhutan	95	1178	80668	2124	44728	3904	24335
17	Bolivia	300	4759	63040	8329	36020	13131	22846
18	Bosnia and Harzegovina	-	3747	-	3972	-	4324	-
19	Botswana	15	759	19368	1622	9062	2242	6557
20	Brazil	6950	108167	64252	170115	40855	217930	31891
21	Brunei Darussalam	9	161	52861	328	25908	459	18520
22	Bulgaria	205	8722	23504	8225	24924	7023	29190
23	Burkina Faso	18	6108	2865	11937	1466	23321	750
24	Burundi	4	3680	978	6695	538	11569	311
25	Cambodia	476	7098	67077	11168	42632	16526	28808
26	Cameroon	268	7527	35605	15085	17766	26484	10119
27	Canada	2901	23209	124995	31147	93140	37896	76551
28	Cape Verde	-	278	-	428	-	671	-
29	Central African Republic	141	2057	68546	3615	39001	5704	24720
30	Chad	43	4030	10670	7651	5620	13908	3092
31	Chile	468	10337	45276	15211	30767	19548	23941
32	China	2830	927808	3050	1277558	2215	1480412	1911
33	Colombia	1070	25381	42158	42321	25283	59758	17906
34	Congo Democratic Republic of the	832	23251	574966	51654	282660	104788	146244
35	Congo Republic of the	1019	1447	43826	2943	19727	5689	9724
36	Costa Rica	95	1968	48268	4023	23612	5929	16024
37	Cote d'Ivoire	78	6755	11503	14786	5255	23345	3328
38	Croatia	61	4263	14402	4473	13728	4193	14642
39	Cuba	35	9306	3707	11201	3080	11798	2924
40	Czech Republic	58	9997	5822	10244	5682	9512	6119
41	Denmark	13	5060	2569	5293	2456	5238	2482
42	Dominican Republic	20	5048	3962	8495	2354	11164	1791
43	Ecuador	314	6907	45460	12646	24830	17796	17644
44	Egypt	58	38841	1501	68470	851	95615	610
45	El Salvador	19	4120	4600	6276	3019	9062	2091

Contd..

Table : 1.29 Countrywise Availability of Internal Renewable Fresh Water

Sl. No.	Country	Annual Internal Renewable Water Resources (BCM)	1975		2000		2025	
			Population ('000 No.)	Renewable Water Per Capita (Cu.M.)	Population ('000 No.)	Renewable Water Per Capita (Cu.M.)	Population ('000 No.)	Renewable Water Per Capita (Cu.M.)
1	2	3	4	5	6	7	8	9
46	Equatorial Guinea	30	225	133297	453	66275	795	37749
47	Eritrea	9	2089	4213	3850	2285	6681	1317
48	Estonia	13	1432	8939	1396	9168	1131	11315
49	Ethiopia	110	32221	3414	62565	1758	115382	953
50	Fiji	29	576	49566	817	34949	1104	25857
51	Finland	113	4711	23984	5176	21833	5254	21508
52	France	198	52699	3757	59080	3351	61662	3211
53	Gabon	164	593	276354	1226	133754	1981	82777
54	Gambia	8	548	14609	1305	6129	2151	3719
55	Georgia	63	4908	12897	4968	12743	5178	12225
56	Germany	171	78679	2173	82220	2080	80238	2131
57	Ghana	53	9829	5412	20212	2632	36876	1443
58	Greece	59	9047	6483	10645	5510	9863	5947
59	Greenada	-	92	-	94	-	105	-
60	Gautemala	116	6018	19276	11385	10189	19816	5854
61	Guinea	226	4149	54476	7430	30416	12497	18084
62	Guinea Bissau	27	627	43041	1213	22257	1946	13874
63	Guyana	241	734	328391	861	279799	1045	230695
64	Haiti	11	4920	2236	8222	1338	11988	918
65	Honduras	63	3017	21022	6485	9778	10656	5951
66	Hungary	120	10532	11394	10036	11957	8900	13483
67	Iceland	168	218	770533	281	597931	328	511640
68	India	1908	620701	3074	1013662	1882	1330449	1434
69	Indonesia	2838	135666	20919	212107	13380	273442	10379
70	Iran, Islamic Republic of	138	33344	4124	67702	2031	94463	1456
71	Iraq	75	11020	6844	23115	3263	41014	1839
72	Ireland	50	3177	15737	3730	13404	4404	11354
73	Israel	2	3455	622	6217	346	8277	260
74	Italy	167	55441	3012	57298	2915	51270	3257
75	Jamaica	8	2013	4124	2583	3214	3245	2558
76	Japan	430	111524	3856	126714	3393	121150	3549
77	Jordan	1	2600	338	6669	132	12063	73
78	Kazakhstan	110	14136	7753	16223	6756	17698	6193
79	Kenya	30	13741	2198	30080	1004	41756	723
80	Korea, Dem. People's Republic of	77	16304	4729	24039	3207	29388	2624
81	Korea Republic of	70	35281	1976	46844	1488	52533	1327
82	Kuwait	0	1007	20	1972	10	2974	7
83	Kyrgyzstan	21	3299	6244	4699	4384	6096	3379
84	Lao People's democratic Republic	332	3024	109645	5433	61034	9653	34354
85	Latvia	35	2474	14312	2357	15022	1936	18285
86	Lebanon	5	2767	1735	3282	1463	4400	1091
87	Lesotho	5	1187	4405	2153	2430	3506	1492
88	Liberia	232	1609	144179	3154	73557	6618	35058
89	Libya	1	2446	245	5605	107	8647	69
90	Lithuania	25	3308	7527	3670	6784	3399	7326

Contd..

Table : 1.29 Countrywise Availability of Internal Renewable Fresh Water

Sl. No.	Country	Annual Internal Renewable Water Resources (BCM)	1975		2000		2025	
			Population ('000 No.)	Renewable Water Per Capita (Cu.M.)	Population ('000 No.)	Renewable Water Per Capita (Cu.M.)	Population ('000 No.)	Renewable Water Per Capita (Cu.M.)
1	2	3	4	5	6	7	8	9
91	Luxembourg	-	362	0	431	0	463	0
92	Macedonia	-	1676	0	2024	0	2258	0
93	Madagascar	337	7819	43098	15942	21139	28964	11635
94	Malawi	19	5244	3562	10925	1710	19958	936
95	Malaysia	580	12258	47317	22244	26074	30968	18729
96	Mali	100	6169	16211	11234	8902	21295	4696
97	Mauritania	11	1371	8314	2670	4270	4766	2392
98	Mauritius	2	892	2477	1158	1908	1379	1602
99	Mexico	357	59099	6047	98881	3614	130196	2745
100	Moldova, Republic of	12	3839	3048	4380	2671	4547	2573
101	Mongolia	35	1447	24043	2662	13073	3709	9383
102	Morocco	30	17305	1734	28351	1058	38670	776
103	Mozambique	216	10498	20575	19680	10975	30612	7056
104	Myanmar	1046	30441	34348	45611	22924	58120	17990
105	Namibia	46	900	50538	1726	26364	2338	19464
106	Nepal	210	12797	16426	23930	8784	38010	5530
107	Netherlands	90	13653	6592	15786	5701	15782	5703
108	New Zealand	327	3083	106062	3862	84673	4695	69649
109	Nicaragua	175	2498	70053	5074	34488	8696	20124
110	Niger	33	4771	6813	10730	3029	21495	1512
111	Nigeria	280	57004	4912	111506	2511	183041	1530
112	Norway	392	4007	97821	4465	87800	4817	81383
113	Oman	1	880	880	2542	388	5352	184
114	Pakistan	418	74734	5597	156483	2673	263000	1590
115	Panama	144	1723	83567	2856	50426	3779	38104
116	Papua New Guinea	801	2729	293559	4807	166644	7460	107374
117	Paraguay	314	2659	118096	5496	57128	9355	33564
118	Peru	40	15161	2638	25662	1559	35518	1126
119	Philippines	479	43010	11137	75967	6305	108251	4425
120	Poland	56	34022	1652	38765	1450	39069	1438
121	Portugal	70	9093	7654	9875	7048	9348	7445
122	Qatar	-	171	-	599	-	779	-
123	Romania	208	21245	9790	22327	9316	19945	10428
124	Russia	4498	134233	33511	146934	30614	137933	32612
125	Rwanada	6	4384	1437	7733	815	12427	507
126	Samoa	-	151	-	180	-	271	-
127	Saudi Arabia	2	7251	331	21607	111	39965	60
128	Senegal	39	4806	8198	9481	4156	16743	2353
129	Sierra Leone	160	2931	54597	4854	32960	8085	19789
130	Singapore	1	2263	265	3567	168	4168	144
131	Slovakia	31	4736	6503	5387	5716	5393	5710
132	Slovenia	-	1742	-	1986	-	1818	-
133	Solomon Islands	45	190	234897	444	100757	817	54742
134	Somalia	14	4134	3266	10097	1337	21211	636

Contd..

Table : 1.29 Countrywise Availability of Internal Renewable Fresh Water

Sl. No.	Country	Annual Internal Renewable Water Resources (BCM)	1975		2000		2025	
			Population ('000 No.)	Renewable Water Per Capita (Cu.M.)	Population ('000 No.)	Renewable Water Per Capita (Cu.M.)	Population ('000 No.)	Renewable Water Per Capita (Cu.M.)
1	2	3	4	5	6	7	8	9
135	South Africa	50	24728	2022	40377	1238	46015	1087
136	Spain	111	35596	3127	39630	2808	36658	3036
137	Sri Lanka	50	13603	3676	18827	2656	23547	2123
138	Sudan	154	16012	9618	29490	5222	46264	3329
139	Suriname	200	364	548698	417	479467	525	381212
140	Swaziland	5	482	9364	1008	4475	1785	2527
141	Sweden	180	8193	21971	8910	20202	9097	19787
142	Switzerland	50	6339	7888	7386	6770	7587	6590
143	Syrian Arab Republic	45	7438	6014	16125	2774	26292	1701
144	Tajikistan	16	3442	4648	6188	2586	8857	1807
145	Tanzania, United Republic of	89	15900	5597	33517	2655	57918	1537
146	Thailand	410	41359	9911	61399	6676	72717	5637
147	Togo	12	2285	5251	4629	2592	8482	1415
148	Trinidad and Tobago	5	1012	5040	1295	3938	1493	3415
149	Tunisia	4	5668	727	9586	430	12843	321
150	Turkey	204	40025	5087	66591	3057	87869	2317
151	Turkmenistan	25	2520	9802	4459	5539	6287	3929
152	Uganda	66	11183	5902	21778	3031	44435	1485
153	Ukraine	140	49016	2848	50456	2767	45688	3056
154	United Arab Emirates	0	505	297	2441	61	3284	46
155	United Kingdom	71	56226	1263	58830	1207	59961	1184
156	United States of America	2478	220165	11255	278357	8902	325573	7611
157	Uruguay	124	2829	43839	3337	37158	3907	31741
158	Uzbekistan	50	13981	3605	24318	2073	33355	1511
159	Venezuela	1317	12734	103421	24170	54490	34775	37872
160	Vietnam	891	48030	18555	79832	11163	108037	8249
161	Yemen	4	6991	586	18112	226	38985	105
162	Yugoslavia	-	9085	-	10640	-	10844	-
163	Zambia	116	4841	23961	9169	12652	15616	7428
164	Zimbabwe	20	6143	3256	11669	1714	15092	1325

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.

- ii) :United Nations Population Division, World Population Prospects: The 1996 Revision (New York: United Nations, 1996).
- iii) :United Nations, Comprehensive Assessment of the Freshwater Resources of the World (New York: United Nations,1997)

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
2. Population for the year 2025 are as per United Nations Medium Projections
[http:// www.populationaction.org/resources/factsheets/factsheet_6.htm](http://www.populationaction.org/resources/factsheets/factsheet_6.htm)

Chart 9 Arable/Irrigated Area in Selected Countries during 2003 (M.Ha.)

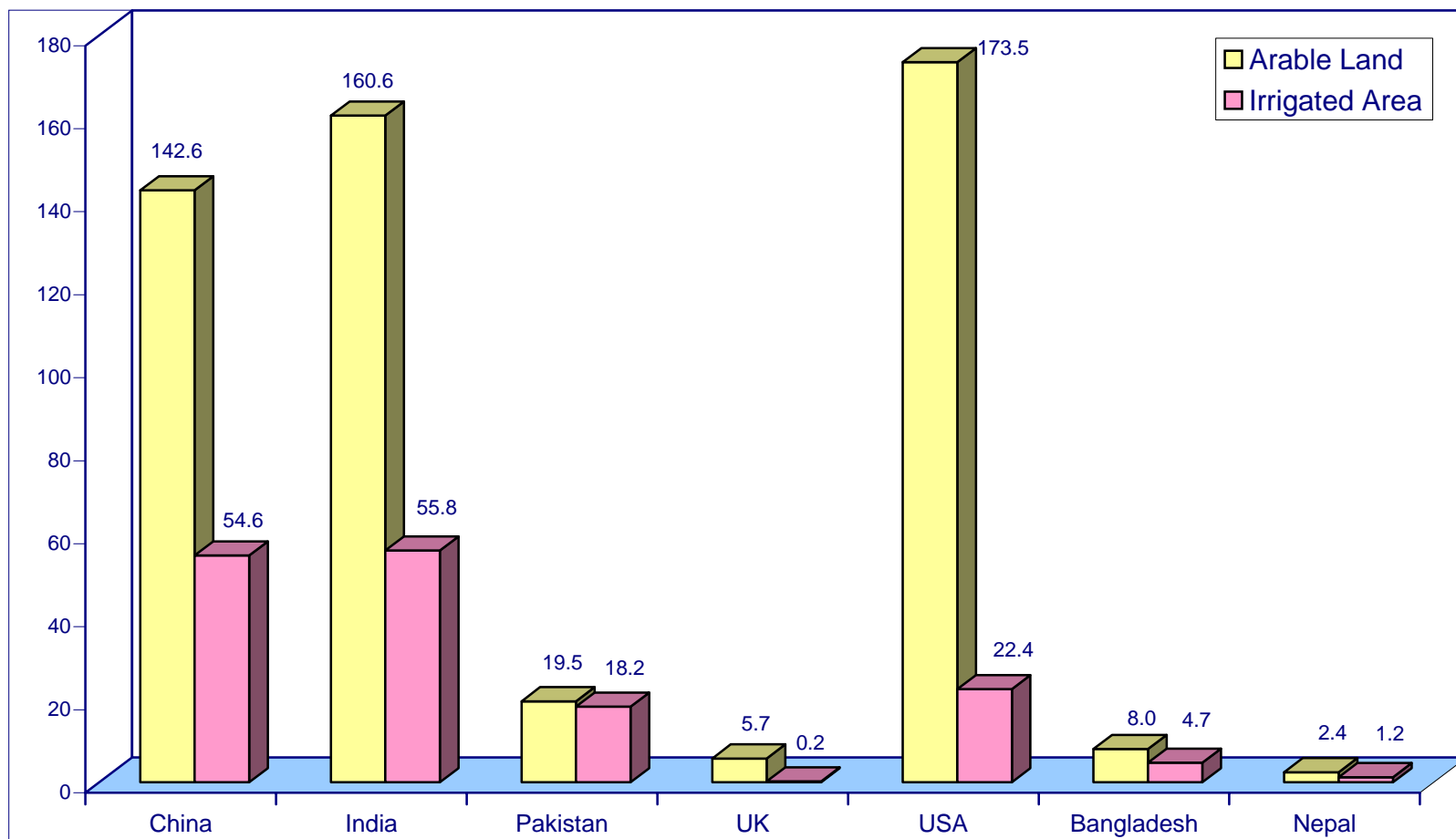


Table : 1.30 Countrywise Geographical Area, Arable Land and Irrigated Area in the World

(Unit " '000 Ha.)

Sl. No.	Name of the Country	Geographical Area 2003	Arable Land 2003	Irrigated Area	
				2002	2003
1	2	3	4	5	6
A F R I C A					
1	ALGERIA	238174	7545	569	569
2	ANGOLA	124670	3300	80	80
3	BENIN	11262	2650	12	12
4	BOTSWANA	58173	377	1	1
5	BRTISH IND. OCEON TERRITORY	8	N.A.	N.A.	N.A.
6	BURKINA FASO	27400	4840	25	25
7	BURUNDI	2783	990	21	21
8	CAMEROON	47544	5960	26	26
9	CAPE VERDE	403	46	3	3
10	CENTRAL AFR. REPUBLIC	62298	1930	2	2
11	CHAD	128400	3600	30	30
12	COMOROS	223	80	N.A.	2
13	CONGO DEMR	234486	N.A.	N.A.	N.A.
14	CONGO REPUBLIC	34200	495	2	2
15	COTE DIVOIRE	32246	3300	73	73
16	DJIBOUTI	2320	1	1	1
17	EGYPT	100145	2922	3422	3422
18	EQUATORIAL GUINEA	2805	130	N.A.	N.A.
19	ERITREA	11760	562	21	21
20	ETHIOPIA	110430	11056	290	290
21	GABON	26767	325	7	7
22	GAMBIA	1130	315	2	2
23	GHANA	23854	4185	31	31
24	GUINEA	24586	1100	95	95
25	GUINEA-BISSAU	3612	300	25	25
26	KENYA	58037	4650	90	103
27	LESOTHO	3035	330	3	3
28	LIBERIA	11137	382	3	3
29	LIBYAN ARAB JAMAHIR	175954	1815	470	470
30	MADAGASCAR	58704	2950	1086	1086
31	MALAWI	11848	2450	56	56
32	MALI	124019	4660	236	236
33	MAURITANIA	102552	488	49	
34	MAURITIUS	204	100	21	22
35	MOROCCO	44655	8484	1445	1445
36	MOZAMBIQUE	80159	4350	118	118
37	NAMIBIA	82429	815	8	8
38	NIGER	126700	14483	73	73
39	NIGERIA	92377	30500	270	282
40	REUNION	251	35	12	12
41	RWANDA	2634	1200	9	9
42	ST HELENA	31	4	NA	NA

Contd..

Table : 1.30 Countrywise Geographical Area, Arable Land and Irrigated Area in the World

(Unit " '000 Ha.)

Sl. No.	Name of the Country	Geographical Area 2003	Arable Land 2003	Irrigated Area	
				2002	2003
1	2	3	4	5	6
43	SAO TOME PRINCIPE	96	8	10	10
44	SENEGAL	19672	2460	120	120
45	SEYCHELLES	46	1	NA	NA
46	SIERRA LEONE	7174	570	30	30
47	SOMALIA	63766	1045	200	200
48	SOUTH AFRICA	121909	14753	1498	1498
49	SUDAN	250581	17000	1863	1863
50	SWAZILAND	1736	178	50	50
51	TANZANIA UNITED REPUBLIC	94509	4000	184	184
52	TOGO	5679	2510	7	7
53	TUNISIA	16361	2790	394	394
54	UGANDA	24104	5200	9	9
55	WESTN SAHARA	26600	5	N.A.	NA
56	CONGO, DAM REPUBLIC	234486	6700	11	11
57	ZAMBIA	75261	5260	156	156
58	ZIMBABWE	39076	3220	174	174
TOTAL		3265461	199405	13393	13372
N.C.AMERICA					
59	ANTIGUA-BARBUDA	44	8	NA	NA
60	ARUBA	19	2	NA	NA
61	BAHAMAS	1388	8	1	1
62	BARBADOS	43	16	5	5
63	BELIZE	2297	70	3	3
64	BERMUDA	5	1	NA	NA
65	BRITISH-VIRGIN-ISLAND	15	3	NA	NA
66	CANADA	998467	45660	785	785
67	CAYMAN ISLAND	26	1	NA	NA
68	COSTA RICA	5110	225	108	108
69	CUBA	11086	3063	870	870
70	DOMINICA	75	5	NA	NA
71	DOMINICAN RUPUBLIC	4873	1096	275	275
72	EL-SALVADOR	2104	660	45	45
73	GREEN LAND	41045	N.A.	NA	NA
74	GRENADA	34	2	NA	NA
75	GUADELOUPE	171	20	6	6
76	GUATEMALA	10889	1440	130	130
77	HAITI	2775	780	92	92
78	HONDURAS	11209	1068	80	80
79	JAMAICA	1099	174	25	NA
80	MARTINIQUE	110	10	7	7
81	MEXICO	195820	24800	6320	6320
82	MONTSERRAT	10	2	NA	N.A.
83	NETH ANTILLE	80	8	NA	N.A.

Contd..

Table : 1.30 Countrywise Geographical Area, Arable Land and Irrigated Area in the World

(Unit " '000 Ha.)

Sl. No.	Name of the Country	Geographical Area 2003	Arable Land 2003	Irrigated Area	
				2002	2003
1	2	3	4	5	6
84	NICARAGUA	13000	1925	61	61
85	PANAMA	7552	548	43	43
86	PUERTO RICO	895	33	40	40
87	SAINT KITTS AND NEVIS	36	7	NA	N.A.
88	SANT LUCIA	62	4	3	3
89	ST.PIER MQ	24	3	NA	N.A.
90	SAINT VINCENT/GRENAI	39	7	1	1
91	TRINIDAD & TOBAGO	513	75	4	4
92	TURKS CAICOS	43	1	NA	N.A.
93	USA	962909	173450	22384	22385
94	US-VIRGIN-ISLAND	35	2	NA	N.A.
TOTAL		2273902	255177	31288	31264
SOUTH AMERICA					
95	ARGENTINA	278040	27900	1550	1550
96	BOLIVIA	109858	3050	132	132
97	BRAZIL	851488	59000	2920	2920
98	CHILE	75663	1982	1900	1900
99	COLOMBIA	113891	2293	900	900
100	ECUADOR	28356	1620	865	865
101	FLKLAND ISLAND	1217	NA	NA	N.A.
102	FRENCH GUIANA	9000	12	2	2
103	GUYANA	21497	480	150	150
104	PARAGUAY	40675	3040	67	67
105	PERU	128522	3700	1200	1200
106	SURINAME	16327	58	51	51
107	URUGUAY	17622	1370	202	210
108	VENEZUELA,BOLIVAR REPUBLIC	91205	2600	575	575
TOTAL		1783361	107105	10514	10522
ASIA					
109	AFGHANISTAN	65209	7910	2720	2720
110	ARMENIA	2980	500	286	286
111	AZERBAIJAN REPUBLIC	8660	1786	1455	1455
112	BAHRAIN	71	2	4	4
113	BANGLA DESH	14400	7976	4597	4725
114	BHUTAN	4700	108	40	40
115	BRUNEIDARUSSALAM	577	12	1	1
116	CAMBODIA	18104	3700	270	270
117	CHINA	959806	142615	54402	54596
118	CYPRUS	925	100	40	40
119	TIMOR-LESTE	1487	122	N.A.	N.A.
120	GEORGIA	6970	802	469	469
121	INDIA	328726	160519	55983	55808
122	INDONESIA	190457	21000	4500	4500

Contd..

Table : 1.30 Countrywise Geographical Area, Arable Land and Irrigated Area in the World

(Unit " '000 Ha.)

Sl. No.	Name of the Country	Geographical Area 2003	Arable Land 2003	Irrigated Area	
				2002	2003
1	2	3	4	5	6
123	IRAN	164820	16117	7600	7650
124	IRAQ	43832	5750	3525	3525
125	ISRAEL	2214	342	194	194
126	JAPAN	37790	4397	2607	2592
127	JORDAN	8878	295	75	75
128	KAZAKHSTAN	272490	22550	3556	3556
129	KOREA DEMO. REPUBLIC	12054	2700	1460	1460
130	KOREA REPUBLIC	9926	1646	880	878
131	KUWAIT	1782	15	13	13
132	KYRGYZSTAN	19990	1310	1072	1072
133	LAOS	23680	950	175	175
134	LEBANON	1040	170	104	104
135	MALAYSIA	32974	1800	365	365
136	MALDIVES	30	4	NA	N.A.
137	MANGOLIA	156650	1198	84	84
138	MYANMAR	67658	10093	1985	1870
139	NEPAL	14718	2365	1170	1170
140	OMAN	30950	37	72	72
141	PAKISTAN	79610	19458	17990	18230
142	PALLESTINE OCCUPIED TR	602	79	15	15
143	PHILIPPINES	30000	5700	1550	1550
144	QATAR	1100	18	13	N.A.
145	SAUDI ARABIA	214969	3600	1620	1620
146	SINGAPORE	68	1	NA	N.A.
147	SRI LANKA	6561	916	638	743
148	SYRIAn Arab Republic	18518	4593	1333	1333
149	TAJIKISTAN	14255	930	721	722
150	THAILAND	51312	14133	4986	4986
151	TURKEY	78356	23358	5215	5215
152	TURKMENISTAN	48810	2200	1800	1800
153	UNTD ARAB EMIRATES	8360	64	76	76
154	UZBEKISTAN	44740	4700	4281	4281
155	VIETNAM	33169	6680	3000	3000
156	YEMEN	52797	1537	500	550
TOTAL		3187775	506858	193442	193890
EUROPE					
157	ALBANIA	2875	578	346	353
158	ANDORRA	47	1	N.A.	N.A.
159	AUSTRIA	8387	1391	4	4
160	BELARUS	20760	5557	131	131
161	BELGIUM	3053	837	40	40
162	GULGARIA	11099	3323	592	588
163	BOSNIA HERZEGOVIA	5121	1004	3	3

Contd..

Table : 1.30 Countrywise Geographical Area, Arable Land and Irrigated Area in the World

(Unit " '000 Ha.)

Sl. No.	Name of the Country	Geographical Area 2003	Arable Land 2003	Irrigated Area	
				2002	2003
1	2	3	4	5	6
164	CROATIA	5654	1460	5	11
165	CZECH. REPUBLIC	7887	3062	24	24
166	DENMARK	4309	2266	448	449
167	ESTONIA	4523	545	4	4
168	FAEROE ISLAND	140	3	NA	N.A.
169	FINLAND	33815	2210	64	64
170	FRANCE	55150	18451	2600	2600
171	GERMANY	35703	11827	485	485
172	GIBRALTAR	1	NA	NA	N.A.
173	GREECE	13196	2698	1431	1453
174	HUNGARY	9303	4612	230	230
175	ICELAND	10300	7	NA	N.A.
176	IRELAND	7027	1182	NA	N.A.
177	ITALY	30134	7959	2750	2750
178	LATVIA	6459	1821	20	20
179	LIECHTENSTEN	16	4	NA	N.A.
180	LITHUINIA	6530	2926	7	7
181	LUXEMBOURG	259	62	NA	N.A.
182	MACEDONIA	2571	566	55	55
183	MALTA	32	10	2	2
184	MOLDOVA REPUBLIC	3385	1845	300	300
185	NETHERLANDS	4153	912	565	565
186	NORWAY	32376	873	127	127
187	POLAND	31269	12587	100	100
188	PORTUGAL	9198	1590	650	650
189	RUSSIAN FEDERATION	1709824	122559	4600	4600
190	ROMANIA	23839	9414	3077	3077
191	SAN MARINO	6	1	NA	N.A.
192	SLOVAKIA	4903	1433	183	183
193	SLOVENIA	2027	173	3	3
194	SPAIN	50537	13738	3780	3780
195	SWEDEN	45029	2669	115	115
196	SWITZERLAND	4128	409	25	25
197	UK	24361	5660	170	170
198	UKRAINE	60370	32480	2262	2208
199	SERBIA AND MONTENGRO	10217	3390	32	N.A.
TOTAL		2299973	284095	25230	25176
OCEANIA					
200	AMER-SAMOA	20	2	NA	N.A.
201	AUSTRALIA	774122	47600	2545	2545
202	CANTON - AND ENDERBURY LS	7	NA	NA	N.A.
203	CHRISTMAS-ISLAND	13	NA	NA	N.A.
204	COCOS ISLAND	1	NA	NA	N.A.

Contd..

Table : 1.30 Countrywise Geographical Area, Arable Land and Irrigated Area in the World

(Unit " '000 Ha.)

Sl. No.	Name of the Country	Geographical Area 2003	Arable Land 2003	Irrigated Area	
				2002	2003
1	2	3	4	5	6
205	COOK ISLAND	24	4	NA	N.A.
206	FIJI	1827	200	3	3
207	FRENCH POLYNESIA	400	3	1	1
208	GUAM	55	2	NA	N.A.
209	KIRIBATI	73	2	NA	N.A.
210	MARSHAIL ISLAND	18	2	NA	N.A.
211	MICRONESIA	70	4	NA	N.A.
212	N MARIANAS	46	6	NA	N.A.
213	NAURU	2	NA	NA	N.A.
214	NEW CALEDONIA	1858	6	10	10
215	NEW -ZEALAND	27053	1500	285	285
216	NIUE	26	3	NA	N.A.
217	NORFOLK ISLAND	4	NA	NA	N.A.
218	PALAU	46	4	NA	N.A.
219	PAPUA NEW GUINEA	46284	225	NA	N.A.
220	SAMOA	284	60	NA	N.A.
221	SOLOMON ISLAND	2890	18	NA	N.A.
222	TOKELAU	1	NA	NA	N.A.
223	TONGA	75	15	NA	N.A.
224	TUVALU	3	NA	NA	N.A.
225	VANUATU	1219	20	NA	N.A.
226	WALLIS AND FUTUNA LS	14	1	N.A.	N.A.
TOTAL		856434	49677	2844	2844
WORLD		13666906	1402317	276711	277068

SOURCE : F.A.O. Website - www.fao.org

Arable Land refers to land under temporary crops (double cropped land is counted only once) temporary meadows for mowing or pasture, land under market & kitchen gardens (including cultivation under grass), & land under temporary fallow (less than five years). The abandoned land resulting from shifting cultivation is not included in this category.

Chart 10 Statewise Distribution of Large Dams

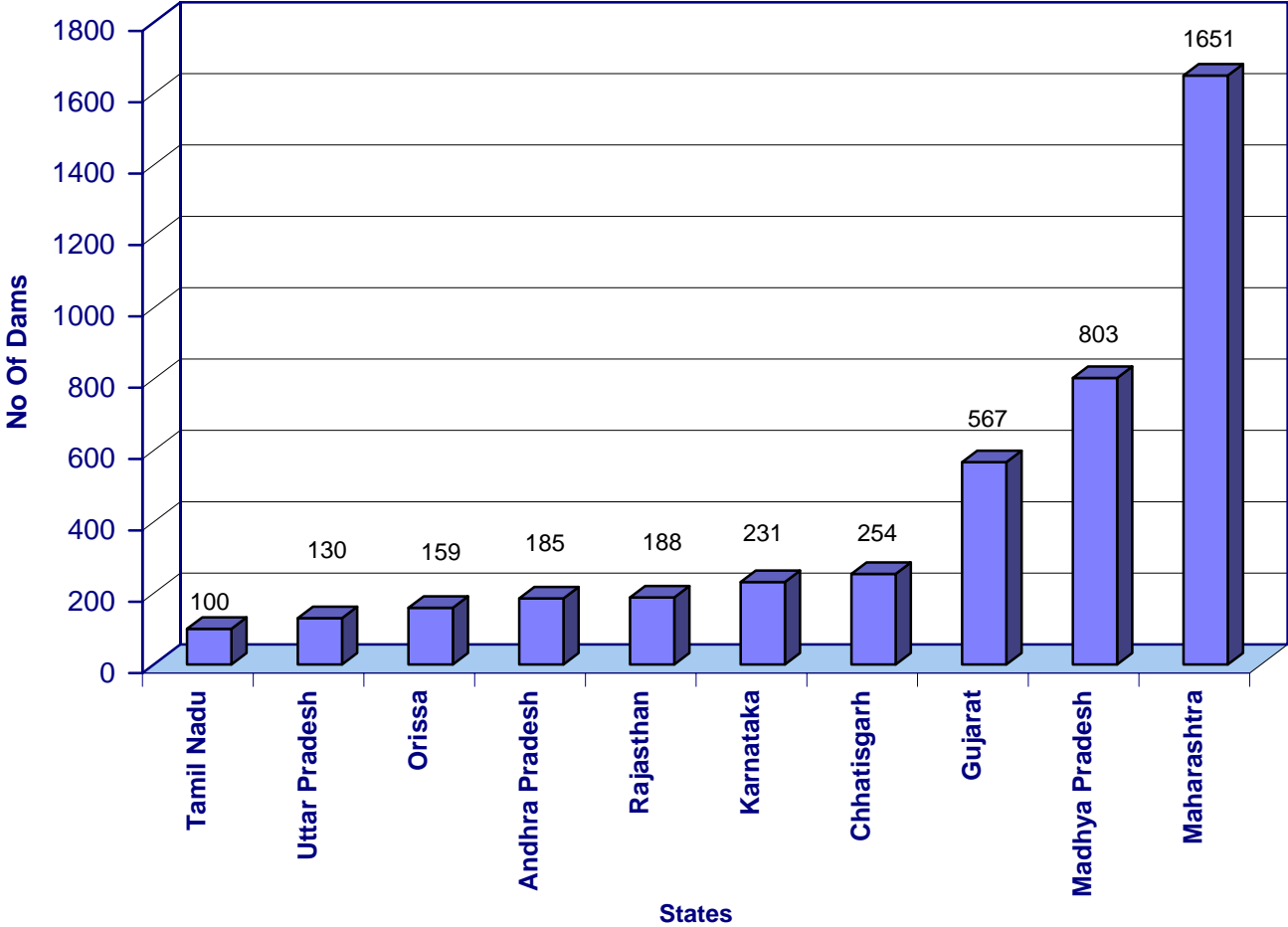


Table : 1.31 Statewise Distribution of Large Dams - Abstract

Information Compiled upto April 2002

Sl. No.	State/U.T.	Number of Dams Completed During The Period										Total Completed Dams	Under Construction	Total
		Upto 1900	1901 to 1950	1951 to 1960	1961 to 1970	1971 to 1980	1981 to 1990	1991 to 2000	2001 & Beyond	Year of Construction not Available				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
1*	Andaman & Nicobar Islands	0	0	0	0	0	0	0	0	0	0	1	1	
2	Andhra Pradesh	2	24	16	21	18	22	1	0	57	161	24	185	
3	Arunachal Pradesh	0	0	0	0	0	0	0	0	0	0	1	1	
4	Assam	0	0	0	0	0	2	0	0	0	2	1	3	
5	Bihar	1	0	1	8	6	6	1	1	0	24	5	29	
6	Chhatis garh	0	11	8	18	65	97	34	0	14	247	7	254	
7	Goa	0	0	0	0	1	4	0	0	0	5	2	7	
8	Gujarat	5	48	59	74	136	137	4	0	7	470	97	567	
9	Haryana	0	0	0	0	0	0	0	0	0	0	0	0	
10	Himachal Pradesh	0	0	0	1	2	1	1	0	0	5	1	6	
11	Jammu & Kashmir	0	0	0	0	2	2	1	0	3	8	2	10	
12	Jharkhand	0	0	8	5	10	23	0	0	2	48	28	76	
13	Karnataka	6	27	11	35	48	41	7	0	28	203	28	231	
14	Kerala	0	1	4	18	6	8	10	0	3	50	4	54	
15	Madhya Pradesh	2	85	32	62	216	296	66	0	34	793	10	803	
16	Maharashtra	20	39	23	150	620	384	167	2	48	1453	198	1651	
17	Manipur	0	0	0	0	1	1	0	0	0	2	3	5	
18	Meghalaya	0	0	1	3	2	0	0	0	0	6	0	6	
19	Mizoram	0	0	0	0	0	0	0	0	0	0	0	0	
20	Nagaland	0	0	0	0	0	0	0	0	0	0	0	0	
21	Orissa	2	0	3	6	50	72	9	0	1	143	16	159	
22	Punjab	0	0	1	0	0	3	7	0	0	11	1	12	
23	Rajasthan	22	11	26	24	28	46	22	0	1	180	8	188	
24	Sikkim	0	0	0	0	0	0	0	0	0	0	1	1	
25	Tamil Nadu	1	10	10	27	27	12	4	1	0	92	8	100	
26	Tripura	0	0	0	0	1	0	0	0	0	1	0	1	
27	Uttar Pradesh	4	25	21	23	15	14	11	0	0	113	17	130	
28	Uttranchal	0	0	0	5	4	2	0	0	0	11	6	17	
29	West Bengal	0	0	1	1	5	13	2	0	0	22	6	28	
Total		65	281	225	481	1263	1186	347	4	198	4050	475	4525	

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

* Union Territory (UT)

Table :1.32 The World's Largest Hydro Plants Ranked by Capacity

Rank Order	Name	Year Completed	Country	Rated Capacity Planned (MW)
1	2	3	4	5
1	Itaipu	1982	Brazil/Paraguay	12600
2	Tucuruí(Raul-G.Lhano)	1984	Brazil	7260
3	Grand Coulee	1942	U.S.	6809
4	Sayano-Shushensk	1989	Russia	6400
5	Krasnoyarsk	1967	Russia	6000
6	Zingo (Sergipe-Stak)	1994	Brazil	5270
7	Bratsk	1964	Russia	4500
8	Cahora Bassa	1974	Mozambique	4150
9	Boyuchany	1989	Russia	4000
10	Ust-Ilim	1977	Russia	3840
11	LLha Solteira	1973	Brazil	3200
12	Xingo (Beha State)	1994	Brazil	3000
13	Yacyreta	n/s	Argentina	2700
14	Nurek	1980	Russia	2700
15	Minamiaiki	2005	Japan	2700
16	Sao Simao	1978	Brazil	2680
17	Dherdap1	1972	Yugoslavia	2660
18	Volgograd 22nd Congress	1958	Russia	2563
19	Foz do Areia	1980	Brazil	2511
20	Luiz Ginzaga (Itaparica)	1988	Brazil	2500
21	Paulo Afonso IV	1979	Brazil	2462
22	Chicoasen	1980	Mexico	2400
23	Ataturk	1992	Turkey	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.

**Table : 1.33 The World's Largest Reservoirs -
Ranked by Capacity**

Rank Order	Name	Year Completed/	Country	Dam Type	Reservoir Capacity m ³ x 10 ³
1	2	3	4	5	6
1	Borcka	2005	Turkey	TE	418950
2	Ingapata	n/s	Ecuador	PG	413000
3	Frederick House	1938	Canada	PG/TE	392250
4	Kanev	n/s	Russia	EF/PG	262000
5	Ikizdere	2003	Turkey	TE/ER	194958
6	Kakhovskaya	1955	Russia	EF/PG	182000
7	Kariba	1959	Zimbabwe	VA	180600
8	Bratsk	1964	Russia	EF/PG	169270
9	Aswan High	1970	Egypt	EF/RF	168900
10	Akasombo	1965	Ghana	RF	153000
11	Daniel Johnson	1968	Canada	MV	141851
12	Manie-5	1968/1971	Canada	PG/TE	141851
13	Guri (Raui Leoni)	1986	Venezuela	PG/ER/TE	135000
14	Kirazlikopru	2002	Turkey	ER	100000
15	Bennett WAC	1967	Canada	TE	74300
16	Llyncelyn	1965	U.K.	TE	73965
17	Krasnoyarsk	1967	Russia	PG	73300
18	Zeya	1978	Russia	CB	68400
19	Karacal	2003	Turkey	TE	63500
20	Esch-Sur - Sure	1960	Luxembourg	VA	62000
21	LG2 CD-CH	1978/1979	Canada	ER/PG/TE	61715
22	Chapeton	n/s	Argentina	EF/PG	60600
23	LG3 TA	1979-83	Canada	TE/ER	60020
24	Ust-Ilim	1977	Russia	PG/RD	59300
25	Boguchany	1989	Russia	RF	58200

Source : International Water, Power & Dam Construction Year Book 2005.

Remarks : Dam types : VA = arch, CB = buttress, TE = earthfill, PG = gravity

: MV = multi-arch, ER = rockfill.

n/s : Year not Supplied

Table : 1:34 The World's Largest Dams - by Dam Volume

Rank Order	Name	Year Completed/ Due	Country	Type	Volume m ³ x 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 :1.35 The World's Highest Dams

Rank Order	Name	Year Completed/ Due	Country	Type	Height (m) *
1	2	3	4	5	6
1	Jafar-Mashnadi (sahid Yaqobi)	1996	Iran	EF	611
2	Rogun	U/C	Russia/Tajakistan	TE	335
3	Nurek	1980	Russia/Tajakistan	EF/TE	300
4	Grande Dixence	1961	Switzerland	PG	285
5	Inguri	1980	Russia/ Georgia	VA	272
6	Vajont	1960	Italy	VA	262
7	Tehri	2002	India	EF/RF	261
8	Chicoasen	1980	Mexico	EF/RF	261
9	Alvaro obregon	1946	Mexico	PG	260
10	Bakhtyari	n/s	Iran	MV	260
11	Khersan II	n/s	Iran	MV	260
12	Kambaratinsh	n/s	Russia	EF/RF	255
13	Kishau	n/s	India	EF/RF	253
14	Mauvoisin	1957	Switzerland	VA	250
15	Deriner	2006	Turkey	MV	247
16	Sayano-Shushensk	1989	Russia	VA/PG	245
17	Mica	1972	Canada	TE	243
18	Guavio	1990	Colombia	EF/RF	243
19	Oroville	1967	US	TE	235
20	Ermenek	n/s	Turkey	HF	235
21	El Cajon	1985	Honduras	VA	234
22	Chirkey	1978	Russia	VA	233
23	Shuibuya	2009	China	ER	233
24	Karoun 4	n/s	Iran	MV	230
25	Bhakra	1963	India	PG	226

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

Section - 2

RESOURCES UTILISATION

This section deals with data on resources utilisation such as cropping pattern, land use, irrigated area, irrigation potential created and utilised, physical achievements under different Command Area Development (CAD) Programmes, electricity consumption in agriculture etc.

Land Use Statistics

The reporting area for the country in 2003-04 was 306 million hectare (m.ha.), which was 93% of the geographical area. Except for Arunachal Pradesh, Goa, Gujarat, Himachal Pradesh, Chandigarh, Jammu & Kashmir, Manipur, Sikkim, Andaman & Nicobar and Daman and Diu the reporting areas for all other States/UTs work out to be more than 99% of their respective geographical area. Rajasthan having reporting area of 34 m.ha. was at the top followed by Maharashtra, Madhya Pradesh, Andhra Pradesh and Uttar Pradesh having reporting area of 31, 31, 27 and 24 m.ha. respectively. The share of these five States in reporting area was 48%.

([Table 2.1](#) & [Chart 11](#))

Total Cultivable Area (TCA) in the country during the year 2003-04 was 183.5 m.ha., which was about 60% of the reporting area. Four States namely Madhya Pradesh, Maharashtra, Rajasthan and Uttar Pradesh accounted for 45.5% of the TCA of the country. The TCA was 3.6% more than the Gross Sown Area (GSA) for the country as a whole for the year 2002-03 while for the year 2003-04 GSA was 3.9% more than TCA for the country as

a whole. But as far as inter-state variations during 2003-04 are concerned, TCA was more than GSA in the State of Andhra Pradesh, Arunachal Pradesh, Gujarat, Jharkhand, Karnataka, Manipur, Meghalaya, Mizoram, Nagaland, Rajasthan, Sikkim, Uttaranchal and Tamil Nadu.

During 2003-04, for the country as a whole, GSA exceeded Net Sown Area (NSA) by about 35%. Punjab (87%), West Bengal (76%) Haryana (81%) Himachal Pradesh (74%) were front runners in this aspect.

The highest cultivable area has been reported for the State of Rajasthan, which is about 26 m.ha. followed by Maharashtra, Uttar Pradesh and Madhya Pradesh having 21, 20 and 17 m.ha. of cultivable area respectively. Rajasthan had the highest cultivable area for the reason that fallow lands and culturable waste lands are more in Rajasthan as compared to other States.

The NSA of the country for the year 2003-04 was 141 m.ha. which was about 46% of the reporting area. Maharashtra had the highest NSA of 17 m.ha. followed by Rajasthan, Uttar Pradesh, Madhya Pradesh with net sown area of 17, 17 and 15 m.ha. respectively. It has been observed that NSA has increased by about 8.2 m.ha., in comparison to 2002-03 figures.

Gross Irrigated Area (GIA) of the country was 40% of the GSA. The highest NIA was in Uttar Pradesh which was 12.4 m.ha. followed by Madhya Pradesh, Rajasthan, Punjab & Andhra Pradesh with NIAs of 5.6, 5.2, 4.0 and 3.6 m.ha. respectively. These five States covered about 56% of NIA of the country. ([Table 2.1](#))

It is estimated that during 2003-04, the GSA per thousand persons was 176.67 hectare at national level. Among the States, Rajasthan ranked first with 361.2 hac. ,followed by Punjab, Madhya Pradesh, Haryana, with 312.4, 309.2 and 284.5 hectares of GSA per thousand persons respectively.

The NSA per thousand persons was 130.15 hectares at national level. It varied from 1.78 hectares in Delhi to 289.98 hectares in Rajasthan. The per thousand persons GIA at All-India level was estimated at 71.19 hectares. Amongst the States, Punjab ranked first at the level of 301.80 hectares per thousand persons. Per thousand persons net irrigated area (NIA) at national level was 51.06 hectares. As in the case of GIA, per thousand persons NIA was again highest in Punjab with 159.39 hectares.

([Table 2.2](#))

Cropping Pattern

The cropping pattern according to land use Statistics shows that the total cropped area in 2003-04 was 191m.ha.. Food-grain cultivation formed 65.5% of the total cropped area, out of which 52.6% attributed to cereals and 12.9% to pulses. Among the cereals, the share of rice and wheat in total cropped area was 22.4 and 13.9% respectively. During 2003-04, the percentage share has slightly gone up for crops namely bajra and maize. The total oilseeds accounted for 13.8% of the total cropped area. The percentage share of the net area sown to total cropped area was 74% during the year.

Analysing the cropping pattern since 1999-00, it is observed that the percentage of cropped area under wheat remained around 13-15% while

the percentage under ragi and barley remained around 0.9 and 0.4 % respectively.

Area sown more than once was 25.5% of the total cropped area in 1999-00, which has gone up to 26% of total cropped area in 2003-04.

([Table 2.3](#) & [Chart 12](#))

Irrigated Area Under Principal Crops

Gross irrigated area during 2003-04, was 76.8 m.ha. of which foodgrain crops contributed about 69% comprising cereals & millets and pulses with 64% and 4.3% respectively. Among the cereals, rice and wheat were the main irrigated crops having their shares in the gross irrigated area at 29.8 and 30.6% respectively. The next in order were sugarcane and rapeseed & mustard with 5.3% and 4.8% respectively.

Among the cereals, it is observed that irrigated area under rice is fluctuating between 21.7 and 24.1 m.ha. during the period 1999-00 to 2003-04. The irrigated area under wheat remained between 22-24 m.ha. during the same period

([Table 2.4](#))

Analysis of data of State-wise irrigated area under different selected crops for the year 2003-04 shows that the major States for rice irrigation are Uttar Pradesh, West Bengal, Andhra Pradesh and Punjab with their share as 18,13,13 and 12% respectively of the total area irrigated under rice. Irrigated area under wheat was concentrated in the States of Uttar Pradesh, Punjab, Madhya Pradesh, Haryana and Bihar with respective share of 37, 14, 13, 10 and 8%. For pulses, Madhya Pradesh had the maximum irrigated area followed by Uttar Pradesh and

Rajasthan. Sugarcane had the highest irrigated area in Uttar Pradesh having its share as 45% in the total irrigated area of this crop in the country.

([Table 2.5](#))

Based on analysis of the time series data of NSA and GSA for foodgrain and all crops for the period 1950-51 to 2003-04, it is observed that NSA has gone up by 18%, GSA (for foodgrain) by 28% and GSA (All crops) by 45%. Area sown more than once has gone up from 13.1 m.ha. to 49.8 m.ha., whereas area irrigated more than once has gone up from 1.7 m.ha. to 21.7 m.ha. during the period 1950-51 to 2003-04.

([Table 2.6](#) & [Chart 13](#))

Sources of Irrigation and Area Irrigated

The main sources of irrigation in the country are canals, tanks and wells including tubewells. Analysing the provisional data on net area irrigated by source for the year 2003-04, it is observed that wells provided 64% irrigation followed by canals with 27.5% and tanks with 3.5% at All-India level. Among the States Mizoram and Meghalaya are the only States getting 100% of its irrigation through canals followed by Jammu & Kashmir, Assam, Chhattisgarh and Orissa with 92, 88, 71 and 68% respectively.

Irrigation by tanks is highest in the State of Tamil Nadu at 18% followed by Jharkhand at 16.5%. Irrigation through wells including tubewells is common in all the States except hilly regions and North-eastern States. The States of Andhra Pradesh, Bihar, Goa, Gujarat, Haryana, Madhya Pradesh, Maharashtra, Punjab, Rajasthan, Tamil Nadu, Uttar Pradesh, Uttaranchal and West Bengal got more

than 50% of their total net irrigated area covered by wells during 2003-04. Chandigarh and Lakshdweep got 100% of their net area irrigated through wells.

([Table 2.8](#) & [Chart 14](#))

Irrigation Development in the Country

There are three types of irrigation schemes in the country namely major, medium and minor. The minor schemes are further divided into two categories viz. Surface Water Schemes and Ground Water Schemes.

Analysing the data on potential created and utilised over different Plan periods, it is observed that irrigation potential created has increased from 22.6 m.ha. in pre-plan era to 105.3 m.ha. by the end of IXth Plan (1997-2002) and it is targeted 123.2 m.ha. at the end of Xth Plan. Out of this 46.9 m.ha. is from major & medium schemes and 76.3 m.ha. from minor schemes. The percentage utilisation of total potential created was 79.7 at the end of 2001-02. It remained around 90 to 95% during different Plan periods up to the end of Annual Plans 1990-92. From VIIIth Plan onwards up to 1997-2002, the utilisation percentage continued to be in the range of 80%.

([Tables 2.09 & 2.10](#) and [Charts 15 to 18](#))

Among the States for major & medium projects, the potential created at the end of IXth Plan (1997-2002) is highest for Uttar Pradesh with 7.9 m.ha. followed by Andhra Pradesh, Maharashtra, Bihar, Punjab and Rajasthan with 3.3, 3.2, 2.7, 2.5 and 2.48 m.ha. respectively. The total share of these six States was about 60% in creation of total irrigation potential. The percentage of potential created upto the end of IX Plan to ultimate potential

through Major & Medium Irrigation projects is 63% at national level. The percentage of potential targeted to be created till end of Xth Plan (2007) to ultimate potential is 80% at national level.

Analysing the data on potential utilisation at the end of IXth Plan, it is found that about 84% of the potential created was utilised under major & medium irrigation projects at All-India level. Among the States Tamil Nadu and Tripura were at top with 100% utilisation whereas Punjab, Jammu & Kashmir, Andhra Pradesh, Rajasthan, Orissa, Kerala and West Bengal were having more than 90% utilisation.

[\(Table 2.11\)](#)

For Minor Irrigation, Potential Created and Utilised till the end of IXth Plan 1997-2002 were 68.3 and 52.9 m. ha. respectively at All-India level. The percentage of potential created till 2001-02 to ultimate potential is 83.7 at national level, while it is targeted at 93.5% at the end of Xth Plan.

The percentage of potential utilised for minor irrigation till 2001-02, corresponding to potential created was 77.5% at All-India level. Among the States it is the highest for Haryana with 94.2% potential utilisation followed by Punjab, Goa, Kerala, Rajasthan, Jammu & Kashmir and Himachal Pradesh.

[\(Table 2.14\)](#)

In a nutshell, at the end of IXth Plan (1997-2002), if all the major, medium and minor schemes are considered cumulatively, out of 140 m. ha. of ultimate potential 75.2% has been created of which 79.7% has been utilised at the national level.

[\(Table 2.15 & chart 19\)](#)

The data on irrigation potential created and utilised upto

2003-04 as available in CWC as well as the Gross Irrigated Area from the Ministry of Agriculture are presented. It is observed that if all the Major, Medium and Minor schemes are considered cumulatively, a total of 117 m.ha. of irrigation potential has been created at the All-India level upto 2003-04 out of which 74% has been utilised till 2003-04. The gross irrigated area for 2003-04 is 77 m.ha. Among the states the potential created upto 2003-04 is the highest for Uttar Pradesh at 27.6m.ha. followed by Andhra Pradesh and Maharashtra at 9.4 and 9.1 m.ha respectively. In terms of the GIA for the year 2003-04, Uttaranchal ranks first at 17.93 m.ha. followed by Punjab and Rajasthan at 7.7 and 6.4 m.ha. respectively.

[\(Table 2.16\)](#)

Major & Medium Irrigation Projects

Up to IX Plan(1997-2002), there were 228 completed major projects and another 169 ongoing projects in X Plan (2002-2007). 69 new major projects were taken up in X Plan of which 19 in Andhra Pradesh, 11 in Orissa, 6 each were in Uttar Pradesh and West Bengal and 5 in Haryana. Among the States the largest numbers of major projects completed up to the end of IX Plan were in Uttar Pradesh followed by Tamil Nadu and Maharashtra.

A total of 917 medium projects were completed up to the IX Plan and another 219 are ongoing projects in X Plan period. 136 new medium projects have been included in X Plan. The largest number of 26 new projects were identified in Gujarat. Among the States the largest number of medium projects completed till the end of IX Plan was 187 in Maharashtra followed by Andhra Pradesh, Gujarat, Madhya Pradesh,

and Rajasthan with 114, 114, 101 and 97 projects respectively.

For ongoing medium projects, the maximum number is in Maharashtra (95) followed by Jharkhand (19), Gujarat (18), Karnataka (18) and Orissa(10). Besides major & medium projects there are Extension, Renovation and Modernisation (ERM) Projects also. 87 such projects were completed up to IX Plan and 86 new projects have also been identified in X Plan. Whereas, there are 83 ongoing projects in X Plan. [\(Table 2.17\)](#)

Status of Bore Holes

For minor irrigation, various types of bore holes have been drilled in the country by the Central Ground Water Board. The main types of bore holes are Exploratory Well(EW), Observation Well(OW), Slim Hole(SH), Pizo Metre(PZ) and Deposit Well(DW). The cumulative total of these structures shows that there were 21368 structures as on 31.3.2003 in the country. Out of which DW constitutes about 18% while the remaining 82% are other types of bore holes. Rajasthan, Andhra Pradesh, Karnataka, Gujarat, Uttar Pradesh, Maharashtra and Orissa account for about 57% of the total bore holes in the country. Out of total DW schemes in the country, Rajasthan, Bihar, and Uttar Pradesh each account for about 16%, 14% and 14% respectively. [\(Table2.18\)](#)

Command Area Development

The Command Area Development (CAD) programme was started in 1974-75, as a centrally sponsored scheme to achieve speedy utilisation of irrigation potential created and also to improve productivity in

selected irrigated commands. The important activities of this programme are development of field channels, land levelling, warabandi, and field drains etc. This programme presently covers 312 projects resulting in creation of 23 M.Ha of irrigation potential out of which 16 million ha. has been utilised till the end of September 2005.

[\(Table 2.19\)](#)

The cumulative achievement since inception of the programme till the end of March 2006 shows that there has been created 17.4 m.ha. field channels, 11.10 m.ha warabandi and 1.61m.ha fielddrains.The cumulative achievement of land levelling upto March 2004 is 2.24 m.ha.

[\(Tables 2.20 to 2.23\)](#)

Analysing cumulative data for different CAD programmes for all the states,it is observed that the development up to March 2006, under field channels is the highest for Uttar Pradesh followed by Karnataka Rajasthan Bihar, Maharashtra and Madhya Pradesh. These six States accounted for 74% of the total achievement under the programme.

[\(Table 2.20\)](#)

For land levelling programme, the maximum share in the achievement upto March 2004 was attained by Karnataka followed by Maharashtra, Andhra Pradesh, Gujarat and Rajasthan. These five States together achieved 92% of the total achievement under this programme. [\(Table 2.21\)](#)

In case of warabandi, the maximum cumulative achievement up to March 2006 was reported by Uttar Pradesh, followed by Tamil Nadu, Gujarat, Rajasthan, and Orissa. These

five States accounted for 75% of the total achievement of the programme. Uttar Pradesh(5.2 lakh hec) and Maharashtra (4.3 Lakh hec.) remained the most benefited States under field drains programme up to December 2005. These two States accounted for 61% of the total achievement of the programme.

([Tables 2.22](#) and [2.23](#))

Electricity and its Consumption in Agriculture

Per capita electricity consumption in agriculture has increased from 80.08 KWH in 2002-03 to 81.20 KWH in 2003-04 which is 20.8% of the total consumption of electricity per capita.

Analysing the per capita consumption of electricity in agriculture during 2003-04, it is observed that amongst the States, Gujarat with per capita consumption of 272 kilo watt hour (KWH) was at the top followed by Haryana and Punjab at 249 KWH and 248 KWH respectively. Goa (1067 KWH) is the leading State so far as per capita total electricity consumption is concerned followed by Gujarat(918 KWH) and Punjab (903 KWH). In the U/Ts, Dadra & Nagar Haveli was at 6632 KWH followed by Daman & Diu at 5425 KWH per capita total electricity consumption.

([Tables 2.25](#) & [chart 20](#))

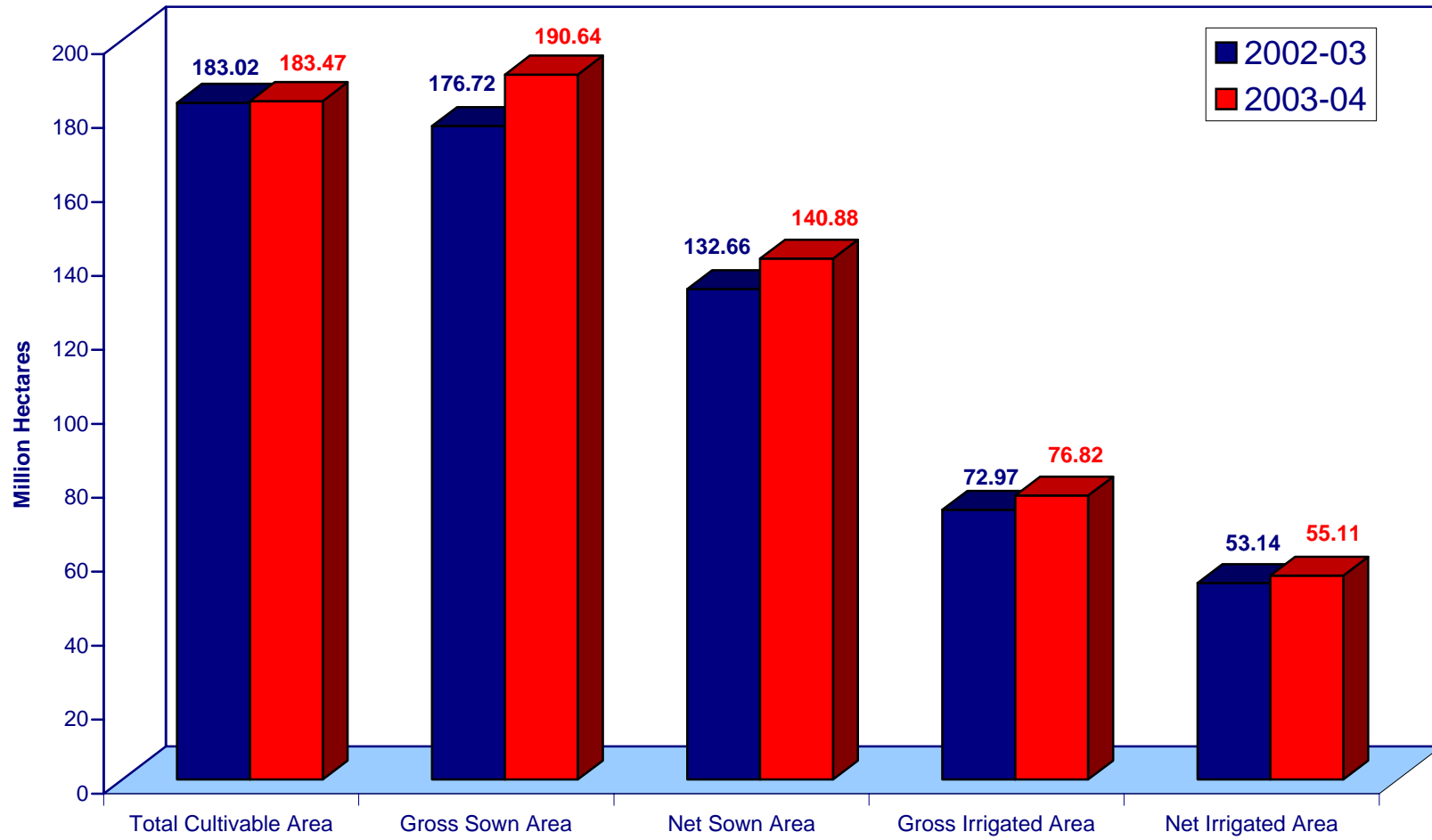
Irrigation pump sets energised as on 31.3.2004, were 14.12 million. Among the regions, southern region was on the top with its share of 42% in total irrigation pumpsets energised followed by western and northern regions with 33% and 21% respectively. Among the States, pumpsets energised were highest in Maharashtra with 2.49 million

pumpsets followed by Andhra Pradesh, Tamil Nadu and Karnataka with 2.31, 1.82 and 1.42 million respectively.

84.3% of villages were electrified till the end of 2004 as per 1991 census. Among the regions, the southern region with 99.6% of villages electrified was followed by western and northern region with 98% and 77% respectively. In 20 states in the country, almost all the villages have been electrified by the end of 2004.

([Table 2.26](#))

Chart 11 Selected Land Use Statistics - All India



**Table: 2.1 Statewise Land Use Classification and Irrigation Statistics,
2001-02 to 2003-04**

(Thousand Hectares)

SL NO.	NAME OF THE STATE/UTs.	YEAR	POPULATION ('000)	GEOGRAPHICAL AREA	REPORTING AREA (Col 7 + 10 + 14 + 17 + 18)	FOREST	NOT AVAILABLE FOR CULTIVATION		
							AREA PUT TO NON-AGRI-CULTURAL USES	BARREN & UN-CULTURABLE LAND	TOTAL
1	2	3	4	5	6	7	8	9	10
1	Andhra Pradesh	2001-02	76601	27507	27440	6199	2665	2084	4749
		2002-03	77548	27507	27440	6199	2703	2084	4787
		2003-04	78527	27507	27440	6199	2692	2084	4775
2	Arunachal Pradesh*	2001-02	1109	8374	5498	5154	5	21	26
		2002-03	1125	8374	5498	5154	5	21	26
		2003-04	1139	8374	5498	5154	5	21	26
3	Assam	2001-02	27090	7844	7850	1933	1081	1453	2533
		2002-03*	27564	7844	7850	1933	1081	1453	2533
		2003-04*	28050	7844	7850	1933	1081	1453	2533
4	Bihar	2001-02	84631	9416	9360	622	1642	436	2079
		2002-03	86261	9416	9360	622	1643	436	2079
		2003-04	87810	9416	9360	622	1645	436	2081
5	Chhattisgarh	2001-02	21167	13519	13736	6247	687	342	1029
		2002-03	21578	13519	13790	6300	614	420	1034
		2003-04	22011	13519	13790	6300	696	343	1039
6	Goa	2001-02	1376	370	361	125	37	-	37
		2002-03	1411	370	361	125	37	-	37
		2003-04	1451	370	361	125	37	-	37
7	Gujarat	2001-02	51504	19602	18639	1706	1131	2595	3726
		2002-03	52364	19602	18868	1854	1145	2608	3753
		2003-04*	53195	19602	19008	1854	1145	2608	3753
8	Haryana	2001-02	21511	4421	4372	45	425	101	526
		2002-03	21913	4421	4375	45	470	99	569
		2003-04	22296	4421	4374	45	432	100	532
9	Himachal Pradesh	2001-02	6154	5567	4543	1099	317	807	1124
		2002-03	6226	5567	4543	1099	319	806	1125
		2003-04*	6294	5567	4543	1099	319	806	1125
10	Jammu & Kashmir	2001-02	10345	22224	3781	2023*	293	289	582
		2002-03	10633	22224	3781	2023*	293	289	582
		2003-04	10935	22224	3781	2023*	293	289	582

Contd..

**Table: 2.1 Statewise Land Use Classification and Irrigation Statistics,
2001-02 to 2003-04**

(Thousand Hectares)

SL NO.	NAME OF THE STATE/UTs.	YEAR	POPULATION ('000)	GEOGRAPHICAL AREA	REPORTING AREA (Col 7 + 10 + 14 + 17 + 18)	FOREST	NOT AVAILABLE FOR CULTIVATION		
							AREA PUT TO NON-AGRI-CULTURAL USES	BARREN & UN-CULTURABLE LAND	TOTAL
1	2	3	4	5	6	7	8	9	10
11	Jharkhand	2001-02	27389	7972	7970	2333	792	573	1366
		2002-03	27853	7972	7970	2333	792	573	1366
		2003-04	28303	7972	7970	2333	792	573	1366
12	Karnataka	2001-02	53451	19179	19050	3070	1325	788	2113
		2002-03	54145	19179	19050	3070	1332	788	2120
		2003-04	54824	19179	19050	3071	1336	788	2124
13	Kerala	2001-02	32155	3886	3885	1082	392	30	422
		2002-03	32501	3886	3885	1082	393	30	423
		2003-04	32862	3886	3885	1082	396	29	425
14	Madhya Pradesh	2001-02	61646	30825	30755	8683	1860	1396	3255
		2002-03	62936	30825	30756	8681	1890	1417	3307
		2003-04	64237	30825	30756	8683	1925	1425	3350
15	Maharashtra	2001-02	98330	30771	30758	5217	1373	1722	3095
		2002-03	99829	30771	30758	5214	1380	1720	3099
		2003-04	101275	30771	30758	5214	1390	1725	3115
16	Manipur	2001-02	2431	2233	1944	1693*	26	1	27
		2002-03*	2468	2233	1939	1693*	26	1	27
		2003-04*	2499	2233	1945	1693*	26	1	27
17	Meghalaya	2001-02	2346	2243	2227	951	87	136	223
		2002-03	2380	2243	2227	951	87	136	223
		2003-04	2411	2243	2227	951	87	128	215
18	Mizoram	2001-02	906	2108	2081	1626	123	8	130
		2002-03	919	2108	2047	1542	124	8	132
		2003-04	932	2108	2085	1594	125	9	134
19	Nagaland	2001-02	2037	1658	1608	863	67	-	67
		2002-03	2068	1658	1599	863	67	-	67
		2003-04	2090	1658	1583	863	75	-	75
20	Orissa	2001-02	37184	15571	15571	5813	999	843	1842
		2002-03	37664	15571	15571	5813	999	843	1842
		2003-04	38139	15571	15571	5813	999	843	1842

Contd..

**Table: 2.1 Statewise Land Use Classification and Irrigation Statistics,
2001-02 to 2003-04**

(Thousand Hectares)

SL NO.	NAME OF THE STATE/UTs.	YEAR	POPULATION ('000)	GEOGRAPHICAL AREA	REPORTING AREA (Col 7 + 10 + 14 + 17 + 18)	FOREST	NOT AVAILABLE FOR CULTIVATION		
							AREA PUT TO NON-AGRICULTURAL USES	BARREN & UNCULTURABLE LAND	TOTAL
1	2	3	4	5	6	7	8	9	10
21	Punjab	2001-02	24656	5036	5033	306	402	32	434
		2002-03	25003	5036	5033	308	412	31	443
		2003-04	25336	5036	5033	308	429	21	451
22	Rajasthan	2001-02	57723	34224	34265	2645	1752	2521	4272
		2002-03	58940	34224	34266	2651	1765	2514	4279
		2003-04	60127	34224	34266	2661	1760	2499	4259
23	Sikkim*	2001-02	551	710	674	265	143*	107*	250
		2002-03	559	710	670	265	143*	107*	250
		2003-04	566	710	672	265	143	107*	250
24	Tamil nadu	2001-02	62730	13006	12991	2132	1998	477	2476
		2002-03	63372	13006	12991	2132	2012	478	2490
		2003-04	64019	13006	13027	2122	2113	509	2623
25	Tripura*	2001-02	3232	1049	1049	606	131	3	134
		2002-03	3277	1049	1049	606	131	3	134
		2003-04	3326	1049	1049	606	131	3	134
26	Uttaranchal	2001-02	8627	5348	5672	3465	152	310	462
		2002-03	8776	5348	5672	3468	152	312	465
		2003-04*	8925	5348	5689	4368	152	312	465
27	Uttar Pradesh	2001-02	169629	24093	24202	1689	2514	595	3109
		2002-03	173201	24093	24202	1689	2553	575	3129
		2003-04*	176765	24093	24417	1689	2553	575	3129
28	West Bengal	2001-02	81334	8875	8695	1184	1548	25	1573
		2002-03	82460	8875	8687	1194	1605	28	1633
		2003-04*	83585	8875	8854	1194	1605	28	1633
29	Andaman & Nicobar*	2001-02	363	825	746	717*	5	0	5
		2002-03	371	825	746	717*	5	0	5
		2003-04	377	825	746	717	5	0	5
30	Chandigarh	2001-02	925	11	7	0	4	-	4
		2002-03	948	11	7	0	4	-	4
		2003-04*	969	11	7	0	4	-	4

Contd..

**Table: 2.1 Statewise Land Use Classification and Irrigation Statistics,
2001-02 to 2003-04**

(Thousand Hectares)

SL NO.	NAME OF THE STATE/UTs.	YEAR	POPULATION ('000)	GEOGRAPHICAL AREA	REPORTING AREA (Col 7 + 10 + 14 + 17 + 18)	FOREST	NOT AVAILABLE FOR CULTIVATION		
							AREA PUT TO NON-AGRICULTURAL USES	BARREN & UNCULTURABLE LAND	TOTAL
1	2	3	4	5	6	7	8	9	10
31	Dadra & Nagar Haveli	2001-02	227	49	49	20	4	0	4
		2002-03	232	49	49	20	4	0	4
		2003-04*	237	49	49	20	4	0	4
32	Daman & Diu*	2001-02	163	11	2	-	-	-	-
		2002-03	167	11	2	-	-	-	-
		2003-04	170	11	2	-	-	-	-
33	Delhi	2001-02	14236	148	147	1	75	13	88
		2002-03	14681	148	147	1	75	13	88
		2003-04	15128	148	147	1	75	14	89
34	Lakshadweep	2001-02*	62	3	3	-	-	-	-
		2002-03*	63	3	3	-	-	-	-
		2003-04*	64	3	3	-	-	-	-
35	Pondicherry	2001-02	987	48	49	-	16	(a)	16
		2002-03	1000	48	49	-	17	(a)	17
		2003-04	1013	48	49	-	17	(a)	17
All India Total		2001-02	1044808	328726	305014	69511	24070	17709	41778
		2002-03	1062436	328726	305240	69645	24277	17796	42073
		2003-04	1079887	328726	305843	69700	24485	17733	42218

Contd..

**Table: 2.1 Statewise Land Use Classification and Irrigation Statistics,
2001-02 to 2003-04**

(Thousand Hectares)

SL NO.	NAME OF THE STATE/UTs.	YEAR	OTHER UNCULTIVATED LAND EXCL. FALLOW LANDS				FALLOW LANDS			NET SOWN AREA (NSA)
			PERMANENT PASTURES & OTHER GRAZING LAND	LAND UNDER MISC TREE CROPS & GROVES NOT INC. IN NET AREA SOWN	CULTUR-ABLE WASTE LAND	TOTAL	FALLOW LANDS OTH. THAN CURRENT FALLOWS	CURRENT FALLOW	TOTAL	
1	2	3	11	12	13	14	15	16	17	18
1	Andhra Pradesh	2001-02	676	277	700	1654	1421	3007	4429	10410
		2002-03	676	277	701	1654	1679	3507	5186	9615
		2003-04	676	277	701	1654	1658	3036	4693	10118
2	Arunachal Pradesh*	2001-02	4	36	37	77	47	30	77	164
		2002-03	4	36	37	77	47	30	77	164
		2003-04	4	36	37	77	47	30	77	164
3	Assam	2001-02	160	209	77	445	66	99	164	2774
		2002-03*	160	209	77	445	66	99	164	2774
		2003-04*	160	209	77	445	66	99	164	2774
4	Bihar	2001-02	18	235	46	299	135	563	697	5664
		2002-03	18	237	46	301	133	499	632	5725
		2003-04	18	238	46	302	130	513	643	5712
5	Chhattisgarh	2001-02	849	4	334	1186	231	243	474	4800
		2002-03	856	1	337	1194	235	273	508	4754
		2003-04	848	1	344	1192	232	248	480	4779
6	Goa	2001-02	1	1	55	57	-	-	-	141
		2002-03	1	1	55	57	-	-	-	141
		2003-04	1	1	55	57	-	-	-	141
7	Gujarat	2001-02	850	4	1988	2842	11	733	744	9622
		2002-03	850	4	1985	2839	11	930	941	9481
		2003-04*	850	4	1985	2839	11	930	941	9622
8	Haryana	2001-02	25	7	30	61	0	173	173	3566
		2002-03	25	6	35	67	3	233	236	3458
		2003-04	25	6	36	67	4	192	196	3534
9	Himachal Pradesh	2001-02	1519	60	122	1701	13	56	69	550
		2002-03	1518	58	122	1698	15	60	75	545
		2003-04*	1518	58	122	1698	15	60	75	545
10	Jammu & Kashmir	2001-02	125	72	140	337	8	82	90	748
		2002-03	125	72	142	339	13	91	105	733
		2003-04	125	72	142	339	12	78	90	747

Contd..

**Table: 2.1 Statewise Land Use Classification and Irrigation Statistics,
2001-02 to 2003-04**

(Thousand Hectares)

SL NO.	NAME OF THE STATE/UTs.	YEAR	OTHER UNCULTIVATED LAND EXCL. FALLOW LANDS				FALLOW LANDS			NET SOWN AREA (NSA)
			PERMANENT PASTURES & OTHER GRAZING LAND	LAND UNDER MISC TREE CROPS & GROVES NOT INC. IN NET AREA SOWN	CULTUR-ABLE WASTE LAND	TOTAL	FALLOW LANDS OTH. THAN CURRENT FALLOWS	CURRENT FALLOW	TOTAL	
1	2	3	11	12	13	14	15	16	17	18
11	Jharkhand	2001-02	88	113	274	476	783	1244	2027	1769
		2002-03	88	113	274	476	783	1244	2027	1769
		2003-04	88	113	274	476	783	1244	2027	1769
12	Karnataka	2001-02	956	302	423	1681	426	1728	2154	10031
		2002-03	952	305	421	1678	513	1832	2344	9838
		2003-04	947	301	419	1668	487	1854	2341	9847
13	Kerala	2001-02	0	14	64	78	34	79	114	2191
		2002-03	0	13	69	83	39	71	110	2189
		2003-04	0	11	67	78	41	69	110	2190
14	Madhya Pradesh	2001-02	1481	18	1218	2718	604	636	1241	14859
		2002-03	1394	19	1213	2627	626	997	1622	14518
		2003-04	1360	19	1177	2557	621	599	1220	14945
15	Maharashtra	2001-02	1250	245	915	2411	1195	1222	2417	17619
		2002-03	1249	247	915	2410	1200	1255	2455	17579
		2003-04	1249	251	917	2418	1216	1364	2580	17432
16	Manipur	2001-02	1	6	1	8	0	0	0	216
		2002-03*	1	6	1	8	0	0	0	212
		2003-04*	1	6	1	8	0	0	0	217
17	Meghalaya	2001-02	-	155	441	596	162	65	227	230
		2002-03	-	155	441	596	162	65	227	230
		2003-04	-	161	444	605	167	63	229	227
18	Mizoram	2001-02	11	19	5	35	163	36	199	91
		2002-03	9	15	10	34	206	41	247	92
		2003-04	6	15	6	27	194	38	233	98
19	Nagaland	2001-02	-	124	61	184	74	87	161	333
		2002-03	-	124	60	184	74	86	161	324
		2003-04	-	122	58	179	76	84	160	305
20	Orissa	2001-02	443	482	392	1317	434	320	754	5845
		2002-03	443	482	392	1317	434	485	919	5680
		2003-04	443	482	392	1317	434	369	803	5796

Contd..

**Table: 2.1 Statewise Land Use Classification and Irrigation Statistics,
2001-02 to 2003-04**

(Thousand Hectares)

SL NO.	NAME OF THE STATE/UTs.	YEAR	OTHER UNCULTIVATED LAND EXCL. FALLOW LANDS				FALLOW LANDS			NET SOWN AREA (NSA)
			PERMANENT PASTURES & OTHER GRAZING LAND	LAND UNDER MISC TREE CROPS & GROVES NOT INC. IN NET AREA SOWN	CULTUR-ABLE WASTE LAND	TOTAL	FALLOW LANDS OTH. THAN CURRENT FALLOWS	CURRENT FALLOW	TOTAL	
1	2	3	11	12	13	14	15	16	17	18
21	Punjab	2001-02	3	6	4	13	1	24	26	4254
		2002-03	6	5	6	17	1	22	23	4243
		2003-04	4	4	9	17	0	13	14	4243
22	Rajasthan	2001-02	1699	13	4731	6442	2321	1819	4141	16765
		2002-03	1703	12	4866	6582	3259	6688	9947	10807
		2003-04	1708	14	4547	6269	2407	1275	3683	17394
23	Sikkim*	2001-02	4	5	2	12	30	5	35	113
		2002-03	4	5	2	12	30	5	35	108
		2003-04	4	5	2	12	30	5	35	110
24	Tamil nadu	2001-02	118	271	387	777	1409	1026	2435	5172
		2002-03	118	278	389	785	1491	1503	2994	4590
		2003-04	113	283	379	776	1863	954	2817	4689
25	Tripura*	2001-02	(n)	27	1	28	1	1	2	280
		2002-03	(n)	27	1	28	1	1	2	280
		2003-04		27	1	28	1	1	2	280
26	Uttaranchal	2001-02	229	251	386	764	67	36	102	776
		2002-03	229	252	386	764	71	41	112	759
		2003-04*	229	252	386	764	71	41	112	776
27	Uttar Pradesh	2001-02	71	355	518	943	624	1026	1649	16812
		2002-03	69	342	500	911	630	1247	1877	16597
		2003-04*	69	342	500	911	630	1247	1877	16812
28	West Bengal	2001-02	4	56	38	98	28	289	318	5522
		2002-03	5	55	37	98	26	381	407	5354
		2003-04*	5	55	37	98	26	381	407	5522
29	Andaman & Nicobar*	2001-02	0	1	1	2	4	1	5	17
		2002-03	0	1	1	2	4	1	5	17
		2003-04	0	1	1	2	4	1	5	17
30	Chandigarh	2001-02	-	0	-	0	0	0	0	2
		2002-03	-	0	-	0	0	0	0	2
		2003-04*		0		0	0	0	0	2

Contd..

**Table: 2.1 Statewise Land Use Classification and Irrigation Statistics,
2001-02 to 2003-04**

(Thousand Hectares)

SL NO.	NAME OF THE STATE/UTs.	YEAR	OTHER UNCULTIVATED LAND EXCL. FALLOW LANDS				FALLOW LANDS			NET SOWN AREA (NSA)
			PERMANENT PASTURES & OTHER GRAZING LAND	LAND UNDER MISC TREE CROPS & GROVES NOT INC. IN NET AREA SOWN	CULTUR-ABLE WASTE LAND	TOTAL	FALLOW LANDS OTH. THAN CURRENT FALLOWS	CURRENT FALLOW	TOTAL	
1	2	3	11	12	13	14	15	16	17	18
31	Dadra & Nagar Haveli	2001-02	1	-	0	1	1	1	2	23
		2002-03	1	-	0	1	1	1	1	23
		2003-04*	1	-	0	1	1	1	1	23
32	Daman & Diu*	2001-02	-	-	-	-	-	-	-	2
		2002-03	-	-	-	-	-	-	-	2
		2003-04	-	-	-	-	-	-	-	2
33	Delhi	2001-02	0	1	10	11	7	10	18	29
		2002-03	0	1	10	11	7	10	18	29
		2003-04	0	1	10	11	7	12	19	27
34	Lakshadweep	2001-02*	-	-	-	-	-	-	-	3
		2002-03*	-	-	-	-	-	-	-	3
		2003-04*	-	-	-	-	-	-	-	3
35	Pondicherry	2001-02	0	1	4	5	3	1	4	24
		2002-03	0	1	4	5	2	3	5	22
		2003-04	0	1	4	5	2	3	6	21
All India Total		2001-02	10586	3370	13405	27362	10304	14643	24947	141416
		2002-03	10507	3360	13536	27403	11762	21702	33463	132656
		2003-04	10455	3369	13176	26999	11238	14805	26043	140883

Contd..

**Table: 2.1 Statewise Land Use Classification and Irrigation Statistics,
2001-02 to 2003-04**

(Thousand Hectares)

SL NO.	NAME OF THE STATE/UTs.	YEAR	TOTAL CULTIVABLE AREA (TCA)	GROSS SOWN AREA (GSA)	GROSS IRRIGATED AREA (GIA)	NET IRRIGATED AREA (NIA)	POTENTIAL		ULTIMATE IRRIGATION POTENTIAL (UIP)	PERCENTAGE		
							CREATED UPTO (PC)	UTILISED UPTO (PU)		PC TO TCA 23/19 X100	PC TO UIP 23/25 X100	GIA TO UIP 21/25 X100
1	2	3	19	20	21	22	23	24	25	26	27	28
1	Andhra Pradesh	2001-02	15816	12756	5549	4238	8740	6728	11260	55.3	77.6	49.3
		2002-03	15778	11559	4536	3614	8924	6856	11260	56.6	79.3	40.3
		2003-04	15789	12366	4781	3634	9360	7068	11260	59.3	83.1	42.5
2	Arunachal Pradesh*	2001-02	314	248	43	42®	76	46	168	24.3	45.4	25.6
		2002-03	314	255	43	42®	78	47	168	25.0	46.7	25.6
		2003-04	314	263	43	42	84	50	168	26.6	49.7	25.6
3	Assam	2001-02	3224	3984	215	172	1134	761	2870	35.2	39.5	7.5
		2002-03*	3224	3965	215	172	1153	773	2870	35.8	40.2	7.5
		2003-04*	3224	3962	215	174	749	525	2870	23.2	26.1	7.5
4	Bihar	2001-02	6642	7897	4539	3462	7423	4789	13347	111.8	55.6	34.0
		2002-03	6641	7957	4572	3462	7561	4878	13347	113.9	56.7	34.3
		2003-04	6640	7882	4567	3433	7461	4875	13347	112.4	55.9	34.2
5	Chhattisgarh	2001-02	5612	5595	1227	1151	924	761	Included in MP	16.5	NA	NA
		2002-03	5600	5446	1144	1068	982	799		17.5	NA	NA
		2003-04	5604	5707	1179	1090	1991	1243		35.5	NA	NA
6	Goa	2001-02	197	168	38	23	42	34	116	21.3	36.2	32.8
		2002-03	197	164	39	24	44	35	116	22.4	38.0	33.6
		2003-04	197	169	40	24	45	35	116	22.8	38.7	34.5
7	Gujarat	2001-02	12357	10734	3572	2994	4312	3264	6103	34.9	70.7	58.5
		2002-03	12411	10631	3637	3041	4497	3365	6103	36.2	73.7	59.6
		2003-04*	12552	11311	4173	3041	6598	4205	6103	52.6	108.1	68.4
8	Haryana	2001-02	3776	6318	5311	2938	4475	4088	4512	118.5	99.2	117.7
		2002-03	3735	6032	5199	2966	4502	4108	4512	120.5	99.8	115.2
		2003-04	3771	6388	5343	2969	4598	4171	4512	121.9	101.9	118.4
9	Himachal Pradesh	2001-02	801	956	181	102	236	195	353	29.5	66.9	51.3
		2002-03	800	945	187	124	245	201	353	30.6	69.3	53.0
		2003-04*	800	951	188	124	244	201	353	30.5	69.0	53.3
10	Jammu & Kashmir	2001-02	1050	1106	449	310	639	562	1358	60.9	47.1	33.1
		2002-03	1050	1078	434	300	681	588	1358	64.9	50.2	32.0
		2003-04	1050	1102	446	307	711	584	1358	67.7	52.3	32.8

Contd..

**Table: 2.1 Statewise Land Use Classification and Irrigation Statistics,
2001-02 to 2003-04**

(Thousand Hectares)

SL NO.	NAME OF THE STATE/UTs.	YEAR	TOTAL CULTIVABLE AREA (TCA)	GROSS SOWN AREA (GSA)	GROSS IRRIGATED AREA (GIA)	NET IRRIGATED AREA (NIA)	POTENTIAL		ULTIMATE IRRIGATION POTENTIAL (UIP)	PERCENTAGE		
							CREATED UPTO (PC)	UTILISED UPTO (PU)		PC TO TCA 23/19 X100	PC TO UIP 23/25 X100	GIA TO UIP 21/25 X100
1	2	3	19	20	21	22	23	24	25	26	27	28
11	Jharkhand	2001-02	4184	2088	223	164	354	230	Included in Bihar	8.5	NA	NA
		2002-03	4184	2060	217	164	358	233		8.6	NA	NA
		2003-04	4184	2235	230	164	834	559		19.9	NA	NA
12	Karnataka	2001-02	12910	11670	3089	2565	3875	3179	5974	30.0	64.9	51.7
		2002-03	12908	11532	2841	2450	3944	3221	5974	30.6	66.0	47.6
		2003-04	12908	11450	2702	2384	4816	3843	5974	37.3	80.6	45.2
13	Kerala	2001-02	2382	2992	432	377	1236	1119	2679	51.9	46.1	16.1
		2002-03	2381	2970	429	379	1287	1163	2679	54.1	48.0	16.0
		2003-04	2378	2954	426	384	1317	1177	2679	55.4	49.1	15.9
14	Madhya Pradesh	2001-02	17336	19044	4889	4735	7137	4976	17932	41.2	39.8	27.3
		2002-03	17373	18078	4631	4494	7289	5072	17932	42.0	40.7	25.8
		2003-04	17362	19788	5776	5631	7639	4611	17932	44.0	42.6	32.2
15	Maharashtra	2001-02	21196	22381	3894*	2975	8489	5696	8952	40.1	94.8	0.0
		2002-03	21196	22387	4005*	2971	8593	5759	8952	40.5	96.0	0.0
		2003-04	21180	22190	3831*	2944*	9106	6348	8952	43.0	101.7	0.0
16	Manipur	2001-02	223	216	40	40	205	140	604	91.8	33.9	6.6
		2002-03*	219	212	54	54	209	142	604	95.2	34.5	8.9
		2003-04*	224	217	40	40	208	144	604	92.8	34.4	6.6
17	Meghalaya	2001-02	1053	285	76	59	85	49	168	8.0	50.4	45.2
		2002-03	1053	278	76	59	85	49	168	8.0	50.4	45.2
		2003-04	1061	272	82	60	95	71	168	8.9	56.4	48.8
18	Mizoram	2001-02	314	91	17	16	13	11	75	4.1	17.2	22.7
		2002-03	361	92	17	16	14	11	75	3.8	18.3	22.7
		2003-04	351	98	18	16	13	8	75	3.7	17.5	24.0
19	Nagaland	2001-02	678	378	80	65	79	49	90	11.6	87.4	88.9
		2002-03	669	370	81	65	82	50	90	12.2	90.9	90.0
		2003-04	645	370	104	67	120	54	90	18.6	133.5	115.6
20	Orissa	2001-02	7473	8799	2546	1334*	3502	2745	8803	46.9	39.8	28.9
		2002-03	7473	7853	1712	1300*	3557	2772	8803	47.6	40.4	19.4
		2003-04	7473	8637	2518	1326	3424	2506	8803	45.8	38.9	28.6

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**Table: 2.1 Statewise Land Use Classification and Irrigation Statistics,
2001-02 to 2003-04**

(Thousand Hectares)

SL NO.	NAME OF THE STATE/UTs.	YEAR	TOTAL CULTIVABLE AREA (TCA)	GROSS SOWN AREA (GSA)	GROSS IRRIGATED AREA (GIA)	NET IRRIGATED AREA (NIA)	POTENTIAL		ULTIMATE IRRIGATION POTENTIAL (UIP)	PERCENTAGE		
							CREATED UPTO (PC)	UTILISED UPTO (PU)		PC TO TCA 23/19 X100	PC TO UIP 23/25 X100	GIA TO UIP 21/25 X100
1	2	3	19	20	21	22	23	24	25	26	27	28
21	Punjab	2001-02	4290	7941	7667	4056	9529	8839	5967	222.1	159.7	128.5
		2002-03	4276	7810	7540	4046	9565	8877	5967	223.7	160.3	126.4
		2003-04	4270	7931	7661	4046	8983	8375	5967	210.4	150.5	128.4
22	Rajasthan	2001-02	25649	20798	6744	5420	7321	6609	5128	28.5	142.8	131.5
		2002-03	25633	13218	5272	4372	7421	6691	5128	29.0	144.7	102.8
		2003-04	25638	21664	6393	5239	8886	6545	5128	34.7	173.3	124.7
23	Sikkim*	2001-02	155	124	16	9	29	21	70	19.0	42.1	22.9
		2002-03	151	119	15	9	30	21	70	19.9	42.9	21.4
		2003-04	153	121	15	9	26	17	70	16.8	36.7	21.4
24	Tamil nadu	2001-02	8265	6226	3412	2801	5392	4645	5532	65.2	97.5	61.7
		2002-03	8251	5191	2622	2310	5413	4655	5532	65.6	97.9	47.4
		2003-04	8168	5316	2479	2148	5776	3966	5532	70.7	104.4	44.8
25	Tripura*	2001-02	310	341	51	40	73	60	281	23.7	26.1	18.1
		2002-03	310	351	53	40	77	63	281	24.8	27.3	18.9
		2003-04	310	333	52	40	97	69	281	31.2	34.4	18.5
26	Uttaranchal	2001-02	1516	1221	539	346	281	186	Included in U.P.	18.6	NA	NA
		2002-03	1510	1212	532	341	285	190		18.9	NA	NA
		2003-04*	1527	1307	570	346	940	680		61.6	NA	NA
27	Uttar Pradesh	2001-02	19334	25943*	18062	12391	24635	20219	30499	127.4	80.8	59.2
		2002-03	19315	25331*	17842	12232	25160	20694	30499	130.3	82.5	58.5
		2003-04*	19530	25785	17931	12391	27646	21623	30499	141.6	90.6	58.8
28	West Bengal	2001-02	5933	9779	4947	2980	4976	3809	6918	83.9	71.9	71.5
		2002-03	5854	9454	4947	2980	5041	3850	6918	86.1	72.9	71.5
		2003-04*	6022	9707	4947	2980	5244	3560	6918	87.1	75.8	71.5
29	Andaman & Nicobar*	2001-02	24	43	-	-	↓	↓	↓	↓	↓	↓
		2002-03	24	46	-	-	↓	↓	↓	↓	↓	↓
		2003-04	24	45	-	-	↓	↓	↓	↓	↓	↓
30	Chandigarh	2001-02	2	3	2	1	↓	↓	↓	↓	↓	↓
		2002-03	2	3	2	1	↓	↓	↓	↓	↓	↓
		2003-04*	2	3	2	1	↓	↓	↓	↓	↓	↓

Contd..

**Table: 2.1 Statewise Land Use Classification and Irrigation Statistics,
2001-02 to 2003-04**

(Thousand Hectares)

SL NO.	NAME OF THE STATE/UTs.	YEAR	TOTAL CULTIVABLE AREA (TCA)	GROSS SOWN AREA (GSA)	GROSS IRRIGATED AREA (GIA)	NET IRRIGATED AREA (NIA)	POTENTIAL		ULTIMATE IRRIGATION POTENTIAL (UIP)	PERCENTAGE		
							CREATED UPTO (PC)	UTILISED UPTO (PU)		PC TO TCA 23/19 X100	PC TO UIP 23/25 X100	GIA TO UIP 21/25 X100
1	2	3	19	20	21	22	23	24	25	26	27	28
31	Dadra & Nagar Haveli	2001-02	24	30	8	8	↓	↓	↓	↓	↓	↓
		2002-03	24	30	7	7						
		2003-04*	24	30	7	7						
32	Daman & Diu*	2001-02	2	3	0	-						
		2002-03	2	3	0	-						
		2003-04	2	3	0	-						
33	Delhi	2001-02	58	52	39	29						
		2002-03	58	45	32	23						
		2003-04	57	44	31	25						
34	Lakshadweep	2001-02*	3	3	1	1						
		2002-03*	3	3	1	1						
		2003-04*	3	3	1	1						
35	Pondicherry	2001-02	33	39	34	21						
		2002-03	32	36	31	19						
		2003-04	31	37	31	17						
	Total UT's (Sl. No 29 to 35)	2001-02	146	173	84	60	103	3809	249	70.5	41.4	33.7
		2002-03	145	166	73	51	104	3810	249	72.0	41.9	29.3
		2003-04	143	165	72	51	92	3798	249	64.2	36.9	28.9
All India Total		2001-02	183138	190244	77940	55866	105317	83905	140008	57.5	75.2	55.7
		2002-03	183016	176719	72966	53148	107183	85259	140008	58.6	76.6	52.1
		2003-04	183471	190644	76820	55105	117099	87194	140008	63.8	83.6	54.9

Source : 1) Ministry of Agriculture, Directorate of Economics & Statistics. 2) Annual document 2004-05.

0 Below 500 hectares. * : Estimated

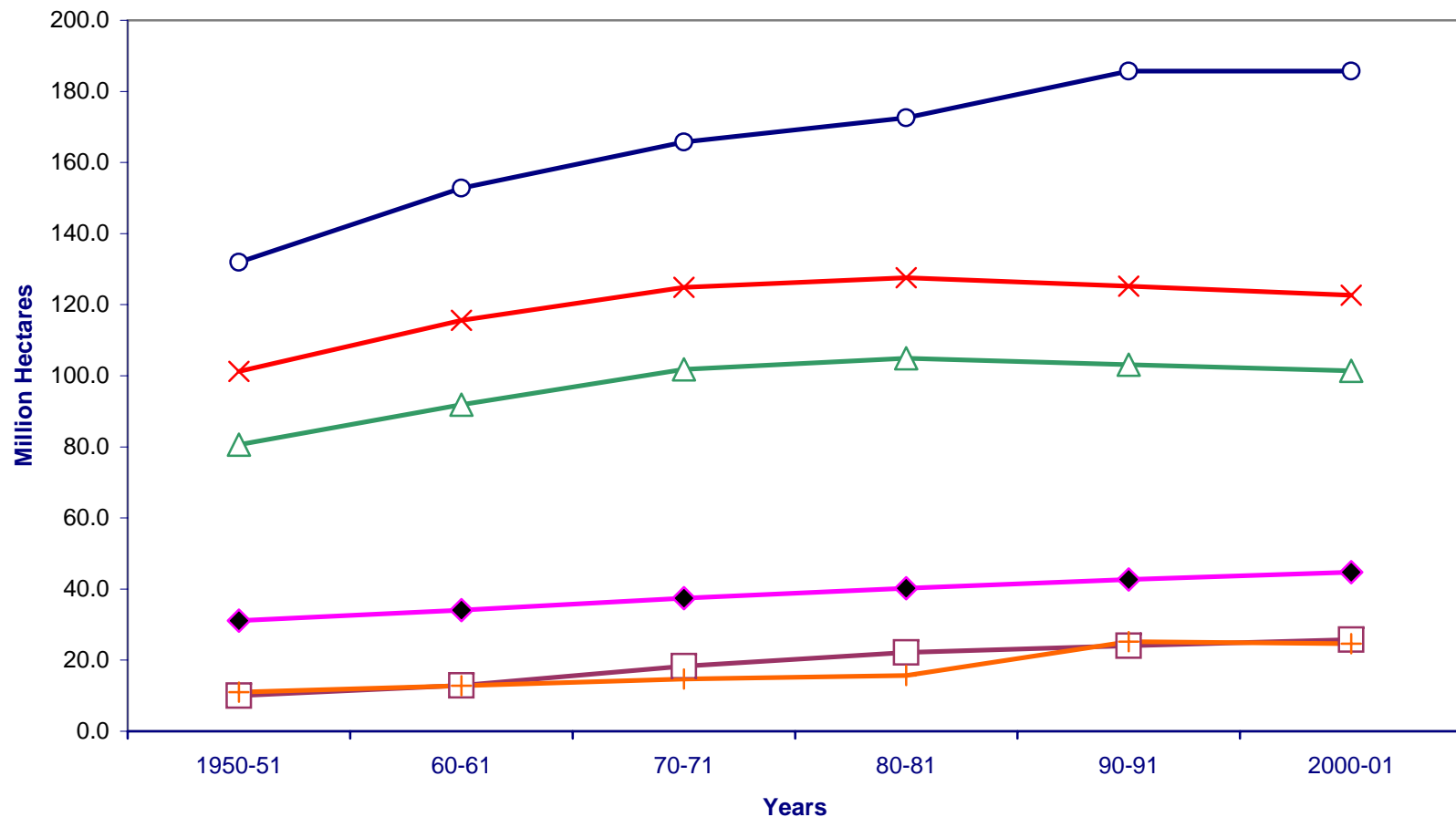
Table : 2.2 Per Capita State-Wise Land Use Statistics 2003-04

(Unit: Hectares)

Sl. No.	Name of the State/UTs.	Estimated Population 2004 1st March (000)	Gross Sown Area Per-Thousand Persons	Net Sown Area Per-Thousand Persons	Gross Irrigated Area Per-Thousand Persons	Net Irrigated Area Per-Thousand Persons
1	2	3	4	5	6	7
1	Andhra Pradesh	78973	156.59	128.12	60.54	46.02
2	Arunachal Pradesh	1141	230.50	143.73	37.69	36.81
3	Assam	27878	142.12	99.50	7.71	6.17
4	Bihar	87745	89.83	65.10	52.05	39.12
5	Chhittisgarh	21904	260.55	218.18	53.83	49.76
6	Goa	1409	119.94	100.07	28.39	17.03
7	Gujarat	53290	212.25	180.56	78.31	57.16
8	Haryana	22450	284.54	157.42	238.00	132.25
9	Himachal Pradesh	6309	150.74	86.38	29.80	19.65
10	Jammu & Kashmir	10622	103.75	70.33	41.99	28.90
11	Jharkhand	28388	78.73	62.32	8.10	5.78
12	Karnataka	54926	208.46	179.28	49.19	43.40
13	Kerala	32707	90.32	66.96	13.02	11.74
14	Madhya Pradesh	64006	309.16	233.49	90.24	87.98
15	Maharashtra	101624	218.35	171.53	37.70	28.97
16	Manipur	2251	96.40	96.40	17.77	17.77
17	Meghalaya	2409	112.91	94.23	34.04	24.91
18	Mizoram	923	106.18	106.18	19.50	17.33
19	Nagaland	2068	178.92	147.49	50.29	32.40
20	Orissa	38085	226.78	152.19	66.12	34.82
21	Punjab	25384	312.44	167.15	301.80	159.39
22	Rajasthan	59984	361.16	289.98	106.58	87.34
23	Sikkim	562	215.30	195.73	26.69	16.01
24	Tamil Nadu	64096	82.94	73.16	38.68	33.51
25	Tripura	3324	100.18	84.24	15.64	12.03
26	Uttaranchal	8927	146.41	86.93	63.85	38.76
27	Uttar Pradesh	176374	146.20	95.32	101.66	70.25
28	West Bengal	83316	116.51	66.28	59.38	35.77
29	Andaman & Nicobar	391	115.09	43.48	0.00	0.00
30	Chandigarh	1000	3.00	2.00	2.00	1.00
31	Dadra & Nagar Haveli	240	125.00	95.83	29.17	29.17
32	Daman & Diu	194	15.46	10.31	0.00	0.00
33	Delhi	15129	2.91	1.78	2.05	1.65
34	Lakshadweep	69	43.48	43.48	14.49	14.49
35	Pondicherry	1019	36.31	20.61	30.42	16.68
All India Total		1079117	176.67	130.55	71.19	51.06

Source : Central Water Commission (I.S. Organisation)

Chart 12 Decadal Changes in Cropping Pattern According to Land Use Statistics - All India



◆ Rice □ Wheat ▲ Total Cereals × Total Food Grain + Total Oil Seeds ○ Gross Cropped Area

Table : 2.3 Cropping Pattern According to Land Use Statistics - All India

(Unit : '000 Hectares)

Sl. No.	Name of the crop	1950-51	1960-61	1970-71	1980-81	1990-91	1999-00	2000-01	2001-02	2002-03	2003-04
1	2	3	4	5	6	7	8	9	10	11	12
1	Rice	31056 (23.5)	34056 (22.3)	37381 (22.6)	40237 (23.3)	42744 (22.9)	45451 (24.0)	44764 (24.1)	44893 (23.6)	42034 (23.8)	42634 (22.4)
2	Wheat	10010 (7.6)	12931 (8.5)	18293 (11.0)	22225 (12.8)	24046 (12.9)	27695 (14.6)	25797 (13.9)	26315 (13.8)	25203 (14.3)	26587 (13.9)
3	Jowar	15554 (11.8)	18426 (12.0)	16871 (10.2)	16412 (9.5)	14158 (7.6)	10343 (5.5)	9915 (5.3)	9843 (5.2)	9341 (5.3)	9360 (4.9)
4	Bajra	9744 (7.4)	11470 (7.5)	13391 (8.0)	11658 (6.8)	10735 (5.8)	9124 (4.8)	10021 (5.4)	9745 (5.1)	7932 (4.5)	10624 (5.6)
5	Maize	3250 (2.4)	4401 (2.9)	5856 (3.5)	6032 (3.5)	5893 (3.2)	6573 (3.5)	6803 (3.7)	6728 (3.5)	6761 (3.8)	7405 (3.9)
6	Ragi	2254 (1.7)	2478 (1.6)	2474 (1.5)	2504 (1.4)	2145 (1.2)	1738 (0.9)	1815 (1.0)	1735 (0.9)	1518 (0.9)	1766 (0.9)
7	Barley	3198 (2.4)	3140 (2.1)	2556 (1.6)	1799 (1.1)	972 (0.5)	746 (0.4)	789 (0.4)	714 (0.4)	703 (0.4)	739 (0.4)
8	Other cereals and Millets	5576 (4.2)	4997 (3.3)	4962 (3.0)	4033 (2.3)	2372 (1.3)	1404 (0.7)	1520 (0.8)	1339 (0.7)	1273 (0.7)	1213 (0.6)
	Total Cereals	80642 (61.1)	91899 (60.2)	101784 (61.4)	104900 (60.8)	103065 (55.4)	103073 (54.4)	101423 (54.6)	101312 (53.3)	94765 (53.6)	100328 (52.6)
9	Gram	7803 (5.9)	9274 (6.1)	7820 (4.7)	6547 (3.8)	7471 (4.0)	6315 (3.3)	5205 (2.8)	6418 (3.4)	5919 (3.3)	7139 (3.7)

Contd..

Table : 2.3 Cropping Pattern According to Land Use Statistics - All India

(Unit : '000 Hectares)

Sl. No.	Name of the crop	1950-51	1960-61	1970-71	1980-81	1990-91	1999-00	2000-01	2001-02	2002-03	2003-04
1	2	3	4	5	6	7	8	9	10	11	12
10	Tur	2228 (1.7)	2429 (1.6)	2639 (1.6)	2877 (1.7)	3600 (1.9)	3455 (1.8)	3664 (2.0)	3346 (1.8)	3362 (1.9)	3550 (1.9)
11	Other Pulses	10523 (8.0)	11962 (7.8)	12667 (7.7)	13284 (7.7)	13363 (7.2)	12393 (6.5)	12408 (6.7)	13309 (7.0)	12060 (6.8)	13826 (7.3)
	Total Pulses	20554 (15.6)	23665 (15.5)	23126 (13.9)	22708 (13.2)	24883 (13.4)	22163 (11.7)	21278 (11.5)	23073 (12.1)	21340 (12.1)	24515 (12.9)
	Total Foodgrains	101196 (76.7)	115564 (75.7)	124910 (75.4)	127608 (73.9)	126526 (68.1)	125237 (66.1)	122701 (66.1)	124385 (65.4)	116105 (65.7)	124843 (65.5)
12	Sugarcane	1757 (1.3)	2417 (1.6)	2589 (1.6)	2897 (1.7)	3908 (2.1)	4483 (2.4)	4577 (2.5)	4714 (2.5)	4770 (2.7)	4380 (2.3)
13	Condiments & Spices	1244 (0.9)	1569 (1.0)	1864 (1.1)	2065 (1.2)	2325 (1.3)	2904 (1.5)	2808 (1.5)	3250 (1.7)	3056 (1.7)	3101 (1.6)
14	Fruits and Vegetables	2249 (1.7)	2649 (1.9)	3683 (2.0)	4924 (1.7)	6692 (3.6)	8155 (4.3)	8162 (4.4)	8769 (4.6)	8957 (5.1)	9046 (4.7)
15	Groundnut	4406 (3.3)	6467 (4.2)	7552 (4.6)	6789 (3.9)	8397 (4.5)	6980 (3.7)	6734 (3.6)	6354 (3.3)	6013 (3.4)	6151 (3.0)
16	Rapeseed & Mustard	1058 (0.8)	1145 (0.8)	1415 (0.9)	2268 (1.3)	5143 (2.8)	5609 (3.0)	4172 (2.2)	5079 (2.7)	4318 (2.4)	5445 (2.9)
17	Sesamum	1957 (1.5)	1575 (1.0)	1853 (1.1)	1747 (1.0)	2413 (1.3)	1753 (0.9)	1701 (0.9)	1885 (1.0)	1556 (0.9)	2003 (1.1)

Contd..

Table : 2.3 Cropping Pattern According to Land Use Statistics - All India

(Unit : '000 Hectares)

Sl. No.	Name of the crop	1950-51	1960-61	1970-71	1980-81	1990-91	1999-00	2000-01	2001-02	2002-03	2003-04
1	2	3	4	5	6	7	8	9	10	11	12
18	Linseed	1226 (0.9)	1267 (0.8)	1199 (0.7)	1163 (0.7)	989 (0.5)	646 (0.3)	495 (0.3)	533 (0.3)	450 (0.3)	477 (0.3)
	Total Oilseeds	10968 (8.3)	12777 (8.3)	14719 (8.9)	15698 (9.1)	25152 (13.5)	26308 (13.9)	24633 (13.3)	25160 (13.2)	23933 (13.5)	26286 (13.8)
19	Cotton	5655 (4.3)	7610 (5.0)	7830 (4.7)	7752 (4.5)	7551 (4.1)	8776 (4.6)	8582 (4.6)	9083 (4.8)	7698 (4.4)	7589 (4.0)
20	Jute	561 (0.4)	633 (0.4)	753 (0.4)	940 (0.5)	783 (0.4)	861 (0.5)	842 (0.5)	887 (0.5)	877 (0.5)	891 (0.5)
21	Mesta	65 (0.1)	281 (0.2)	332 (0.2)	360 (0.2)	NIL	174 (0.1)	188 (0.1)	173 (0.1)	171 (0.1)	152 (0.1)
	Total Fibres	6667 (5.1)	8762 (5.7)	9108 (5.5)	9193 (5.3)	8667 (4.7)	9908 (5.2)	9714 (5.2)	10241 (5.4)	8836 (5.0)	8713 (4.6)
22	Tobacco	379 (0.3)	401 (0.3)	431 (0.2)	461 (0.3)	440 (0.2)	463 (0.2)	305 (0.2)	374 (0.2)	393 (0.2)	431 (0.2)
23	Other Crops	7433 (5.6)	8633 (5.7)	8486 (5.1)	9792 (5.7)	12032 (6.5)	11978 (6.3)	12805 (6.9)	13351 (7.0)	10669 (6.0)	13844 (7.3)
	Total Cropped Area	131893	152772	165791	172638	185742	189436	185705	190244	176719	190644
	Area sown more than once	13147 (10.0)	19573 (12.8)	25524 (15.4)	32625 (18.9)	42743 (23.5)	48478 (25.6)	44546 (24.0)	48828 (25.7)	44063 (24.9)	49761 (26.1)
	Net area sown	118746 (90.0)	133199 (87.2)	140267 (84.6)	140002 (81.1)	142999 (76.5)	140958 (74.4)	141160 (76.0)	141416 (74.3)	132656 (75.1)	140883 (73.9)

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

Remarks: Figures within brackets are percentages to total cropped area.

Table : 2.4 Area Irrigated by Principal Crops - All India

(Unit : '000 Hactares)

Sl. No.	Name of the crop	1950-51	1960-61	1970-71	1980-81	1990-91	1999-00	2000-01	2001-02	2002-03	2003-04
1	2	3	4	5	6	7	8	9	10	11	12
1	Rice	9844 (43.8)	12523 (44.7)	14339 (37.5)	16364 (32.9)	19469 (30.8)	24953 (31.7)	24711 (32.6)	24409 (31.3)	21703 (29.7)	22428 (29.2)
2	Jowar	463 (2.0)	655 (2.3)	614 (1.6)	768 (1.5)	794 (1.3)	817 (1.0)	791 (1.0)	752 (1.0)	735 (1.0)	699 (0.9)
3	Maize	369 (1.6)	556 (2.0)	929 (2.4)	1215 (2.4)	1162 (1.8)	1468 (1.9)	1486 (2.0)	1354 (1.7)	1324 (1.8)	1411 (1.8)
4	Wheat	3402 (15.1)	4233 (15.1)	9924 (26.0)	15553 (31.2)	19511 (30.9)	24121 (30.46)	22671 (29.9)	23054 (29.6)	22159 (30.4)	23498 (30.6)
5	Barley	1383 (6.1)	1334 (4.8)	1328 (3.5)	910 (1.8)	530 (0.8)	454 (0.6)	531 (0.7)	457 (0.6)	454 (0.6)	472 (0.6)
Total Cereals & Milliets		16378 (72.6)	20166 (72.1)	28093 (73.5)	35818 (71.9)	42258 (66.9)	52707 (66.9)	51115 (67.4)	50809 (65.2)	47259 (64.8)	49309 (64.2)
6	Gram	974 (4.3)	1107 (4.0)	1222 (3.2)	1347 (2.7)	1531 (2.4)	1747 (2.2)	1572 (2.2)	1949 (2.5)	1887 (2.6)	2156 (2.8)
Total Pulses		1939 (8.6)	1899 (6.8)	2024 (5.3)	2033 (4.1)	2608 (4.1)	2868 (3.6)	2605 (3.4)	3000 (3.8)	2904 (4.0)	3326 (4.3)
Total Foodgrains		18317 (81.2)	22065 (78.9)	30117 (78.8)	37851 (76.0)	44866 (70.0)	55575 (70.5)	53721 (70.8)	53808 (69.0)	50163 (68.7)	52635 (68.5)
7	Sugarcane	1183 (5.2)	1674 (6.0)	1874 (4.9)	2354 (4.7)	3398 (5.4)	4207 (5.3)	4279 (5.6)	4392 (5.6)	4427 (6.1)	4043 (5.3)
8	Condiments & Spices	N.A.	417 (1.5)	659 (1.7)	820 (1.6)	1100 (1.7)	1563 (2.0)	1506 (2.0)	1950 (2.5)	1770 (2.4)	1852 (2.4)
9	Total Fruits & Vegetables	889 (3.9)	477 (1.7)	991 (2.6)	1806 (3.6)	2575 (4.1)	3968 (5.0)	3914 (5.2)	4318 (5.5)	4232 (5.8)	4590 (6.0)

Contd..

Table : 2.4 Area Irrigated by Principal Crops - All India

(Unit : '000 Hactares)

Sl. No.	Name of the crop	1950-51	1960-61	1970-71	1980-81	1990-91	1999-00	2000-01	2001-02	2002-03	2003-04
1	2	3	4	5	6	7	8	9	10	11	12
10	Groundnut	N.A.	195 (0.7)	570 (1.5)	903 (1.8)	1564 (2.5)	1304 (1.7)	1167 (1.5)	1114 (1.4)	992 (1.4)	1052 (1.4)
11	Rapeseed and Mustard	N.A.	138 (0.5)	356 (0.9)	990 (2.0)	3076 (4.9)	3476 (4.4)	2608 (3.4)	3333 (4.3)	2885 (4.0)	3699 (4.8)
Total Oilseeds		1709 (7.6)	421 (1.5)	1088 (2.9)	2269 (4.6)	5761 (9.1)	6486 (8.2)	5400 (7.1)	6074 (7.8)	5521 (7.6)	6494 (8.5)
12	Cotton	465 (2.0)	967 (3.7)	1358 (3.6)	2115 (4.2)	2487 (3.9)	2878 (3.7)	2791 (3.7)	3114 (4.0)	2590 (3.5)	2591 (3.4)
13	Tobacco	N.A.	88 (0.3)	102 (0.3)	155 (0.3)	190 (0.3)	238 (0.3)	183 (0.2)	192 (0.2)	204 (0.3)	215 (0.3)
14	Other Crops	—	1871 (6.7)	2006 (5.2)	2406 (4.8)	1993 (3.2)	3898 (4.9)	4076 (5.4)	4092 (5.3)	4059 (5.6)	4400 (5.7)
Gross Irrigated		22563	27980	38195	49775	63204	78813	75870	77940	72966	76820

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

Remarks : Figures within brackets are percentages of the gross irrigated area.

Table: 2.5 Statewise Irrigated Area Under Selected Crops during 2003-04

(Unit : 000' Hectare)

Sl. No.	State/UTs	Gram	Total Pulses	Total Food-grains	Sugar-cane	Ground-nut	Rape-Seed & Mustard	Cotton	Tobacco	Total Irrigated area under all crops
1	2	12	13	14	15	16	17	18	19	20
1	Andhra Pradesh	5	29	3159	369	249	0	163	38	4781
2	Arunachal Pradesh**	-	-	43	-	-	-	-	-	43
3	Assam**	-	0	208	-	-	1	-	-	215
4	Bihar	11	15	4230	27	-	33	-	11	4567
5	Chhattisgarh	21	30	1091	10	7	4	0	0	1179
6	Goa	-	2	20	1	3	-	-	-	40
7	Gujarat**	51	103	1333	266	146	268	723	97	4173
8	Haryana	26	63	3634	159	1	487	523	0	5343
9	Himachal Pradesh**	0	5	161	2	0	1	0	0	188
10	Jammu & Kashmir	0	3	340	0	-	43	0	0	446
11	Jharkhand**	1	6	154	3	0	1	-	0	230
12	Karnataka	64	94	1287	335	165	0	38	6	2702
13	Kerala	-	-	170	4	-	-	-	-	426
14	Madhya Pradesh	1235	1404	4820	69	14	217	202	0	5776
15	Maharashtra**	209	239	1623	553	112	1	114	1	3831
16	Manipur	-	-	40	-	-	-	-	-	40
17	Meghalaya	-	-	55	-	-	7	-	-	82
18	Mizoram	-	-	16	-	-	-	-	-	18
19	Nagaland	-	-	78	-	-	4	-	-	104
20	Orissa**	-	128	1953	29	64	7	-	2	2518
21	Punjab **	5	41	6139	119	2	48	-	-	7661
22	Rajasthan	395	461	2914	6	115	1804	326	0	6393

Contd..

Table: 2.5 Statewise Irrigated Area Under Selected Crops during 2003-04

(Unit : 000' Hectare)

Sl. No.	State/UTs	Gram	Total Pulses	Total Food-grains	Sugar-cane	Ground-nut	Rape-Seed & Mustard	Cotton	Tobacco	Total Irrigated area under all crops
1	2	12	13	14	15	16	17	18	19	20
23	Sikkim **	-	0	15	-	-	-	-	-	15
24	Tamil Nadu	0	42	1400	192	172	-	44	6	2479
25	Tripura **	-	0	44	-	-	-	-	-	52
26	Uttaranchal**	0	4	396	123	0	6	0	0	570
27	Uttar Pradesh**	121	644	13969	1800	1	550	5	23	17931
28	West Bengal **	12	12	3286	8	-	203	-	31	4947
29	A&N island **	-	-	-	-	-	-	-	-	-
30	Chandigarh **	0	0	1	0	-	0	0	-	2
31	D&N Haveli**	-	0	3	2	-	-	-	-	7
32	Daman &Diu **	-	-	-	-	-	-	-	-	-
33	Delhi	0	0	28	0	-	1	-	-	31
34	Lakshadweep**	-	0	0	-	-	-	-	-	1
35	Pondicherry	-	0	26	2	1	-	0	-	31
All INDIA		2156	3326	52635	4043	1052	3699	2591	215	76820

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

Remarks : (a) Below 500 Hactares. ** - Provisional

**Chart 13 Area Sown and Irrigated
(Million Hectares)**

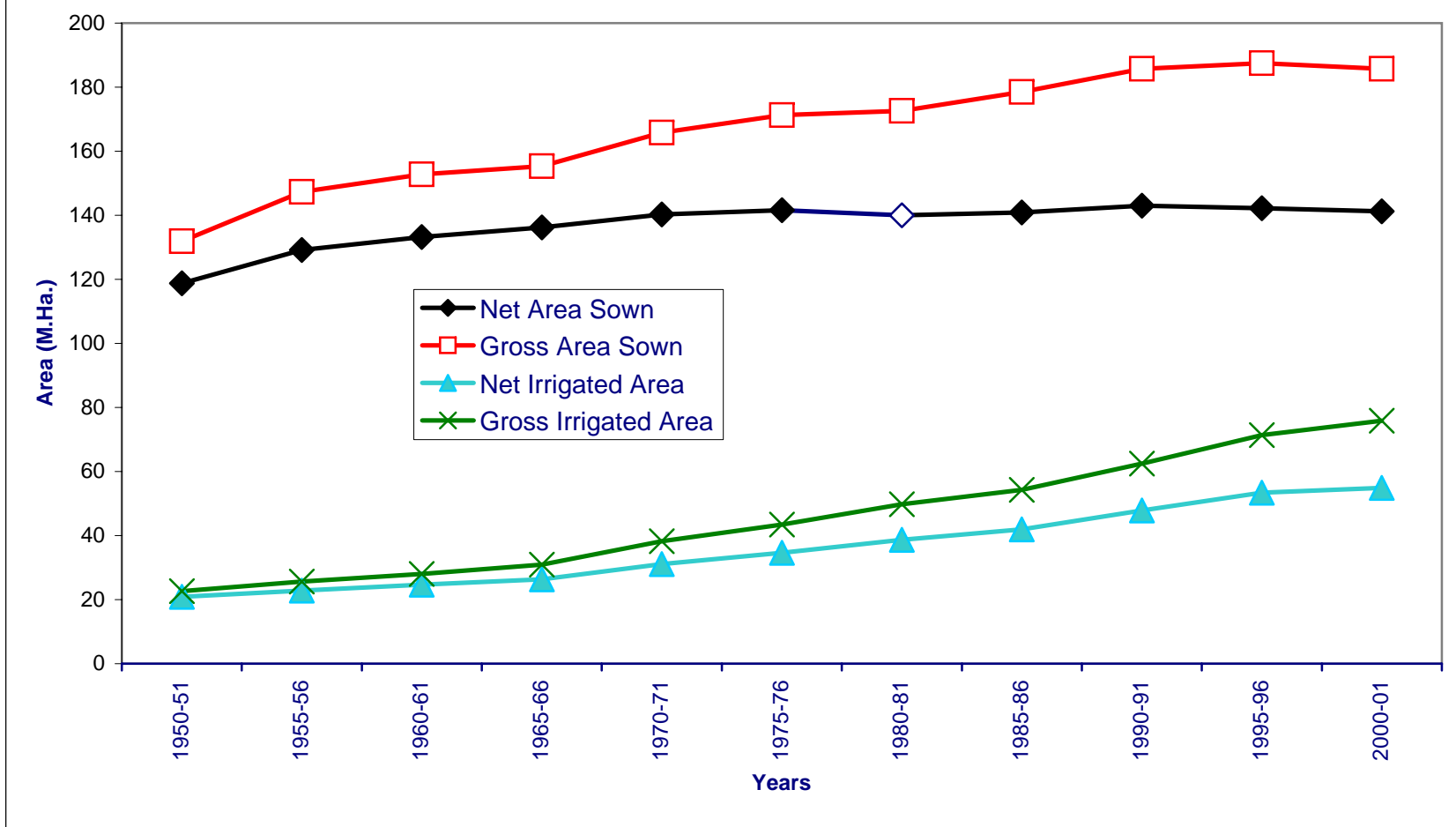


Table : 2.6 All India Area Sown and Irrigated Area

(Unit: Million Hectares)

Sl. No.	Year	AREA SOWN				IRRIGATED AREA		
		Net	Gross		Area Sown More Than Once	Net	Gross All Crops	Area More than Once
			Food Grains	All Crops				
1	2	3	4	5	6	7	8	9
1	1950-51	118.8	97.3	131.9	13.1	20.9	22.6	1.7
2	1955-56	129.2	110.6	147.3	18.2	22.8	25.6	2.8
3	1960-61	133.2	115.6	152.8	19.6	24.7	28.0	3.3
4	1965-66	136.2	115.1	155.3	19.1	26.3	30.9	4.6
5	1970-71	140.3	124.3	165.8	25.5	31.1	38.2	7.1
6	1975-76	141.6	128.2	171.3	29.6	34.6	43.4	8.8
7	1980-81	140.0	126.7	172.6	32.6	38.7	49.8	11.1
8	1985-86	140.9	128.0	178.5	37.6	41.9	54.3	12.4
9	1990-91	143.0	127.8	185.7	42.7	47.8	62.5	14.7
10	1995-96	142.2	121.0	187.5	45.3	53.4	71.4	18.0
11	1996-97	142.8	125.1	189.6	46.8	55.0	73.2	18.2
12	1997-98	142.1	125.5	190.6	48.5	55.0	73.0	18.0
13	1998-99	142.6	126.7	193.0	50.5	57.1	76.0	18.9
14	1999-00	141.0	125.2	189.4	48.5	57.1	78.8	21.7
15	2000-01	141.2	122.7	185.7	44.5	54.9	75.9	21.0
16	2001-02	141.4	124.4	190.2	48.8	55.9	77.9	22.0
17	2002-03	132.7	116.1	176.7	44.0	53.1	73.0	19.8
18	2003-04	141.0	124.8	190.6	49.8	55.1	76.8	21.7

Source : Ministry of Agriculture, Directorate of Economics & Statistics

**Table : 2.7 Statewise Sown Area and Irrigated Area
During 2001-02 and 2003-04**

(Unit: '000 Hectares)

Sl. No.	Name of the State/U.T.	YEAR	Area Sown				Irrigated Area				%age (Col.8/Col.4 * 100)
			Net	Gross (Food grains)	All Crops	more than Once (6)-(4)	Net	Gross (Food grains)	All Crops	More than Once (10)-(8)	
1	2	3	4	5	6	7	8	9	10	11	12
1	Andhra Pradesh	2001-02	10410	7056	12756	2347	4238	3913	5549	1311	40.71
		2002-03	9615	6289	11559	1944	3614	2977	4536	922	37.59
		2003-04	10118	6807	12366	2248	3634	3159	4781	1147	35.92
2	Arunachal Pradesh	2001-02	164	188	248	84	42®	43	43	1	0.00
		2002-03	164	198	255	91	42®	43	43	1	0.00
		2003-04	164	197	263	99	42	43	43	1	25.61
3	Assam (c)	2001-02	2774	2755	3984	1209	172	208	215	43	6.20
		2002-03	2774	2749	3965	1190	172	208	215	43	6.20
		2003-04	2774	2749	3962	1188	174	208	215	41	6.27
4	Bihar	2001-02	5664	7020	7897	2233	3462	4207	4539	1077	61.12
		2002-03	5725	7070	7957	2232	3462	4232	4572	1110	60.47
		2003-04	5712	6999	7882	2170	3433	4230	4567	1134	60.10
5	Chhittigarh	2001-02	4800	5175	5595	796	1151	1154	1227	76	23.98
		2002-03	4754	5043	5446	692	1068	1069	1144	76	22.47
		2003-04	4779	5268	5707	928	1090	1091	1179	89	22.81
6	Goa	2001-02	141	67	168	27	23	19	38	15	16.31
		2002-03	141	60	164	22	24	19	39	15	17.02
		2003-04	141	63	169	27	24	20	40	16	17.02
7	Gujarat	2001-02	9622	3814	10734	1112	2994	1077	3572	578	31.12
		2002-03	9481	3769	10631	1149	3041	1053	3637	596	32.07
		2003-04	9622	4075	11311	1690	3041	1333	4173	1132	31.60
8	Haryana	2001-02	3566	4253	6318	2752	2938	3600	5311	2373	82.39
		2002-03	3458	3974	6032	2574	2966	3506	5199	2233	85.77
		2003-04	3534	4298	6388	2854	2969	3634	5343	2374	84.01
9	Himachal Pradesh	2001-02	550	817	956	406	102	154	181	79	18.55
		2002-03	545	813	945	401	124	160	187	63	22.75
		2003-04	545	809	951	406	124	161	188	64	22.75
10	Jammu & Kashmir	2001-02	748	900	1106	358	310	337	449	139	41.44
		2002-03	733	881	1078	345	300	330	434	134	40.93
		2003-04	747	903	1102	355	307	340	446	139	41.10

Contd..

**Table : 2.7 Statewise Sown Area and Irrigated Area
During 2001-02 and 2003-04**

(Unit: '000 Hectares)

Sl. No.	Name of the State/U.T.	YEAR	Area Sown				Irrigated Area				%age (Col.8/Col.4 * 100)
			Net	Gross (Food grains)	All Crops	more than Once (6)-(4)	Net	Gross (Food grains)	All Crops	More than Once (10)-(8)	
1	2	3	4	5	6	7	8	9	10	11	12
11	Jharkhand	2001-02	1769	1889	2088	319	164	147	223	59	9.27
		2002-03	1769	1877	2060	291	164	142	217	53	9.27
		2003-04	1769	2041	2235	466	164	154	230	66	9.27
12	Karnataka	2001-02	10031	7116	11670	1638	2565	1624	3089	524	25.57
		2002-03	9838	6963	11532	1694	2450	1382	2841	391	24.90
		2003-04	9847	6825	11450	1604	2384	1287	2702	318	24.21
13	Kerala	2001-02	2191	338	2992	802	377	184	432	55	17.21
		2002-03	2189	322	2970	782	379	182	429	50	17.31
		2003-04	2190	298	2954	765	384	170	426	42	17.53
14	Madhya Pradesh	2001-02	14859	11783	19044	4185	4735	4075	4889	154	31.87
		2002-03	14518	11333	18078	3560	4494	3913	4631	137	30.95
		2003-04	14945	12720	19788	4843	5631	4820	5776	145	37.68
15	Maharashtra	2001-02	17619	12798	22381	4762	2975	1737	3894*	919	16.89
		2002-03	17579	12845	22387	4808	2971	1725	4005*	1034	16.90
		2003-04	17432	12000	22190	4758	2944*	1623	3831*	887	0.00
16	Manipur	2001-02	216	174	216	0	40	40	40	0	18.52
		2002-03	212	164	212	0	54	54	54	0	25.47
		2003-04	217	167	217	0	40	40	40	0	18.43
17	Meghalaya	2001-02	230	134	285	47	59	47	76	17	25.65
		2002-03	230	134	278	55	59	53	76	17	25.65
		2003-04	227	134	272	46	60	55	82	22	26.43
18	Mizoram	2001-02	91	66	91	0	16	16	17	1	17.58
		2002-03	92	69	92	0	16	16	17	1	17.39
		2003-04	98	75	98	0	16	16	18	2	16.33
19	Nagaland	2001-02	333	261	378	45	65	71	80	15	19.52
		2002-03	324	248	370	45	65	73	81	16	20.06
		2003-04	305	266	370	65	67	78	104	37	21.97
20	Orissa	2001-02	5845	6683	8799	2954	1334*	1982	2546	1212	0.00
		2002-03	5680	5992	7853	2173	1300*	1418	1712	412	0.00
		2003-04	5796	6568	8637	2841	1326	1953	2518	1192	22.88

Contd..

**Table : 2.7 Statewise Sown Area and Irrigated Area
During 2001-02 and 2003-04**

(Unit: '000 Hectares)

Sl. No.	Name of the State/U.T.	YEAR	Area Sown				Irrigated Area				%age (Col.8/Col.4 * 100)
			Net	Gross (Food grains)	All Crops	more than Once (6)-(4)	Net	Gross (Food grains)	All Crops	More than Once (10)-(8)	
1	2	3	4	5	6	7	8	9	10	11	12
21	Punjab	2001-02	4254	6159	7941	3687	4056	5997	7667	3611	95.35
		2002-03	4243	6137	7810	3568	4046	5982	7540	3494	95.36
		2003-04	4243	6302	7931	3689	4046	6139	7661	3615	95.36
22	Rajasthan	2001-02	16765	12743	20798	4033	5420	3226	6744	1324	32.33
		2002-03	10807	8628	13218	2410	4372	2612	5272	900	40.46
		2003-04	17394	13982	21664	4270	5239	2914	6393	1154	30.12
23	Sikkim	2001-02	113	77	124	11	9	16	16	7	7.96
		2002-03	108	72	119	11	9	15	15	6	8.33
		2003-04	110	72	121	11	9	15	15	6	8.18
24	Tamil Nadu	2001-02	5172	3452	6226	1054	2801	2084	3412	611	54.16
		2002-03	4590	2792	5191	601	2310	1513	2622	312	50.33
		2003-04	4689	2837	5316	627	2148	1400	2479	331	45.81
25	Tripura	2001-02	280	259	341	61	40	46	51	11	14.29
		2002-03	280	267	351	71	40	47	53	13	14.29
		2003-04	280	250	333	53	40	44	52	12	14.29
26	Uttaranchal	2001-02	776	983	1221	445	346	380	539	193	44.59
		2002-03	759	964	1212	453	341	370	532	191	44.93
		2003-04	776	1041	1307	530	346	396	570	224	44.59
27	Uttar Pradesh	2001-02	16812	20504	25943*	9131	12391	14072	18062	5671	73.70
		2002-03	16597	19810	25331*	8734	12232	13725	17842	5610	73.70
		2003-04	16812	20395	25785	8973	12391	13969	17931	5540	73.70
28	West Bengal	2001-02	5522	6807	9779	4257	2980	3286	4947	1967	53.97
		2002-03	5354	6539	9454	4099	2980	3286	4947	1967	55.66
		2003-04	5522	6602	9707	4186	2980	3286	4947	1967	53.97
29	A&N island	2001-02	17	10	43	26	-	-	-	-	0.00
		2002-03	17	12	46	29	-	-	-	-	0.00
		2003-04	17	12	45	28	-	-	-	-	0.00
30	Chandigarh	2001-02	2	2	3	1	1	1	2	1	50.00
		2002-03	2	2	3	1	1	1	2	1	50.00
		2003-04	2	2	3	1	1	1	2	1	50.00

Contd..

**Table : 2.7 Statewise Sown Area and Irrigated Area
During 2001-02 and 2003-04**

(Unit: '000 Hectares)

Sl. No.	Name of the State/U.T.	YEAR	Area Sown				Irrigated Area				%age (Col.8/Col.4 * 100)
			Net	Gross (Food grains)	All Crops	more than Once (6)-(4)	Net	Gross (Food grains)	All Crops	More than Once (10)-(8)	
1	2	3	4	5	6	7	8	9	10	11	12
31	D & N Haveli	2001-02	23	25	30	7	8	5	8	0	34.78
		2002-03	23	25	30	7	7	3	7	0	30.43
		2003-04	23	25	30	7	7	3	7	0	30.43
32	Daman & Diu	2001-02	2	3	3	1	-	-	0	-	0.00
		2002-03	2	3	3	1	-	-	0	-	0.00
		2003-04	2	3	3	1	-	-	0	-	0.00
33	Delhi	2001-02	29	45	52	23	29	36	39	10	100.00
		2002-03	29	37	45	24	23	29	32	9	79.31
		2003-04	27	37	44	15	25	28	31	6	92.59
34	Lakshadweep	2001-02	3	-	3	0	1	0	1	0	33.33
		2002-03	3	-	3	0	1	0	1	0	33.33
		2003-04	3	0	3	0	1	0	1	0	33.33
35	Pondicherry	2001-02	24	28	39	15	21	27	34	13	87.50
		2002-03	22	26	36	15	19	25	31	12	86.36
		2003-04	21	28	37	17	17	26	31	14	80.95
All India		2001-02	141416	124385	190244	48828	55866	53808	77940	22074	39.50
		2002-03	132656	116105	176719	44063	53148	50163	72966	19818	40.06
		2003-04	140883	124843	190644	49761	55105	52635	76820	21715	39.11

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

Ramarks : * Estimated

(0) Below 500 Hactares

Chart 14 Net Irrigated Area by Source - India (2003-04)
(Total = 55.10 M.Ha.)

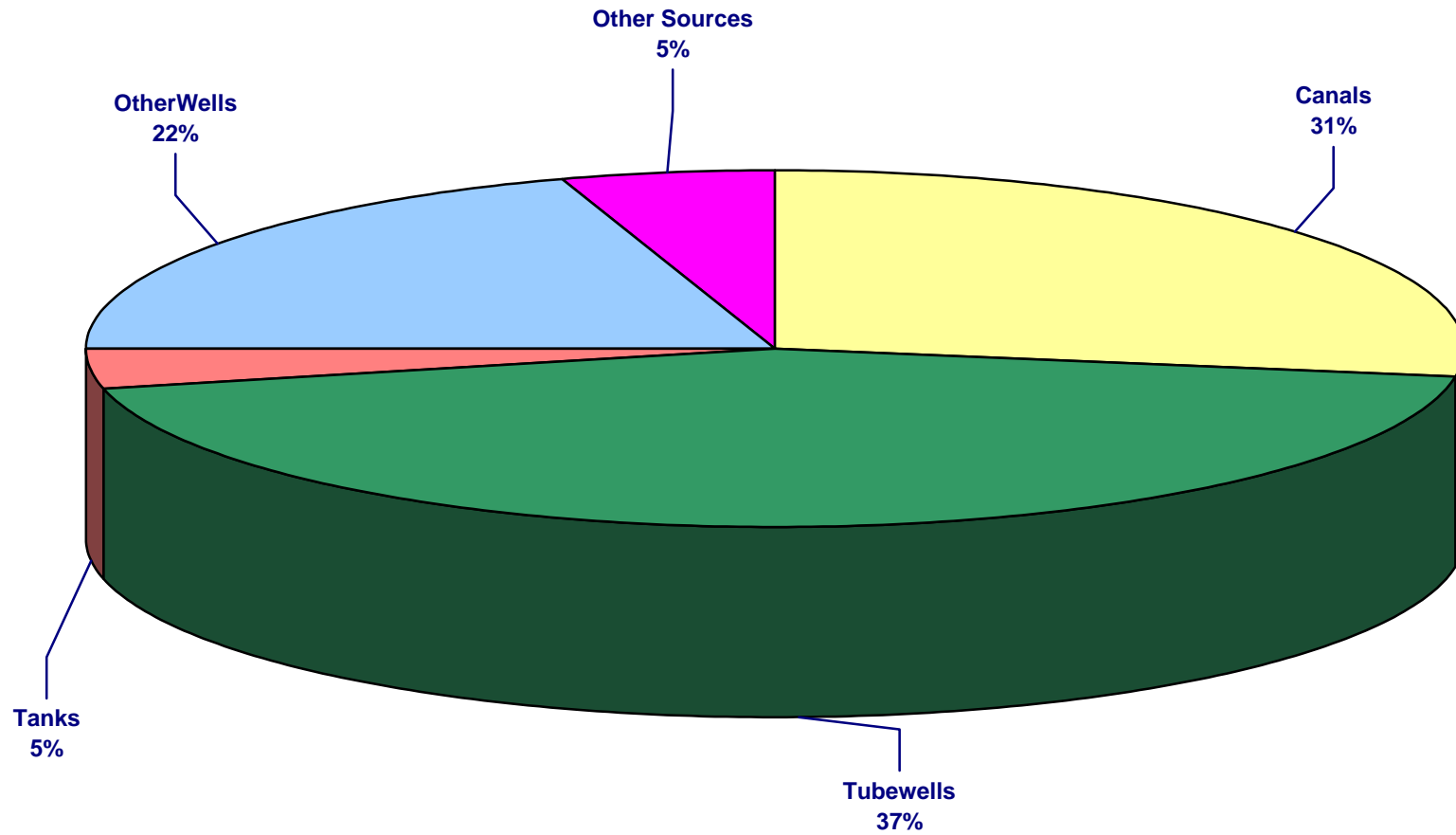


Table : 2.8 Source-wise and Statewise Net Area Irrigated in India, 2001-02 to 2003-04

(Thousand Hectares)

Sl. No.	Name of the State/UT	YEAR	Wells				Other Sources		Total Net Area (All Sources)
			T.W.	O.W.	Total Area	%	Area	%	
1	2	3	10	11	12	13	14	15	16
1	Andhra Pradesh	2001-02	1116	812	1928	45.5	180	4.2	4238
		2002-03	1153	689	1842	51.0	137	3.8	3614
		2003-04	1195	674	1869	51.4	138	3.8	3634
2	Arunachal Pradesh	2001-02	-	-	-	0.0	42	100.0	42
		2002-03	-	-	-	0.0	42	100.0	42
		2003-04	-	-	-	0.0	42	100.0	42
3	Assam	2001-02	2	-	2	1.2	20	11.6	172
		2002-03	2	-	2	1.2	20	11.6	172
		2003-04	2	-	2	1.2	20	11.6	172
4	Bihar	2001-02	2238	14	2252	65.0	133	3.8	3462
		2002-03	2236	15	2251	65.0	134	3.9	3462
		2003-04	2288	17	2251	65.6	112	3.3	3433
5	Chhittigarh	2001-02	139	39	178	15.5	84	7.3	1151
		2002-03	158	39	197	18.4	85	8.0	1068
		2003-04	159	36	195	17.9	77	7.1	1090
6	Goa	2001-02	-	19	19	82.6	-	0.0	23
		2002-03	-	20	20	83.3	-	0.0	24
		2003-04	-	20	20	83.3	-	0.0	24
7	Gujarat	2001-02	998	1592	2590	86.5	9	0.3	2994
		2002-03	1000	1637	2637	86.6	15	0.5	3046
		2003-04	1000	1637	2637	86.6	15	0.5	3046
8	Haryana	2001-02	1502	0	1502	51.1	14	0.5	2938
		2002-03	1522	-	1522	51.3	11	0.4	2966
		2003-04	1562	-	1562	52.6	12	0.4	2969
9	Himachal Pradesh	2001-02	10	3	13	12.7	85	83.3	102
		2002-03	11	3	14	11.3	108	87.1	124
		2003-04	11	1	12	9.7	108	87.1	124
10	Jammu & Kashmir	2001-02	1	1	2	0.6	21	6.8	310
		2002-03	1	1	2	0.7	20	6.7	300
		2003-04	1	0	1	0.3	19	6.2	307
11	Jharkhand	2001-02	11	64	75	45.7	45	27.4	164
		2002-03	11	64	75	45.7	45	27.4	164
		2003-04	11	64	75	45.7	45	27.4	164
12	Karnataka	2001-02	574	480	1054	41.1	364	14.2	2565
		2002-03	737	448	1185	48.4	310	12.7	2450
		2003-04	774	391	1165	48.9	328	13.8	2384
13	Kerala	2001-02	30	86	116	30.8	111	29.4	377
		2002-03	15	101	116	30.6	115	30.3	379
		2003-04	16	106	122	31.8	114	29.7	384
14	Madhya Pradesh	2001-02	1020	2019	3039	64.2	722	15.2	4735
		2002-03	1110	1878	2988	66.5	665	14.8	4494
		2003-04	1501	2233	3734	66.3	820	14.6	5631
15	Maharashtra	2001-02	-	1923	1923	64.6	-	0.0	2975
		2002-03	-	1931	1931	65.0	-	0.0	2971
		2003-04	-	1902	1902	64.6	-	0.0	2944

Contd..

Table : 2.8 Source-wise and Statewise Net Area Irrigated in India, 2001-02 to 2003-04

(Thousand Hectares)

Sl. No.	Name of the State/UT	YEAR	Wells				Other Sources		Total Net Area (All Sources)
			T.W.	O.W.	Total Area	%	Area	%	
1	2	3	10	11	12	13	14	15	16
16	Manipur	2001-02	-	-	-	0.0	40	100.0	40
		2002-03	-	-	-	0.0	54	100.0	54
		2003-04	-	-	-	0.0	40	100.0	40
17	Meghalaya	2001-02	-	-	-	0.0	-	0.0	59
		2002-03	-	-	-	0.0	-	0.0	59
		2003-04	-	-	-	0.0	-	0.0	60
18	Mizoram	2001-02	-	-	-	0.0	-	0.0	16
		2002-03	-	-	-	0.0	-	0.0	16
		2003-04	-	-	-	0.0	-	0.0	16
19	Nagaland	2001-02	-	-	-	0.0	65	100.0	65
		2002-03	-	-	-	0.0	65	100.0	65
		2003-04	-	-	-	0.0	67	100.0	67
20	Orissa	2001-02	75	63	138	10.3	189	14.2	1334
		2002-03	73	61	134	10.3	184	14.2	1300
		2003-04	74	62	136	10.3	188	14.2	1326
21	Punjab	2001-02	3084	-	3084	76.0	3	0.1	4056
		2002-03	3076	-	3076	76.0	3	0.1	4046
		2003-04	3076	-	3076	76.0	3	0.1	4046
22	Rajasthan	2001-02	1163	2653	3816	70.4	47	0.9	5420
		2002-03	1345	2032	3377	77.2	27	0.6	4372
		2003-04	1364	2446	3810	72.7	55	1.0	5239
23	Sikkim	2001-02	-	-	-	0.0	9	100.0	9
		2002-03	-	-	-	0.0	9	100.0	9
		2003-04	-	-	-	0.0	9	100.0	9
24	Tamilnadu	2001-02	237	1211	1448	51.7	14	0.5	2801
		2002-03	243	1020	1263	54.7	11	0.5	2310
		2003-04	304	994	1298	60.4	15	0.7	2148
25	Tripura	2001-02	-	2	2	5.0	24	60.0	40
		2002-03	-	2	2	5.0	24	60.0	40
		2003-04	-	2	2	5.0	24	60.0	40
26	Uttaranchal	2001-02	193	19	212	61.3	40	11.6	346
		2002-03	196	12	208	61.0	36	10.6	341
		2003-04	193	19	212	61.3	40	11.6	346
27	Uttar Pradesh	2001-02	8935	436	9371	75.6	206	1.7	12391
		2002-03	8821	430	9251	75.6	203	1.7	12232
		2003-04	8935	436	9371	75.6	206	1.7	12391
28	West Bengal	2001-02	1664	52	1716	57.6	250	8.4	2980
		2002-03	1664	52	1716	57.6	250	8.4	2980
		2003-04	1664	52	1716	57.6	250	8.4	2980
29	A & N Islands	2001-02	-	-	-	-	-	-	-
		2002-03	-	-	-	-	-	-	-
		2003-04	-	-	-	-	-	-	-
30	Chandigarh	2001-02	1	-	1	100.0	-	0.0	1
		2002-03	1	-	1	100.0	-	0.0	1
		2003-04	1	-	1	100.0	-	0.0	1

Contd..

**Table : 2.8 Source-wise and Statewise Net Area
Irrigated in India, 2001-02 to 2003-04**

(Thousand Hectares)

Sl. No.	Name of the State/UT	YEAR	Wells				Other Sources		Total Net Area (All Sources)
			T.W.	O.W.	Total Area	%	Area	%	
1	2	3	10	11	12	13	14	15	16
31	Dadra & Nagar Haveli	2001-02	0	2	2	25.0	4	50.0	8
		2002-03	0	2	2	28.6	3	42.9	7
		2003-04	0	2	2	28.6	3	42.9	7
32	Daman & Diu	2001-02	-	-	-	-	-	-	-
		2002-03	-	-	-	-	-	-	-
		2003-04	-	-	-	-	-	-	-
33	Delhi	2001-02	24	-	24	82.8	2	6.9	29
		2002-03	19	-	19	82.6	2	8.7	23
		2003-04	21	0	21	84.0	1	4.0	25
34	Lakshadweep	2001-02	-	1	1	100.0	-	0.0	1
		2002-03	-	1	1	100.0	-	0.0	1
		2003-04	-	1	1	100.0	-	0.0	1
35	Pondicherry	2001-02	13	-	13	61.9	0	0.0	21
		2002-03	12	-	12	63.2	0	0.0	19
		2003-04	15	-	15	88.2	2	11.8	17
ALL INDIA		2001-02	23030	11490	34520	61.8	2724	4.9	55866
		2002-03	23404	10436	33840	63.7	2578	4.9	53148
		2003-04	24169	11096	35265	64.0	2752	5.0	55105

Source : Ministry of Agriculture, Directorate of Economics & Statistics

Note : (0) : Below 500 hectares

Total may not tally due to rounding off.

Remarks : Percentage are given with respect to total Net Irrigated Area in the States / UT.

Chart 15 Irrigation Potential Created (M.Ha.)

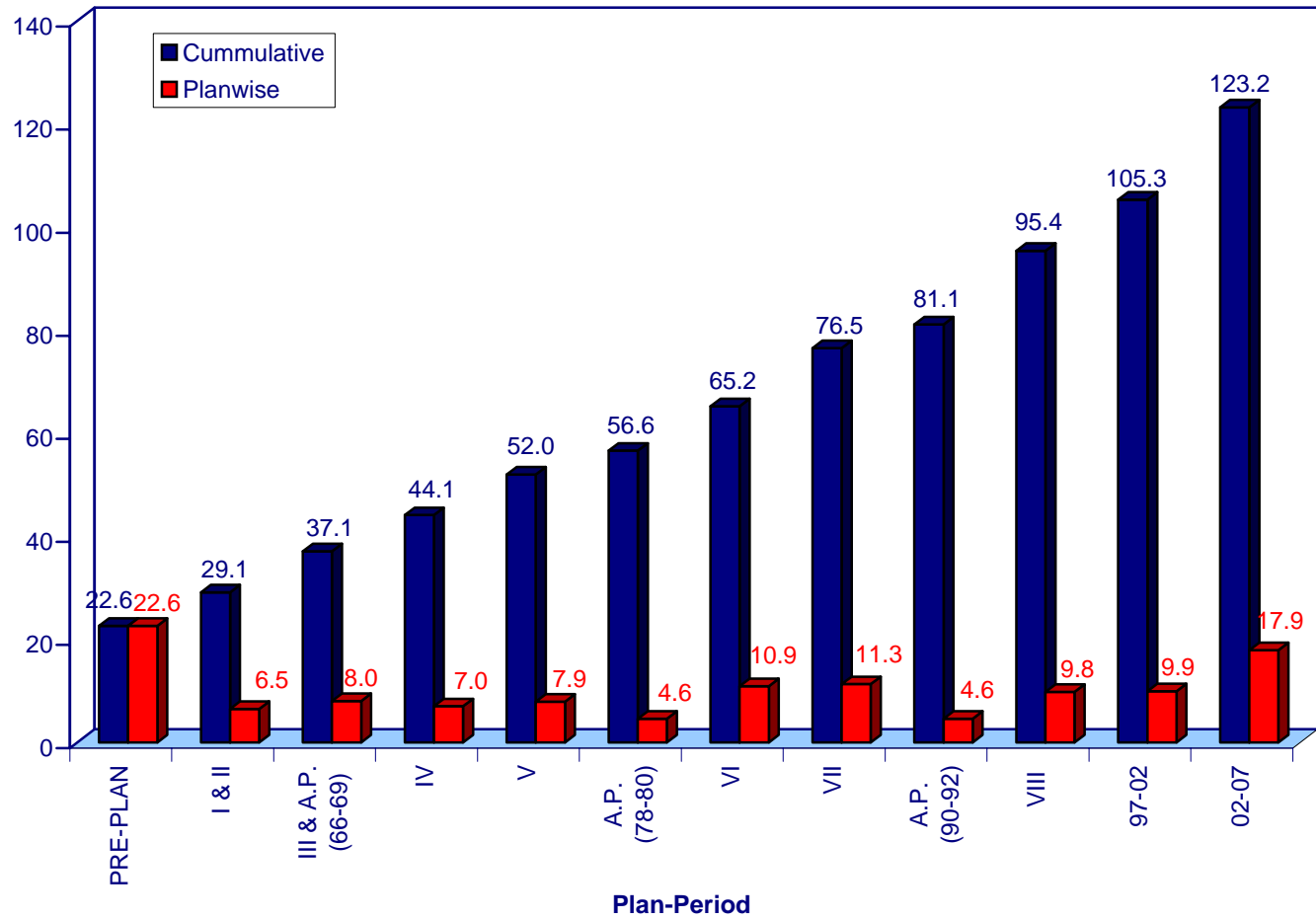


Chart 16 Irrigation Potential Utilised (M.Ha.)

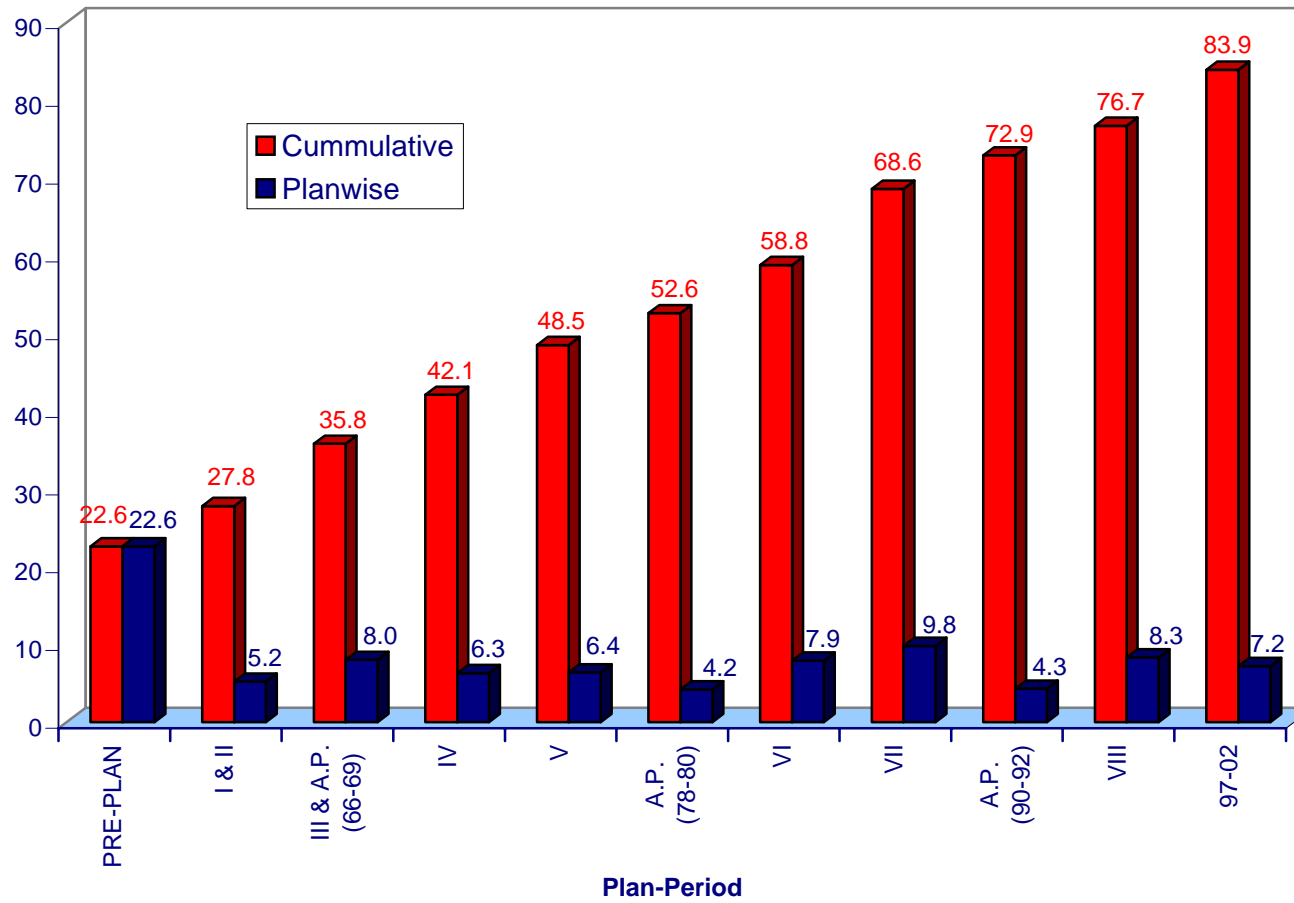


Table : 2.9 Plan-wise Irrigation Potential Created and Utilised in India

(Unit : 000 Hectare)

Sl. No.	Period	Major & Medium Irrigation		Minor Irrigation						Total (Major, Medium & Minor)	
		Surface Water		Surface Water		Ground Water		Surface & Ground Water		P	U
		P	U	P	U	P	U	P	U		
1	2	3	4	5	6	7	8	9	10	11	12
1.	Pre-plan (upto 1951)	9705	9705	6401	6401	6500	6500	12901	12901	22606	22606
2.	First Plan(1951-56)	2486	1280	29	29	1130	1130	1159	1159	3645	2439
3.	Second Plan(1956-61)	2143	2067	24	24	647	647	671	671	2814	2738
4.	Third Plan(1961-66)	2231	2123	26	26	2243	2243	2269	2269	4500	4392
5.	Annual Plans(1966-69)	1530	1576	32	32	1988	1988	2020	2020	3550	3596
6.	Fourth Plan (1969-74)	2608	1937	450	450	3930	3930	4380	4380	6988	6317
7.	Fifth Plan(1974-78)	4014	2475	538	538	3362	3362	3900	3900	7914	6375
8.	Annual Plans(1978-80)	1895	1482	500	500	2200	2200	2700	2700	4595	4182
9.	Sixth Plan(1980-85)	1083	929	1698	1011	5823	4238	7521	5249	8604	6178
10.	Seventh Plan (1985-90)	2225	1893	1289	957	7797	6914	9086	7871	11311	9764
11.	Annual Plans (1990-92)	821	848	470	321	3273	3097	3743	3418	4564	4266
12.	Eighth Plan(1992-97)	2216	2126	843	596	6702	5656	7545	6252	9761	8378
13.	Ninth Plan(1997-02)	4089	2569	1472	844	4320	3762	5792	4606	9881	7175
14.	Xth Plan (2002-07) Target *	9926	6188	3000	N.A.	5000	N.A.	8000	N.A.	17926	N.A.

Source : Central Water Commission (P&P Directorate), MOWR. (Minor Irrigation Division) and Planning Commission.

P - Potential Created U - Potential Utilised Totals may not tally due to rounding off.

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

* : As per Mid Term Appraisal of Tenth Plan, the targets for Major & Medium & Minor Irrigation have been scaled down to 6.5 M.ha. & 4.0 M.ha respectively.

Chart 17 Planwise Irrigation Potential Created and Utilised (Cumulative)

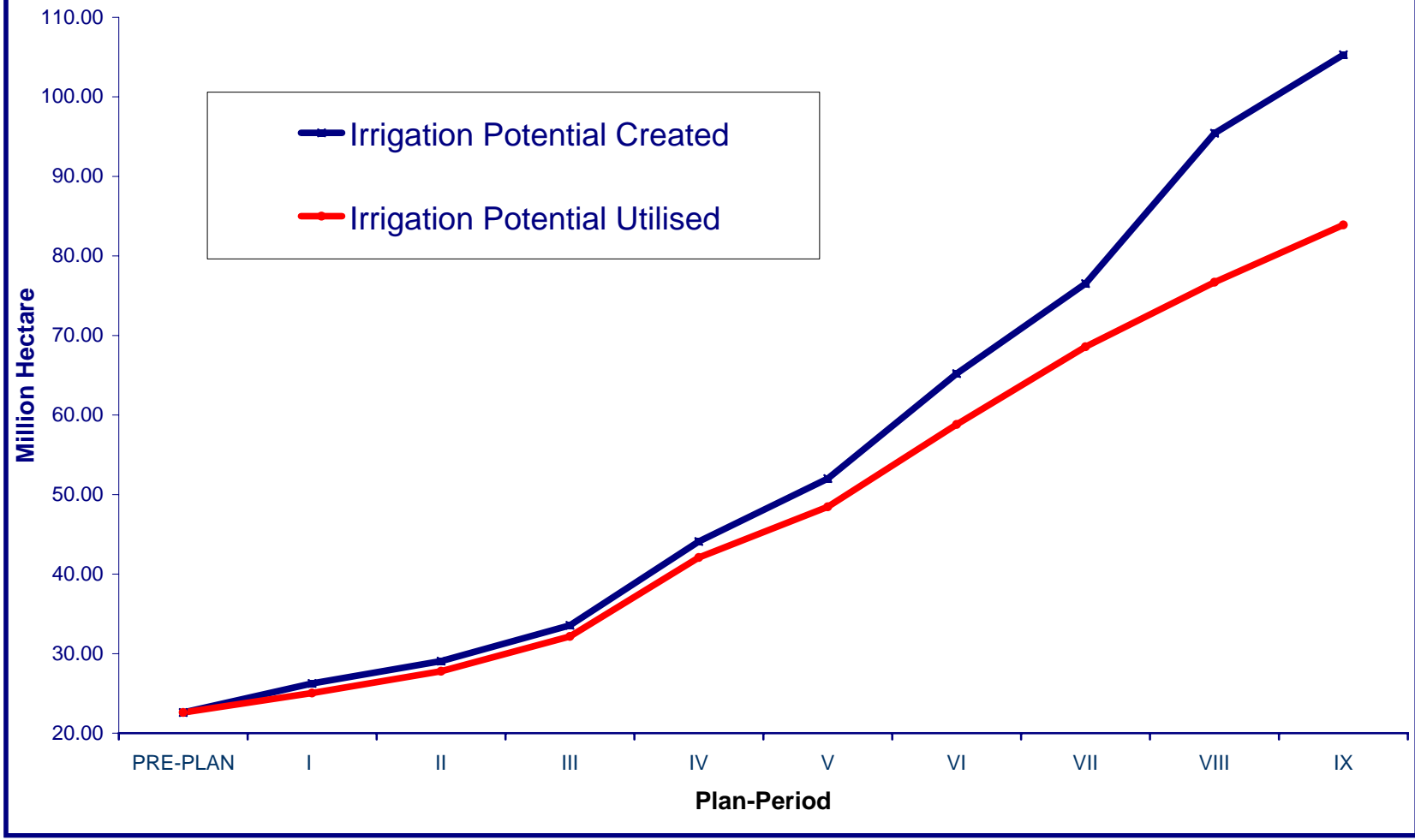


Chart 18 Planwise and Schemewise Irrigation Potential Utilised (Cumulative)

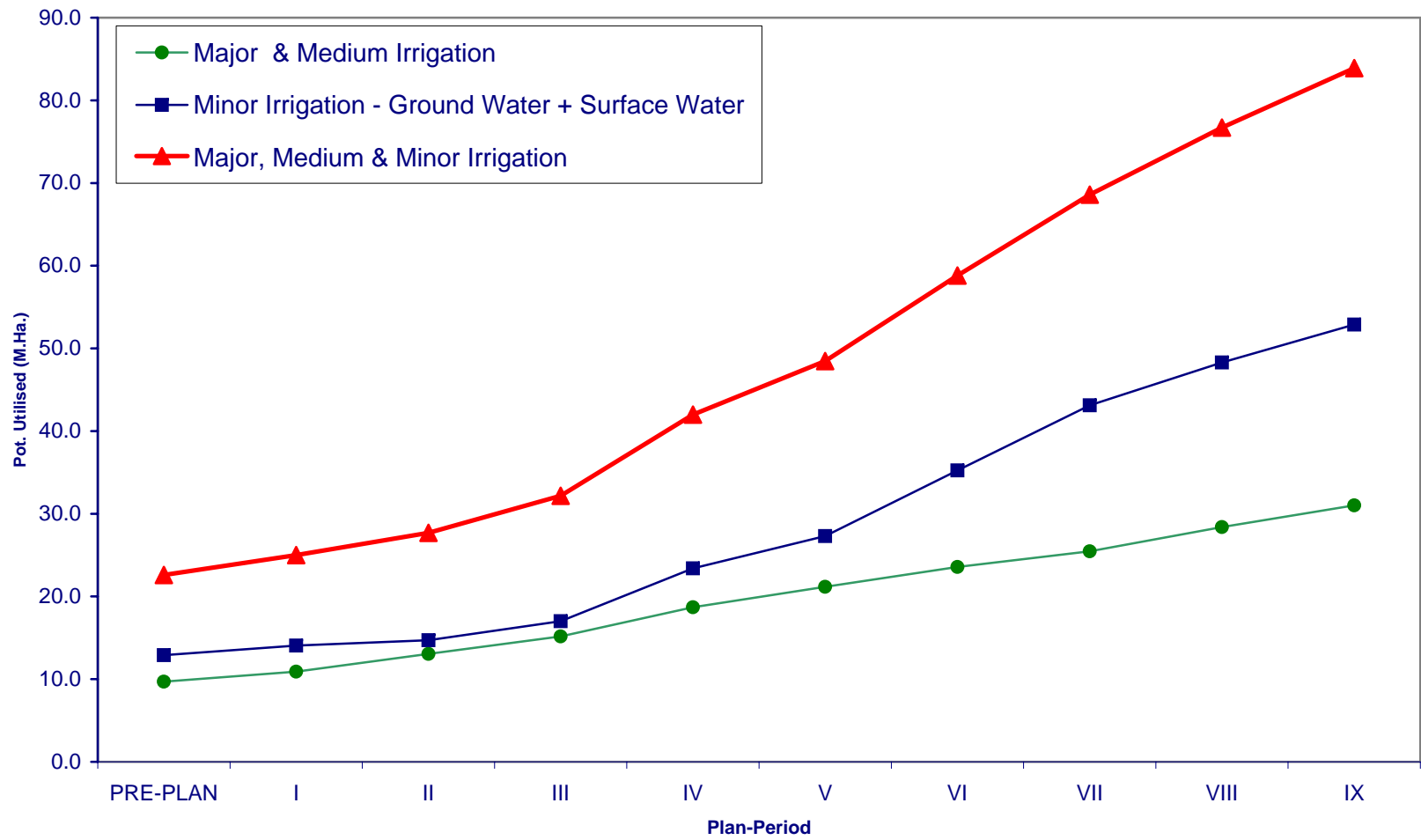


Table :2.10 Planwise Irrigation Potential Created and Utilised in India (Cumulative)

(Unit : 000 Hectare)

Sl. No.	Period	Major & Medium Irrigation		Minor Irrigation						Total (Major, Medium & Minor)		Percentage Utilisation	Gross Area Irrigated as per Statistics
		Surface Water		Surface Water		Ground Water		Surface & Ground Water		P	U		
		P	U	P	U	P	U	P	U				
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1.	Pre-plan (Upto 1951)	9705	9705	6401	6401	6500	6500	12901	12901	22606	22606	100.00	22563
2.	First Plan(Upto 1951-56)	12191	10985	6430	6430	7630	7630	14060	14060	26251	25045	95.41	25642
3.	Second Plan(Upto 1956-61)	14334	13052	6454	6454	8277	8277	14731	14731	29065	27783	95.59	27980
4.	Third Plan(Upto 1961-66)	16565	15175	6480	6480	10520	10520	17000	17000	33565	32175	95.86	30901
5.	Annual Plans(Upto 1966-69)	18095	16751	6512	6512	12508	12508	19020	19020	37115	35771	96.38	35483
6.	Fourth Plan (Upto 1969-74)	20703	18688	6962	6962	16438	16438	23400	23400	44103	42088	95.43	40283
7.	Fifth Plan(Upto 1974-78)	24717	21163	7500	7500	19800	19800	27300	27300	52017	48463	93.17	46080
8.	Annual Plans(Upto 1978-80)	26612	22645	8000	8000	22000	22000	30000	30000	56612	52645	92.99	49214
9a.	Sixth Plan(Upto 1980-85)-Original	30013	25330	9697	9010	27823	26238	37520	35248	67533	60578	89.70	54529
9b.	Sixth Plan(Upto 1980-85) Reappraised	27695	23574	9697	9010	27823	26238	37520	35248	65215	58822	87.10	54529
10.	Seventh Plan (Upto 1985-90) \$	29920	25467	10986	9968	35619	33152	46605	43120	76525	68587	89.63	61850
11.	Annual Plans (Upto 1990-92)	30741	26315	11456	10289	38892	36249	50348	46538	81089	72853	89.84	65680
12a	Eighth Plan (Upto 1992-97) Original	32954	28410	12299	10885	45594	41905	57893	52790	90847	81200	89.38	73246 Pr.
12b	Eighth Plan (Upto 1992-97) Reappraised @	32954	28410	12189	8201	50290	40088	62479	48289	95433	76699	80.37	73246 Pr.
13	Ninth Plan (upto 1997-02)	37046	31010	13661	9045	54610	43850	68271	52895	105317	83905	79.67	78328 Pr.
14	Tenth Plan (Upto 2002-07) Target	46972	37198	16661	N.A.	59610	N.A.	76271	N.A.	123243	N.A.	N.A.	N.A.

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

P - Potential Created U - Potential Utilised Totals may not tally due to rounding off . Pr. Provisional figure

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 IX Plan and onwards are based on reappraised figures at the end of VIII Plan.

@ Figures in Col. 5 to Col.10 for Minor Irrigation based on 2nd Minor Irrigation Census (1993-1994) hence revised

**Table : 2.11 Statewise and Planwise Achievements of Irrigation Potential Created/Utilised
- Major & Medium Irrigation (Surface Water) (Cumulative)**

(Unit : '000 Hectare)

Sl. No.	State/UTs.	Ultimate Potential	Sixth Plan * 1980-85		Seventh Plan 1985-90		Annual Plan 1990-92		Eighth Plan 1992-97		Ninth Plan 1997-2002		Target up to end of Tenth Plan 2002-2007		
			P	U	P	U	P	U	P	U	P	U	P	U	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
1	Andhra Pradesh	5000	2902	2695	2991	2836	2999	2847	3045	2884	3303	3052	4043	3533	
2	Arunachal Pradesh	0	0	0	0	0	0	0	0	0	0	0	4	3	
3	Assam	970	98	55	144	97	176	111	197	138	244	174	360	250	
4	Bihar	6500	2556	2009	2743	2259	2766	2295	2803	2324	2680	1715	3628	2115	
5	Chattisgarh		Included in M.P.									923	761	1228	959
6	Goa	62	1	0	13	5	13	12	13	12	21	15	48	30	
7	Gujarat	3000	1055	646	1199	855	1246	986	1350	1200	1430	1301	3334	2538	
8	Haryana	3000	1923	1745	2021	1791	2035	1791	2079	1834	2099	1850	2218	1927	
9	Himachal Pradesh	50	6	5	8	6	8	4	11	6	13	8	21	13	
10	Jammu & Kashmir	250	153	112	158	117	158	136	174	148	180	169	205	185	
11	Jharkhand		Included in Bihar									354	230	669	435
12	Karnataka	2500	1165	1053	1308	1183	1377	1192	1666	1472	2121	1845	3121	2495	
13	Kerala	1000	375	342	402	355	416	367	513	464	609	559	699	617	
14	Madhya Pradesh	6000	1592	1072	1815	1269	1962	1395	2318	1621	1387	876	1652	1003	
15	Maharashtra	4100	1722	754	1986	976	2030	1036	2337	1288	3239	2147	4515	2977	
16	Manipur	135	40	25	59	46	59	50	63	52	156	111	184	129	
17	Meghalaya	20	-	-	-	-	0	0	0	0	-	-	0	0	
18	Mizoram	0	-	-	-	-	0	0	0	0	-	-	0	0	
19	Nagaland	10	-	-	-	-	0	0	0	0	0	0	0	0	
20	Orissa	3600	1236	1178	1356	1254	1409	1326	1558	1443	1827	1794	2292	2096	
21	Punjab	3000	2252	2234	2344	2303	2367	2309	2513	2451	2542	2486	2703	2590	
22	Rajasthan	2750	1712	1551	1913	1740	1999	1887	2274	2088	2482	2314	2896	2583	
23	Sikkim	20	0	0	0	0	0	0	0	0	-	-	0	0	
24	Tamil Nadu	1500	1499	1506	1539	1536	1545	1541	1546	1545	1549	1549	1559	1555	
25	Tripura	100	-	-	2	2	2	2	2	2	5	5	5	5	
26	Uttar Pradesh	12500	6223	5523	6667	5705	6806	5763	7043	6114	7910	6334	8911	6984	
27	Uttaranchal		Included in U.P.									280	185	287	189
28	West Bengal	2300	1185	1069	1244	1132	1353	1258	1433	1315	1683	1527	2383	1982	
Total States		58367	27695	23574	29912	25467	30726	26308	32935	28401	37040	31006	46966	37194	
Total U.Ts.		98	-	-	8	0	15	7	19	9	7	4	7	4	
All India Total		58465	27695	23574	29920	25467	30741	26315	32954	28410	37046	31010	46972	37198	

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: 2.12 Statewise Achievements of Irrigation Potential Created and Utilised (Cumulative)
Minor Irrigation (Surface Water)**

(Unit : ' 000 Hectare)

Sl. No.	Name of the State	Ultimate Potential	At the end of VI Plan 1980-85		At the end of VII Plan 1985-90		At the end of Annual Plans 1990-92		At the end of VIII Plan 1992-97		At the end of IX Plan 1997- 2002		During X Plan 2002-07 Target		PC	PU
			P	U	P	U	P	U	P	U	P	U	P	U		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	Andhra Pradesh	2300.0	1112.0	996.0	1253.0	1088.8	1283.8	1107.3	1919.3	1127.6	2244.9	1373.9	14.0	NA	97.6	61.2
2	Arunachal Pradesh	150.0	40.2	34.2	56.0	49.7	62.8	53.8	61.6	37.2	75.6	45.4	44.0	NA	50.4	60.0
3	Assam	1000.0	308.0	283.0	378.9	329.8	397.8	341.1	309.7	146.1	389.5	209.7	358.0	NA	38.9	53.8
4	Bihar	1900.0	1180.0	1075.0	1358.0	1218.0	1364.9	1222.2	871.4	537.5	876.9	540.6	655.0	NA	46.2	61.6
5	Chatisgarh	cluded in M.P.														
6	Goa	25.0	13.6	13.4	15.5	14.8	16.6	15.3	15.0	13.7	16.6	15.1	5.0	NA	66.5	90.8
7	Gujarat	347.0	150.0	132.0	181.0	146.9	190.8	151.7	302.8	139.7	468.1	179.0	NA	NA	134.9	38.2
8	Haryana	50.0	39.0	34.0	39.0	34.0	39.0	34.0	7.7	7.7	7.7	7.7	27.0	NA	15.5	99.4
9	Himachal Pradesh	235.0	106.0	97.0	113.8	103.8	126.8	111.5	177.0	153.7	197.2	167.2	25.0	NA	83.9	84.8
10	Jammu & Kashmir	400.0	331.0	322.0	349.3	339.4	354.8	343.0	354.4	333.6	439.2	378.2	3.0	NA	109.8	86.1
11	Jharkhand	cluded in Bihar														
12	Karnataka	900.0	676.0	654.0	713.4	691.4	722.1	698.2	403.7	291.1	434.7	305.0	300.0	NA	48.3	70.2
13	Kerala	800.0	340.0	320.0	389.9	362.4	412.0	390.9	376.9	331.8	441.8	383.3	225.0	NA	55.2	86.8
14	Madhya Pradesh	2200.0	813.0	728.0	941.7	847.0	1072.9	926.9	1568.3	1055.0	1715.7	1139.9	281.0	NA	78.0	66.4
15	Maharashtra	1200.0	742.0	609.0	847.0	669.5	887.0	693.7	1432.0	993.6	1694.2	1073.8	NA	NA	141.2	63.4
16	Manipur	100.0	39.0	34.0	46.8	39.4	49.3	40.9	37.0	22.2	48.1	28.8	33.0	NA	48.1	59.9
17	Meghalaya	85.0	26.0	23.0	31.4	26.6	33.4	28.1	79.3	45.5	82.7	47.8	2.0	NA	97.3	57.7
18	Mizoram	70.0	6.4	5.8	9.5	8.2	10.5	9.0	8.2	7.2	12.1	10.1	38.0	NA	17.3	83.7
19	Nagaland	75.0	51.0	47.0	62.1	54.0	64.2	55.3	66.2	39.3	77.7	48.2	NA	NA	103.6	62.1
20	Orissa	1000.0	553.0	517.0	586.3	542.3	635.8	572.3	1067.6	579.5	1138.1	620.4	NA	NA	113.8	54.5
21	Punjab	50.0	34.0	34.0	42.9	42.1	44.9	43.3	22.3	13.0	22.3	13.0	18.0	NA	44.7	58.1
22	Rajasthan	600.0	372.0	355.0	409.0	384.1	435.2	398.0	175.3	127.9	207.8	143.6	250.0	NA	34.6	69.1
23	Sikkim	50.0	14.0	10.0	20.4	15.9	22.2	17.1	22.3	14.5	29.5	20.5	13.0	NA	59.0	69.5
24	Tamil Nadu	1200.0	810.0	808.0	841.7	838.0	860.7	860.7	1498.9	1214.4	1523.9	1236.8	NA	NA	127.0	81.2
25	Tripura	100.0	46.0	41.0	63.8	59.3	69.0	63.8	38.7	31.2	54.9	45.1	33.0	NA	54.9	82.1
26	Uttar Pradesh	1200.0	851.0	822.0	991.0	933.0	1028.0	965.0	312.2	247.8	344.9	280.4	542.0	NA	28.7	81.3
27	Uttranchal	Included in U.P.														
28	West Bengal	1300.0	1030.0	1002.0	1224.8	1113.0	1251.1	1129.0	1035.8	668.1	1087.1	706.2	130.0	NA	83.6	65.0
	Total States	17337.0	9683.2	8996.4	10965.8	9951.0	11435.6	10271.9	12163.8	8178.9	13632.0	9019.8	2996.0	NA	78.6	66.2
	Total U.Ts.	35.0	14.2	13.9	20.4	16.7	20.7	16.9	25.2	21.7	28.9	25.1	4.0	NA	82.7	86.9
	Grand Total	17372.0	9697.4	9010.3	10986.2	9967.7	11456.2	10288.8	12188.9	8200.6	13661.0	9045.0	3000.0	NA	78.6	66.2

Source : Ministry of Water Resources(Minor Irrigation Division)

Remarks : 1. Totals may not tally due to rounding off. 2. Figure for minor irrigation based on 2nd minor irrigation census(1993-94) Hence figures from 1992-97 changed

P - Potential Created U - Potential Utilised.

PC - Percentage of potential created till 2001-2002 to ultimate potential PU - Percentage of potential utilised till 2001-2002 to corresponding potential created

Figure for minor irrigation based on 2nd minor irrigation census(1993-94) Hence figures from 1992-97 changed

**Table : 2.13 Statewise Achievements of Irrigation Potential Created and Utilised (Cumulative)
Minor Irrigation (Ground Water)**

(Unit : '000 Hectare)

Sl. No.	Name of the State	Ultimate Potential	At the end of VI th Plan 1980-85		At the end of Seventh Plan 1985-90		At the end of Annual Plans 1990-92		At the end of VIII Plan 1992-97		At the end of IX Plan 1997-2002		During X Plan 2002-07 Target		PC	PU	
			P	U	P	U	P	U	P	U	P	U	P	U			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
1.	Andhra Pradesh	3960.0	1229.0	1200.0	1544.0	1507.1	1593.5	1555.3	2936.1	2138.5	3192.1	2302.9	417.4	NA	80.6	72.1	
2.	Arunachal Pradesh	18.0	-	-	-	-	-	2.1	2.1	0.2	0.2	0.7	0.6	0.7	NA	3.7	97.0
3.	Assam	900.0	83.0	66.0	158.2	109.1	177.5	125.9	135.9	67.4	501.0	377.1	340.2	NA	55.7	75.3	
4.	Bihar	4947.0	2232.0	2070.0	3070.0	2773.0	3512.0	3135.0	3543.1	2506.8	3866.4	2533.8	544.1	NA	78.2	65.5	
5.	Chatisgarh		Included in M.P.										1.1	0.5		0.0	42.5
6.	Goa	29.0	0.7	0.3	1.6	1.3	1.8	1.4	4.0	3.5	4.5	4.0	0.1	NA	15.6	88.5	
7.	Gujarat	2756.0	1524.0	1477.0	1669.4	1626.3	1709.5	1652.5	2372.0	1758.0	2413.9	1783.7	51.0	NA	87.6	73.9	
8.	Haryana	1462.0	1348.0	1327.0	1449.0	1420.9	1485.5	1449.7	2305.7	2182.1	2367.4	2230.6	82.3	NA	161.9	94.2	
9.	Himachal Pradesh	68.0	11.0	8.0	12.8	8.9	14.8	10.9	21.5	18.9	25.5	20.6	5.6	NA	37.6	80.7	
10.	Jammu & Kashmir	708.0	6.0	5.0	7.0	6.8	8.8	9.4	11.2	9.4	20.2	15.2	2.1	NA	2.9	75.1	
11.	Jharkhand		Included in Bihar														
12.	Karnataka	2574.0	472.0	461.0	642.0	626.0	713.4	697.4	1299.1	1009.3	1318.9	1029.0	24.3	NA	51.2	78.0	
13.	Kerala	879.0	50.0	45.0	89.5	74.9	106.1	91.5	108.9	101.6	184.7	177.2	75.6	NA	21.0	95.9	
14.	Madhya Pradesh	9732.0	1179.0	1142.0	1439.7	1400.2	1487.6	1448.1	3801.8	2732.5	4033.9	2960.3	405.9	NA	41.4	73.4	
15.	Maharashtra	3652.0	1255.0	1223.0	1547.1	1495.1	1570.4	1518.4	3200.1	2208.3	3556.2	2475.1	388.1	NA	97.4	69.6	
16.	Manipur	359.0	Neg.	Neg.	0.1	0.1	0.3	0.3	0.6	0.4	0.7	0.4	0.0	NA	0.2	59.2	
17.	Meghalaya	63.0	9.0	9.0	9.1	9.1	9.1	9.1	1.8	1.1	1.9	1.2	0.1	NA	3.0	63.4	
18.	Mizoram	5.0	-	-	-	-	-	0.0	0.8	0.6	0.8	0.6	0.0	NA	16.6	74.7	
19.	Nagaland	5.0	Neg.	Neg.	0.7	0.4	0.9	0.6	0.9	0.4	0.9	0.4	0.0	NA	18.8	37.2	
20.	Orissa	4203.0	507.0	463.0	569.9	517.2	609.6	553.9	508.9	199.9	537.8	330.4	51.2	NA	12.8	61.4	
21.	Punjab	2917.0	3140.0	3105.0	3209.9	3160.3	3245.6	3194.9	6855.2	6234.8	6964.1	6339.9	77.8	NA	238.7	91.0	
22.	Rajasthan	1778.0	1615.0	1582.0	1854.1	1819.2	1953.6	1918.7	4096.3	3616.5	4631.3	4151.5	461.2	NA	260.5	89.6	
23.	Sikkim	@	Neg.	Neg.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	0.0	0.0	
24.	Tamil Nadu	2832.0	1140.0	1135.0	1216.7	1211.4	1247.2	1241.9	2234.5	1798.9	2319.0	1858.9	53.9	NA	81.9	80.2	
25.	Tripura	81.0	12.0	9.0	16.7	13.2	18.4	15.1	7.3	5.5	13.6	10.8	6.0	NA	16.8	79.2	
26.	Uttar Pradesh	16799.0	11280.0	10255.0	15651.0	14249.0	17842.0	16375.0	14743.1	11968.3	16379.8	13605.0	1785.1	NA	97.5	83.1	
27.	Uttanchal		Included in U.P.										0.4	0.3		0.0	84.6
28.	West Bengal	3318.0	672.0	598.0	1399.9	1062.0	1521.3	1180.9	2037.4	1464.5	2205.9	1575.3	224.5	NA	66.5	71.4	
Total States		64055.0	27764.7	26180.3	35558.3	33091.5	38830.9	36187.9	50226.3	40027.3	54542.8	43785.2	4997.2	NA	85.1	80.3	
Total U.Ts.		116.0	58.0	57.6	60.9	60.4	61.2	60.7	63.3	60.7	67.0	64.4	2.8	NA	57.8	96.1	
Grand Total		64171.0	27822.7	26237.9	35619.2	33151.9	38892.1	36248.6	50289.6	40088.0	54609.8	43849.6	5000.0	NA	85.1	80.3	

Source : Ministry of Water Resources(Minor Irrigation Division)

Remarks: P : Potential Created @ : Neg: Negligible @ : Not Assessed
U : Potential Utilised

PC - Percentage of potential created till 2001-2002 to ultimate potential

PU - Percentage of potential utilised till 2001-2002 to corresponding potential created

1. Figure for minor irrigation based on 2nd minor irrigation census(1993-94) Hence figures from 1992-97 changed.

2. Totals may not tally due to rounding off.

**Table: 2.14 Statewise Achievements of Irrigation Potential Created and Utilised (Cumulative)
Minor Irrigation (Surface+Ground)**

(Unit : '000 Hectare)

Sl. No.	State/U.T	Ultimate Potential	At the end of Sixth Plan 1980 - 85		At the end of Seventh Plan 1985-90		At the end of Annual Plan 1990-92		At the end of VIII Plan 1992-97		At the end of IX Plan 1997-2002		During X Plan 2002-07 Target		PC	PU
			P	U	P	U	P	U	P	U	P	U	P	U		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	Andhra Pradesh	6260.0	2341.0	2196.0	2797.0	2595.9	2877.3	2662.6	4855.4	3266.1	5437.0	3676.7	431.4	NA	86.9	67.6
2	Arunachal Pradesh	168.0	40.2	34.2	56.0	49.7	64.9	55.8	61.8	37.4	76.3	46.0	44.7	NA	45.4	60.3
3	Assam	1900.0	391.0	349.0	537.0	438.9	575.3	467.0	445.5	213.5	890.5	586.8	698.2	NA	46.9	65.9
4	Bihar	6847.0	3412.0	3145.0	4428.0	3991.0	4876.9	4357.2	4414.4	3044.4	4743.3	3074.3	1199.1	NA	69.3	64.8
5	Chattisgarh	Included in M.P.										1.1	0.5			42.5
6	Goa	54.0	14.3	13.6	17.2	16.0	18.4	16.7	19.0	17.2	21.1	19.1	5.1	NA	39.1	90.3
7	Gujarat	3103.0	1674.0	1609.0	1850.3	1773.2	1900.3	1804.2	2674.7	1897.7	2882.0	1962.7	51.0	NA	92.9	68.1
8	Haryana	1512.0	1387.0	1361.0	1488.0	1454.9	1524.5	1483.7	2313.4	2189.8	2375.2	2238.3	109.3	NA	157.1	94.2
9	Himachal Pradesh	303.0	117.0	105.0	126.6	112.7	141.6	122.5	198.5	172.6	222.7	187.8	30.6	NA	73.5	84.3
10	Jammu & Kashmir	1108.0	337.0	327.0	356.3	346.2	363.6	352.3	365.6	343.0	459.4	393.4	5.1	NA	41.5	85.6
11	Jharkhand	Included in Bihar														
12	Karnataka	3474.0	1148.0	1115.0	1355.4	1317.4	1435.5	1395.5	1702.8	1300.4	1753.6	1334.0	324.3	NA	50.5	76.1
13	Kerala	1679.0	390.0	365.0	479.4	437.3	518.0	482.4	485.8	433.4	626.5	560.5	300.6	NA	37.3	89.5
14	Madhya Pradesh	11932.0	1992.0	1870.0	2381.4	2247.2	2560.5	2375.0	5370.1	3787.5	5749.6	4100.2	686.9	NA	48.2	71.3
15	Maharashtra	4852.0	1997.0	1832.0	2394.1	2164.6	2457.4	2212.1	4632.1	3201.9	5250.4	3548.9	388.1	NA	108.2	67.6
16	Manipur	469.0	39.0	34.0	46.9	39.5	49.6	41.2	37.6	22.6	48.8	29.2	33.0	NA	10.4	59.9
17	Meghalaya	148.0	35.0	32.0	40.4	35.6	42.5	37.2	81.1	46.6	84.6	48.9	2.1	NA	57.2	57.9
18	Mizoram	75.0	6.4	5.8	9.5	8.2	10.5	9.0	9.0	7.8	12.9	10.7	38.0	NA	17.2	83.1
19	Nagaland	80.0	51.0	47.0	62.7	54.4	65.1	55.9	67.1	39.7	78.7	48.6	0.0	NA	98.3	61.8
20	Orissa	5203.0	1060.0	980.0	1156.2	1059.5	1245.4	1126.2	1576.5	779.4	1675.9	950.8	51.2	NA	32.2	56.7
21	Punjab	2967.0	3174.0	3139.0	3252.7	3202.4	3290.5	3238.2	6877.6	6247.8	6986.5	6352.9	95.8	NA	235.5	90.9
22	Rajasthan	2378.0	1987.0	1937.0	2263.1	2203.3	2388.7	2316.6	4271.6	3744.4	4839.1	4295.0	711.2	NA	203.5	88.8
23	Sikkim	50.0	14.0	10.0	20.4	15.9	22.2	17.1	22.3	14.5	29.5	20.5	13.0	NA	59.0	69.5
24	Tamil Nadu	4032.0	1950.0	1943.0	2058.4	2049.3	2107.9	2102.5	3733.3	3013.4	3843.0	3095.6	53.9	NA	95.3	80.6
25	Tripura	181.0	58.0	50.0	80.5	72.5	87.4	78.8	46.0	36.7	68.5	55.9	39.0	NA	37.9	81.5
26	Uttar Pradesh	17999.0	12131.0	11077.0	16642.0	15182.0	18870.0	17340.0	15055.4	12216.1	16724.7	13885.4	2327.1	NA	92.9	83.0
27	Uttarakhand	Included in U.P.										1.0	0.8			81.0
28	West Bengal	4618.0	1702.0	1600.0	2624.6	2175.0	2772.4	2309.9	3073.3	2132.6	3293.0	2281.5	354.5	NA	71.3	69.3
Total States		81392.0	37447.9	35176.6	46524.1	43042.6	50266.4	46459.8	62390.0	48206.1	68174.8	52805.0	7993.2	NA	83.8	77.5
Total U.ts.		151.0	72.2	71.6	81.3	77.1	81.9	77.7	88.5	82.5	96.0	89.6	6.8	NA	63.6	93.3
Grand Total		81543.0	37520.1	35248.2	46605.4	43119.7	50348.3	46537.5	62478.5	48288.6	68270.8	52894.6	8000.0	NA	83.7	77.5

Source : Ministry of Water Resources(Minor Irrigation Division)

Remarks : P - Potential Created U - Potential Utilised PC : Percentage of Potential Created till 2001-2002 to Ultimate Potential

PU : Percentage of Potential Utilised till 2001-2002 to Corresponding Potential Created Total may not tally due to rounding off.

**Table : 2.15 Statewise Achievements of Total Irrigation Potential Created and Utilised
Major Medium and Minor Irrigation Schemes (Cumulative)**

(Unit : '000 Hectare)

Sl. No.	State/U.T	Ultimate Potential	At the end of Sixth Plan 1980 - 85		At the end of Seventh Plan 1985-90		At the end of Annual Plan 1990-92		At the end of VIII Plan 1992-97		At the end of IX Plan 1997-2002		During X Plan 2002-07 Target		PC	PU		
			P	U	P	U	P	U	P	U	P	U	P	U				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17		
1	Andhra Pradesh	11260.00	5243.00	4891.00	5788.00	5431.88	5876.34	5509.63	7900.43	6150.06	8740.21	6728.33	4043.10	3532.51	77.6	77.0		
2	Arunachal Pradesh	168.00	40.20	34.20	55.98	49.65	64.89	55.84	61.82	37.41	76.28	46.03	4.00	2.60	45.4	60.3		
3	Assam	2870.00	489.00	404.00	681.04	535.87	751.28	577.97	642.52	351.46	1134.43	761.17	360.02	249.84	39.5	67.1		
4	Bihar	13347.00	5968.00	5154.00	7171.00	6250.00	7642.90	6652.19	7217.43	5368.36	7423.27	4789.17	3628.42	2114.83	55.6	64.5		
5	Chattisgarh		Included in MP										355.53	230.90	669.47	435.20	-	64.9
6	Goa	116.00	15.30	13.60	30.15	21.01	31.41	28.71	31.97	29.23	42.31	34.42	47.83	30.02	36.5	81.4		
7	Gujarat	6103.00	2729.00	2255.00	3049.32	2628.21	3146.30	2790.22	4024.73	3097.72	4312.32	3263.50	3334.37	2538.43	70.7	75.7		
8	Haryana	4512.00	3310.00	3106.00	3508.97	3245.92	3559.47	3274.72	4392.42	4023.81	4474.65	4088.24	2218.49	1927.32	99.2	91.4		
9	Himachal Pradesh	353.00	123.00	110.00	134.60	118.67	149.61	126.45	209.54	178.60	236.07	195.30	21.35	12.71	66.9	82.7		
10	Jammu & Kashmir	1358.00	490.00	439.00	514.27	463.17	521.62	488.31	539.55	490.97	639.13	562.14	204.69	185.00	47.1	88.0		
11	Jharkhand		Included in Bihar										354.47	230.45	669.47	435.20	-	65.0
12	Karnataka	5974.00	2313.00	2168.00	2663.44	2500.44	2812.48	2587.51	3368.79	2772.38	3874.76	3178.82	3121.01	2494.75	64.9	82.0		
13	Kerala	2679.00	765.00	707.00	881.38	792.27	934.04	849.41	998.75	897.38	1236.00	1119.33	699.49	617.37	46.1	90.6		
14	Madhya Pradesh	17932.00	3584.00	2942.00	4196.40	3516.20	4522.52	3770.02	7688.10	5408.49	7136.52	4975.80	1652.20	1002.83	39.8	69.7		
15	Maharashtra	8952.00	3719.00	2586.00	4380.10	3140.60	4487.40	3248.10	6969.13	4489.90	8489.43	5696.11	4515.43	2976.92	94.8	67.1		
16	Manipur	604.00	79.00	59.00	105.87	85.52	108.57	91.21	100.61	74.57	204.81	140.23	184.15	129.30	33.9	68.5		
17	Meghalaya	168.00	35.00	32.00	40.43	35.63	42.51	37.19	81.09	46.56	84.59	48.94	0.00	0.00	50.4	57.9		
18	Mizoram	75.00	6.44	5.84	9.49	8.22	10.54	9.03	9.03	7.84	12.91	10.73	0.00	0.00	17.2	83.1		
19	Nagaland	90.00	51.00	47.00	62.73	54.43	65.10	55.93	67.13	39.65	78.65	48.59	0.00	0.00	87.4	61.8		
20	Orissa	8803.00	2296.00	2158.00	2512.17	2313.50	2654.38	2452.18	3134.54	2222.35	3502.41	2744.99	2291.63	2096.47	39.8	78.4		
21	Punjab	5967.00	5426.00	5373.00	5596.74	5505.39	5657.45	5547.19	9390.57	8698.79	9528.95	8838.88	2702.78	2590.19	159.7	92.8		
22	Rajasthan	5128.00	3699.00	3488.00	4176.14	3943.29	4387.71	4203.63	6545.61	5832.36	7321.24	6608.90	2895.95	2582.84	142.8	90.3		
23	Sikkim	70.00	14.00	10.00	20.36	15.85	22.19	17.07	22.32	14.50	29.49	20.50	0.00	0.00	42.1	69.5		
24	Tamil Nadu	5532.00	3449.00	3449.00	3597.39	3585.30	3652.91	3643.52	5279.34	4558.35	5392.26	4644.91	1558.69	1555.39	97.5	86.1		
25	Tripura	281.00	58.00	50.00	82.54	74.52	89.38	80.83	48.02	38.67	73.44	60.38	4.90	4.50	26.1	82.2		
26	Uttar Pradesh	30499.00	18354.00	16600.00	23309.00	20887.00	25676.00	23103.00	22098.35	18330.10	24634.77	20219.43	8910.85	6984.49	80.8	82.1		
27	Uttranchal		Included in U.P.										281.30	186.22	286.50	189.44	-	66.2
28	West Bengal	6918.00	2887.00	2669.00	3868.60	3307.00	4125.37	3567.90	4506.25	3447.62	4976.31	3808.61	2383.29	1982.12	71.9	76.5		
Total States		139759.00	65142.94	58750.64	76436.11	68509.60	80992.37	72767.76	95325.04	76607.13	105214.54	83811.31	46966.11	37194.06	75.3	79.7		
Total U.ts.		249.00	72.18	71.55	89.31	77.13	96.89	84.66	107.45	91.47	102.49	93.51	6.51	3.94	41.2	91.2		
Grand Total		140008.00	65215.12	58822.19	76525.42	68586.73	81089.26	72852.50	95432.49	76698.60	105316.75	83904.60	46972.34	37197.78	75.2	79.7		

Source : Ministry of Water Resources(Minor Irrigation Division)

Remarks : P - Potential Created U - Potential Utilised PC : Percentage of Potential Created till 1997-2002 to Ultimate Potential

PU : Percentage of Potential Utilised till 2001-2002 to Corresponding Potential Created Total may not tally due to rounding off.

Chart 19 Irrigation Potential - Ultimate, Created and Utilised upto 2003-04

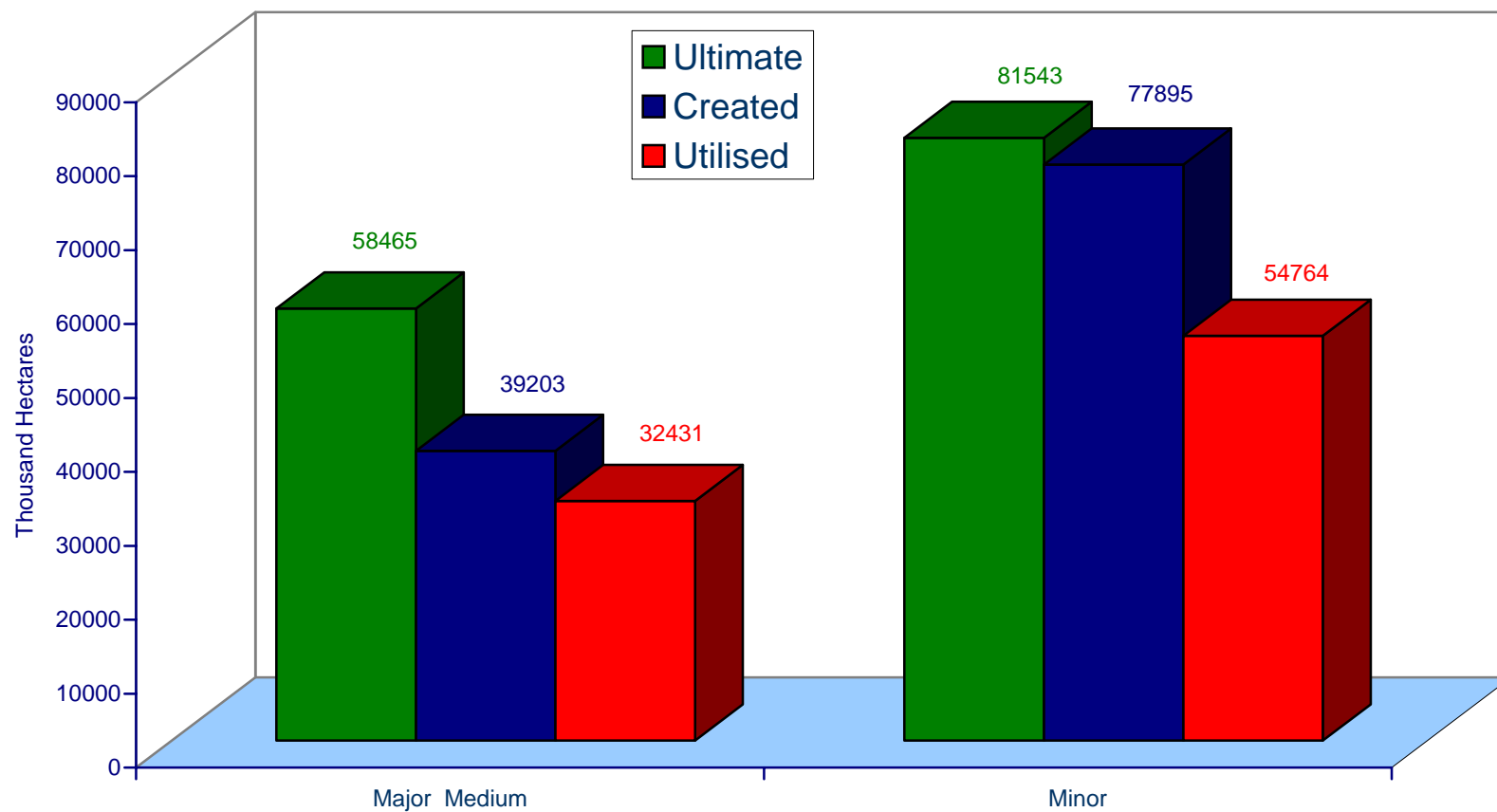


Table : 2.16 Statewise Irrigation Potential Created Utilised and Gross Irrigated Area, 2003-04

(Unit : '000 Hectare)

Sl. No.	Name of the State/UTs.	Potential Created Upto 2003-04					Potential Utilised Upto 2003-04					Gross Irrigated Area 2003-04	Gap (12)-(13)
		Major & Medium	Minor			Grand Total	Major & Medium	Minor			Grand Total		
			Surface	Ground	Total			Surface	Ground	Total			
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Andhra Pradesh	3588	2409.80	3362.94	5773	9360	3236	1515.71	2315.65	3831	7068	4781	2287
2	Arunachal Pradesh	2	81.68	0.26	82	84	1	48.47	0.07	49	50	43	7
3	Assam	279	177.36	293.24	471	749	197	93.21	234.73	328	525	215	310
4	Bihar	2930	637.66	3893.02	4531	7461	1877	399.16	2598.19	2997	4875	4567	308
5	Chattisgarh	1028	372.04	591.31	963	1991	829	176.85	236.76	414	1243	1179	64
6	Goa	28	12.04	4.83	17	45	20	10.87	3.98	15	35	40	-5
7	Gujarat	1599	626.69	4372.54	4999	6598	1425	60.15	2719.81	2780	4205	4173	32
8	Haryana	2139	9.30	2450.00	2459	4598	1875	8.19	2287.85	2296	4171	5343	-1172
9	Himachal Pradesh	14	199.35	30.53	230	244	8	167.25	25.55	193	201	188	13
10	Jammu & Kashmir	187	474.79	49.33	524	711	174	370.55	40.11	411	584	446	138
11	Jharkhand	412	209.15	212.63	422	834	268	136.73	154.03	291	559	230	329
12	Karnataka	2420	807.81	1587.94	2396	4816	2039	509.55	1294.01	1804	3843	2702	1141
13	Kerala	634	444.16	237.86	682	1317	575	377.24	225.08	602	1177	426	751
14	Madhya Pradesh	1590	1234.02	4815.03	6049	7639	1007	752.40	2851.19	3604	4611	5776	-1165
15	Maharashtra	3313	1021.46	4771.58	5793	9106	2195	689.70	3462.53	4152	6348	3831	2517
16	Manipur	156	51.88	0.10	52	208	111	33.17	0.03	33	144	40	104
17	Meghalaya	0	93.60	1.07	95	95	0	70.44	0.74	71	71	82	-11
18	Mizoram	0	13.12	0.00	13	13	0	7.89	0.00	8	8	18	-10
19	Nagaland	0	119.39	0.75	120	120	0	54.06	0.25	54	54	104	-50
20	Orissa	1921	1048.53	453.56	1502	3424	1856	488.56	161.42	650	2506	2518	-12
21	Punjab	2571	18.67	6393.16	6412	8983	2508	17.29	5849.39	5867	8375	7661	714
22	Rajasthan	2579	223.74	6083.41	6307	8886	2377	80.47	4087.42	4168	6545	6393	152

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Table : 2.16 Statewise Irrigation Potential Created Utilised and Gross Irrigated Area, 2003-04

(Unit : '000 Hectare)

Sl. No.	Name of the State/UTs.	Potential Created Upto 2003-04				Potential Utilised Upto 2003-04				Gross Irrigated Area 2003-04	Gap (12)-(13)		
		Major & Medium	Minor			Grand Total	Major & Medium	Minor				Grand Total	
			Surface	Ground	Total			Surface	Ground				Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14
23	Sikkim	0	25.72	0.00	26	26	0	16.70	0.00	17	17	15	2
24	Tamil Nadu	1559	1206.85	3009.95	4217	5776	1555	722.82	1688.13	2411	3966	2479	1487
25	Tripura	8	75.97	12.87	89	97	6	53.30	9.60	63	69	52	17
26	Uttar Pradesh	8213	108.31	19324.08	19432	27646	6531	83.51	15008.79	15092	21623	570	21053
27	Uttranchal	286	321.70	332.35	654	940	189	235.04	255.94	491	680	17931	-17251
28	West Bengal	1742	1098.43	2403.38	3502	5244	1565	569.17	1425.51	1995	3560	4947	-1387
Total States		39196	13122.92	64687.72	77811	117007	32427	7748.45	46936.76	54685	87112	76750	10362
Total U.Ts.		7	22.49	62.36	85	92	4	18.12	60.37	78	82	72	10
Grand Total		39203	13145.41	64750.08	77895	117099	32431	7766.57	46997.13	54764	87194	76820	10374

Source : (i) Central Water Commission (P&P Dte)
(ii) Ministry of Water Resources (Minor Irrigation Division)
(iii) Ministry of Agriculture (DE & S)

Note : Totals may not tally due to rounding off.

Major & Medium figures for upto 03-04 have been arrived by taking sum of achievement figures of 02-03 & target figures of 03-04

**Table : 2.17 Statewise Number of Major, Medium and ERM Irrigation Projects in India as on 01.04.2004
(Tentative / Under Finalisation)**

Sl. No.	Name of the State/UTs.	Major Project					Medium Project				
		Completed in Pre-plan Period	Completed in Plan Period upto IX Plan	Completed in X Plan upto 31.3.04	on going in X Plan	New in X Plan	Completed in Pre-plan Period	Completed in Plan Period upto IX Plan	Completed In X Plan upto 31.03.04	on going in X Plan	New in X Plan
1	2	3	4	5	6	7	8	9	10	11	12
1	Andhra Pradesh	11	5	0	15	19	45	69	3	9	24
2	Arunachal Pradesh	0	0	0	0	0	0	0	0	0	0
3	Assam	0	2	0	5	0	0	8	0	5	0
4	Bihar	2	14	0	9	4	2	17	0	3	2
5	Jharkhad	0	1	0	5	0	0	34	3	19	5
6	Goa	0	0	0	1	0	0	1	0	0	2
7	Gujarat	2	17	0	3	3	0	114	0	18	26
8	Haryana	1	5	1	4	5	0	0	0	0	3
9	Himachal Pradesh	0	0	0	1	0	0	4	0	2	0
10	Jammu & Kashmir	1	1	0	0	0	6	10	0	7	6
11	Karnataka	4	4	0	16	3	8	32	1	18	10
12	Kerala	0	10	0	4	0	0	7	0	4	0
13	Madhya Pradesh	2	9	2	16	4	10	91	1	5	2
14	Chhatisgarh	4	3	0	3	4	4	22	1	5	0
15	Maharashtra	5	16	0	56	6	16	171	1	95	21
16	Manipur	0	1	0	2	1	0	4	0	1	2
17	Meghalaya	0	0	0	0	0	0	0	0	1	0
18	Mizoram	0	0	0	0	0	0	0	0	0	0
19	Nagaland	0	0	0	0	0	0	0	0	0	1
20	Orissa	3	6	0	10	11	3	37	2	10	5
21	Punjab	3	5	0	1	1	0	2	0	0	0
22	Rajasthan	1	5	0	4	5	42	55	0	4	15
23	Sikkim	0	0	0	0	0	0	0	0	0	0
24	Tamil Nadu	17	5	0	0	0	7	39	0	2	0
25	Tripura	0	0	0	0	0	0	0	0	3	0
26	Uttaranchal			0	3	6			0	0	0
27	Uttar Pradesh	15	42	1	9	0		40	0	0	0
28	W.Bengal	3	3	0	2	6	0	17	0	8	12
TOTAL STATES		74	154	4	169	78	143	774	12	219	136
TOTAL UTs		-	-	-	-	-	-	-	0	-	-
NORTH EASTERN COUNCIL		-	-	-	-	-	-	-	0	-	-
TOTAL ALL INDIA		74	154	4	169	78	143	774	12	219	136

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**Table : 2.17 Statewise Number of Major, Medium and ERM Irrigation Projects in India as on 01.04.2004
(Tentative / Under Finalisation)**

Sl. No.	Name of the State/UTs.	ERM					Total			
		Completed in Plan Period upto IX Plan	Completed Upto IX Plan	Completed In X Plan upto 31.03.04	Ongoing for X Plan	New in for X Plan	Completed upto IX Plan	Completed upto 31.03.2004	Ongoing for X Plan	New in X Plan
1	2	13	14	14	15	16	17	18	19	20
1	Andhra Pradesh	0	0	0	8	9	130	133	32	52
2	Arunachal Pradesh	0	0	0	0	0	0	0	0	0
3	Assam	1	0	0	2	0	11	11	12	0
4	Bihar	2	0	0	4	1	37	37	16	7
5	Jharkhad	1	0	0	0	0	36	39	24	5
6	Goa	0	0	0	1	0	1	1	2	2
7	Gujarat	12	0	0	12	22	145	145	33	51
8	Haryana	9	0	0	2	4	15	16	6	12
9	Himachal Pradesh	0	0	0	0	0	4	4	3	0
10	Jammu & Kashmir	4	0	0	6	5	22	22	13	11
11	Karnataka	0	0	0	5	0	48	49	39	13
12	Kerala	1	0	0	2	3	18	18	10	3
13	Madhya Pradesh	1	0	0	4	0	113	116	25	6
14	Chhatisgarh	2	0	0	0	0	35	36	8	4
15	Maharashtra	1	0	0	5	0	209	210	156	27
16	Manipur	0	0	0	4	0	5	5	7	3
17	Meghalaya	0	0	0	0	0	0	0	1	0
18	Mizoram	0	0	0	0	0	0	0	0	0
19	Nagaland	0	0	0	0	0	0	0	0	1
20	Orissa	7	0	0	7	11	56	58	27	27
21	Punjab	8	0	0	6	6	18	18	7	7
22	Rajasthan	7	0	0	3	0	110	110	11	20
23	Sikkim	0	0	0	0	0	0	0	0	0
24	Tamil Nadu	11	0	0	1	0	79	79	3	0
25	Tripura	0	0	0	0	0	0	0	3	0
26	Uttaranchal			0	0	0	117	118	14	22
27	Uttar Pradesh	20	0	0	5	22			3	6
28	W.Bengal	0	0	0	6	3	23	23	16	21
TOTAL STATES		87	0	0	83	86	1232	1248	471	300
TOTAL UTs		-		0			-	-	-	-
NORTH EASTERN COUNCIL		-	-	0	-	-	-	-	-	-
TOTAL ALL INDIA		87	0	0	83	86	1232	1248	471	300

Source: Central Water Commission (P & P Directorate)
E.R.M. : Extention, Renovation and Modernisation Projects.

Table : 2.18 Statewise Status of Bore Holes Drilled by Central Ground Water Board (As on 31.03.2003)

Sl. No.	States/U.Ts	EW	OW	SH	PZ	Total	DW	TOTAL
1	2	3	4	5	6	7	8	9
1	Andhra Pradesh	980	697	14	280	1971	31	2002
2	Arunachal Pradesh	25	5	1	-	31	1	32
3	Assam	240	106	16	55	417	41	458
4	Bihar	207	125	9	4	345	514	859
5	Chatisgarh	390	115	-	25	530	28	558
6	Goa	58	18	-	14	90	31	121
7	Gujarat	738	371	20	304	1433	255	1688
8	Haryana	357	238	23	153	771	168	939
9	Himachal Pradesh	109	7	1	-	117	-	117
10	Jammu & Kashmir	223	68	8	29	328	114	442
11	Jharkhand	218	109	4	12	343	71	414
12	Karnataka	931	502	7	344	1784	5	1789
13	Kerala	283	91	16	119	509	13	522
14	Madhya Pradesh	625	472	8	41	1146	149	1295
15	Maharashtra	812	344	1	131	1288	166	1454
16	Manipur	25	11	-	-	36	2	38
17	Meghalaya	60	15	2	1	78	8	86
18	Mizoram	3	3	-	-	6	-	6
19	Nagaland	11	3	-	-	14	3	17
20	Orissa	801	198	21	94	1114	191	1305
21	Punjab	133	159	19	79	390	14	404
22	Rajasthan	888	366	93	309	1656	591	2247
23	Sikkim	31	9	-	-	40	-	40
24	Tamil Nadu	675	268	13	72	1028	92	1120
25	Tripura	49	19	4	-	72	22	94
26	Uttar Pradesh	591	418	39	104	1152	499	1651
27	Uttaranchal	45	5	1	-	51	129	180
28	West Bengal	282	147	12	154	595	82	677
	Total	9790	4889	332	2324	17335	3220	20555
	Total UTs	198	83	19	114	414	399	813
	Grand Total	9988	4972	351	2438	17749	3619	21368

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

EW- Exploratory Well, **OW-** Observation Well, **SH-** Slim Hole, **PZ-** Pizo Metre, **DW-**Deposit Wells

Table 2.19 Statewise Cumulative Potential Created and Utilised Under CAD Programme

(Th. Ha.)

S.No.	Name of State	End of Annal Plans (1991-92)				End of VIII Plan (1996-97)				End of IX Plan (2001-02)				End of Sept. 2005			
		NoP	PC	PU	% Gap	NoP	PC	PU	% Gap	NoP	PC	PU	% Gap	NoP	PC	PU	%Gap
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	Andhra Pradesh	13	1079.00	990.00	8.25	14	1347.82	1183.50	12.19	14	1454.49	1367.76	5.96	14	1559.82	1458.14	6.52
2	Arunachal Pradesh	0	0.00	0.00	0.00	1	1.70	0.09	94.71	8	16.36	2.24	86.31	8	16.36	2.09	87.22
3	Assam	3	62.00	51.00	17.74	7	132.94	63.24	52.43	7	139.01	63.80	54.10	7	139.31	78.85	43.40
4	Bihar	7	2266.00	1821.00	19.64	7	1905.08	1420.54	25.43	7	1905.08	1357.53	28.74	7	1905.08	1350.45	29.11
5	Chattisgarh	0	0.00	0.00	0.00	0	0.00	0.00	0.00	10	686.57	645.76	5.94	11	740.58	664.24	10.31
6	Goa	2	13.00	12.00	7.69	2	9.21	8.20	10.97	2	9.21	8.20	10.97	2	9.21	8.20	10.97
7	Gujarat	35	896.00	762.00	14.96	37	948.84	632.32	33.36	37	966.16	551.34	42.93	38	1239.16	824.34	33.48
8	Haryana	7	195.00	69.00	64.62	11	263.27	188.82	28.28	13	436.14	278.64	36.11	16	528.32	358.24	32.19
9	Himachal Pradesh	3	10.00	5.00	50.00	5	15.08	5.15	65.85	11	18.46	7.19	61.05	17	22.84	12.55	45.05
10	Jammu & Kashmir	10	48.00	34.00	29.17	10	77.11	42.52	44.86	14	82.34	38.11	53.72	19	119.05	77.06	35.27
11	Jharkhand	0	0.00	0.00	0.00	0	0.00	0.00	0.00	0	0.00	0.00	0.00	2	0.00	0.00	0.00
12	Karnataka	5	926.00	738.00	20.30	15	1048.48	929.47	11.35	15	1182.14	1020.00	13.72	18	1394.11	1167.34	16.27
13	Kerala	10	167.00	143.00	14.37	14	297.76	253.37	14.91	16	342.85	182.09	46.89	16	272.5	220.64	19.03
14	Madhya Pradesh	23	1411.00	858.00	39.19	23	1307.80	1001.58	23.41	13	950.24	498.17	47.57	14	971.98	509.82	47.55
15	Maharashtra	19	952.00	394.00	58.61	24	1031.78	552.15	46.49	24	1175.96	469.42	60.08	25	1313.51	633.66	51.76
16	Manipur	2	47.00	38.00	19.15	4	58.10	48.03	17.33	9	71.74	43.80	38.95	9	71.74	42.91	40.19
17	Meghalaya	1	0.00	0.00	0.00	1	0.00	0.00	0.00	4	2.46	1.33	0.00	4	3.67	3.13	0.00
18	Mizoram	0	0.00	0.00	0.00	0	0.00	0.00	0.00	3	0.12	0.15	-25.00	4	0.23	0.45	-95.65
19	Nagaland	0	0.00	0.00	0.00	1	0.00	0.00	0.00	3	4.41	2.25	48.98	3	4.81	2.96	38.46
20	Orissa	5	873.00	793.00	9.16	11	924.24	792.92	14.21	14	1069.82	902.44	15.65	17	1146.77	964.04	15.93
21	Punjab	0	0.00	0.00	0.00	0	0.00	0.00	0.00	2	199.36	195.37	2.00	5	606.45	601.58	0.80
22	Rajasthan	5	1089.00	906.00	16.80	5	1886.52	719.21	61.88	6	2072.52	1627.28	21.48	7	2097.52	1289.28	38.53
23	Sikkim	0	0.00	0.00	0.00	0	0.00	0.00	0.00	2	0.04	0.06	-50.00	2	0.04	0.06	-50.00
24	Tamil Nadu	5	903.00	785.00	13.07	8	941.16	767.63	18.44	12	923.01	882.04	4.44	13	1048.06	808.08	22.90
25	Tripura	1	0.00	0.00	0.00	1	0.00	0.00	0.00	1	1013.01	0.00	0.00	2	0.85	0.00	100.00
26	Uttar Pradesh	11	2826.00	2046.00	27.60	12	5044.95	3960.10	21.504	24	6158.62	4203.37	31.75	24	6237.32	4144.38	33.56
27	Uttanchal	0	0.00	0.00	0.00	0	0.00	0.00	0.00	3	0.61	0.43	29.51	4	33.20	21.87	34.13
28	West Bengal	4	1060.00	958.00	9.62	4	1204.30	823.37	31.63	4	1232.10	937.98	23.87	4	1239.20	923.72	25.46
29	Uts	0	0.00	0.00	0.00	0	0.00	0.00	0.00	0	0.00	0.00	0.00	0	0.00	0.00	0.00
	Total	171	14823.00	11403.00	23.07	217	18446.14	13392.21	27.40	278	22112.83	15286.75	30.87	312	22721.69	16168.08	28.84

Source : Ministry of Water Resources (CAD Wing.)

NoP : No. of Projects PC : Potential Created PU : Potential Utilised

**Table : 2.20 Statewise Physical Achievements of Field Channels
Under CAD Programme**

(Unit : 000 Hactare)

Sl. No.	Name of States/UT's	Cumm. Ach. Of of FC. upt to end of			Achievements During				Cumulative Achievement
		VII Plan 1985-90	VIII Plan 1992-97	IX. Plan 1997-02	2002-03	2003-04	2004-05	2005-06 (Provisional)	
1	2	3	4	5	6	7	8	9	10
1	Andhra Pradesh	650.8	664.6	680.2	6.4	0.0	3.1	16.4	706.1
2	Arunachal Pradesh	0.0	0.0	1.0	2.3	2.2	3.7	0.5	9.7
3	Assam	38.4	54.1	56.1	0.3	0.3	0.0	0.0	56.7
4	Bihar	1220.9	1282.4	1297.3	2.8	3.1	0.8	2.0	1305.9
5	Chattisgarh	Incl. in M.P.		0.0	7.7	5.4	20.4	11.7	46.7
6	Goa	5.3	10.3	10.4	0.0	0.0	0.0	0.0	10.4
7	Gujarat	766.1	852.0	869.9	0.0	0.0	6.8	36.2	932.8
8	Haryana	114.3	312.7	429.4	10.3	27.7	54.3	28.5	550.2
9	Himachal Pradesh	6.3	10.7	15.7	0.8	2.1	1.6	0.8	20.9
10	Jammu & Kashmir	27.4	55.5	77.9	3.3	3.5	4.4	3.0	92.2
11	Jharkhand	Incl. in Bihar		0.0	0.0	0.0	0.0	0.0	0.0
12	Karnataka	897.8	1043.0	1116.2	81.2	70.0	70.0	67.7	1405.1
13	Kerala	46.2	153.7	174.1	1.1	2.2	2.1	1.6	181.0
14	Madhya Pradesh	833.5	995.8	1031.2	5.7	8.9	10.4	6.9	1063.1
15	Maharashtra	889.2	1113.1	1223.9	3.8	2.3	7.0	9.5	1246.5
16	Manipur	20.8	36.8	50.6	2.6	3.2	2.1	2.4	60.9
17	Meghalaya	0.0	1.0	1.1	0.0	0.8	1.2	0.9	4.1
18	Mizoram	0.0	0.0	0.1	0.2	0.2	0.1	0.0	0.6
19	Nagaland	0.0	0.0	2.0	0.2	0.7	0.4	0.9	4.1
20	Orissa	256.8	346.5	396.4	14.4	10.8	2.9	7.8	432.3
21	Punjab	0.0	0.0	222.7	18.2	17.0	18.0	29.2	305.1
22	Rajasthan	613.6	925.5	1177.2	41.2	34.2	54.7	60.7	1368.0
23	Sikkim	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.2
24	Tamil Nadu	317.9	629.6	850.8	56.7	55.7	26.1	19.8	1009.1
25	Tripura	0.1	0.3	0.3	0.0	0.0	0.0	0.0	0.3
26	Uttar Pradesh	4378.0	5375.0	5936.0	201.0	200.1	80.8	60.9	6478.8
27	Uttaranchal	Incl. in UP		0.0	1.4	0.0	3.1	0.0	4.5
28	West Bengal	55.3	90.1	112.5	9.4	3.5	1.8	3.3	130.4
	Total	11138.7	13952.7	15754.6	470.8	453.6	375.4	370.8	17425.3

Source : Ministry of Water Resources (CAD Wing.)

Remarks : 1. F.C.-Field Channels. 2. Total may not tally due to rounding off

**Table: 2.21 Statewise Physical Achievements of Land Levelling
Under CAD Programme**

(Unit : 000 Hectare)

Sl. No.	Name of the State/Uts.	Cumm. Ach. Of LL upto end of			Acheivements During		Cum Ach. Upto March 2004
		VII Plan 1985-90	VIII Plan 1992-97	IX Plan 1997-02	2002-03	2003-04	
1	2	3	4	5	6	7	8
1	Andhra Pradesh	329.5	356.5	369.7	0.0	0.0	369.7
2	Arunachal Pradesh	0.0	0.0	0.1	0.0	0.0	0.1
3	Assam	0.0	0.0	0.0	0.0	0.0	0.0
4	Bihar	1.3	1.3	1.3	0.0	0.0	1.3
5	Chattisgarh	Inclu. In M.P.		0.0	0.0	0.0	0.0
6	Goa	0.4	0.8	0.9	0.0	0.0	0.8
7	Gujarat	176.4	177.2	177.2	0.0	0.0	177.2
8	Haryana	29.2	36.8	37.3	0.0	0.0	37.3
9	Himachal Pradesh	0.0	0.0	0.0	0.0	0.0	0.0
10	Jammu & Kashmir	24.3	36.0	40.4	0.2	0.1	40.7
11	Jharkand	Inclu. In Bihar		0.0	0.0	0.0	0.0
12	Karnataka	627.7	728.9	772.0	0.0	30.7	802.8
13	Kerala	0.0	0.8	1.3	0.1	0.0	1.4
14	Madhya Pradesh	44.2	44.2	44.2	0.0	0.0	44.2
15	Maharashtra	575.6	586.0	586.0	0.0	0.0	586.0
16	Manipur	2.2	8.5	9.0	0.8	0.2	10.0
17	Meghalaya	0.0	0.7	0.7	0.0	0.5	1.2
18	Mizoram	0.0	0.0	0.1	0.0	0.0	0.1
19	Nagaland	0.0	0.0	0.0	0.0	0.0	0.0
20	Orissa	12.5	16.4	16.4	0.0	0.0	16.4
21	Punjab	0.0	0.0	0.0	0.0	0.0	0.0
22	Rajasthan	87.8	96.5	117.8	2.3	1.1	121.2
23	Sikkim	0.0	0.0	0.0	0.0	0.0	0.0
24	Tamil Nadu	0.0	0.0	0.0	0.0	13.6	13.6
25	Tripura	0.0	0.0	0.0	0.0	0.0	0.0
26	Uttar Pradesh	8.5	8.5	8.5	0.0	0.0	8.5
27	Uttaranchal	Inclu. In U.P		0.0	0.0	0.0	0.0
28	West Bengal	3.1	3.1	3.1	0.0	0.0	3.1
	Total	1922.6	2102.0	2185.8	3.4	46.2	2235.4

Source: Ministry of Water Resources (CAD Wing)

Remarks: L.L = Land Levelling 2. Total may not tally due to rounding off.

This has been discontinued from 2004-05.

**Table : 2.22 Statewise Physical Achievements of Warabandi
Under CAD Programme**

(Unit : '000 Hectares)

Sl. No.	Name of States/UT's	Cum. Ach. of Warabandi upt to end of			Achievements During				Cumulative Achievement
		VII Plan 1985-90	VIII Plan 1992-97	IX. Plan 1997-02	2002-03	2003-04	2004-05	2005-06 (Provi-sional)	
1	2	3	4	5	6	7	8	9	10
1	Andhra Pradesh	308.2	392.1	434.8	5.3	15.8	11.0	0.0	466.9
2	Arunachal Pradesh	0.0	0.0	0.0	0.6	1.3	1.9	0.0	3.8
3	Assam	41.6	77.8	79.3	0.1	0.0	0.0	0.0	79.5
4	Bihar	78.1	86.3	89.3	0.9	0.0	0.0	0.0	90.2
5	Chattisgarh	Incl. in M.P.		0.0	0.0	0.0	0.0	0.0	0.6
6	Goa	4.4	17.2	20.1	0.0	0.0	0.0	0.0	20.1
7	Gujarat	564.3	677.6	695.2	0.0	0.0	0.0	0.0	695.2
8	Haryana	186.3	298.3	298.3	0.0	0.0	0.0	0.0	298.3
9	Himachal Pradesh	2.7	10.4	16.6	0.3	2.5	1.0	0.8	21.1
10	Jammu & Kashmir	24.2	147.8	338.7	4.0	0.0	2.6	2.1	347.2
11	Jharkhand	Incl. in Bihar		0.0	0.0	0.0	0.0	0.0	0.0
12	Karnataka	177.8	269.2	310.0	3.3	10.5	0.0	0.0	323.8
13	Kerala	33.0	110.6	147.4	0.7	0.0	1.5	0.0	149.6
14	Madhya Pradesh	382.0	416.4	417.8	0.0	0.0	0.0	0.0	417.8
15	Maharashtra	389.8	452.8	482.9	0.0	0.0	0.0	0.0	482.9
16	Manipur	11.7	18.4	20.7	1.3	3.7	0.0	0.0	25.7
17	Meghalaya	0.5	0.5	3.3	0.0	1.0	1.2	0.4	5.8
18	Mizoram	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.2
19	Nagaland	0.0	0.0	2.2	0.0	1.7	0.0	0.0	3.9
20	Orissa	178.8	532.0	575.1	39.7	17.7	0.0	0.0	632.5
21	Punjab	0.0	0.0	8.3	0.0	0.0	0.0	0.3	8.6
22	Rajasthan	304.8	607.4	661.6	0.0	0.0	0.0	0.0	661.6
23	Sikkim	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.2
24	Tamil Nadu	23.8	290.4	680.7	67.1	110.4	53.5	21.7	933.5
25	Tripura	0.0	0.2	0.2	0.0	0.0	0.0	0.0	0.2
26	Uttar Pradesh	2245.5	4237.5	4896.9	216.1	177.0	99.5	50.2	5439.6
27	Uttaranchal	Inlc. In U.P.		0.0	0.4	0.0	0.0	0.0	0.4
28	West Bengal	0.1	0.1	0.2	0.0	0.0	0.0	0.0	0.2
Total		4957.1	8642.8	10180.5	339.6	341.6	172.2	75.3	11109.2

Source : Ministry of Water Resources (CAD Wing).

Remarks: W.B. -Warabandi, Total may not tally due to rounding off

**Table :2.23 Statewise Physical Achievements of Field Drains
Under CAD Programme**

(Unit : 000 Hectare)

Sl. No.	Name of States/UT's	Cum. Ach. Of of Field Drains up to end o			Achievements During				Cumulative Achievement
		VII Plan 1985-90	VIII Plan 1992-97	IX.Plan 1997-02	2002-03	2003-04	2004-05	2005-06 (provisional)	
1	2	3	4	5	6	7	8	9	10
1	Andhra Pradesh	9.1	9.1	9.1	0.0	0.0	0.0	0.0	9.1
2	Arunachal Pradesh	0.0	0.0	0.7	2.2	1.4	2.5	0.2	7.0
3	Assam	11.6	21.0	21.8	0.2	0.1	0.0	0.0	22.1
4	Bihar	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1
5	Chattisgarh	Included in MP.		0.0	0.0	0.0	0.0	0.0	0.0
6	Goa	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	Gujarat	2.2	2.9	2.9	0.0	0.0	6.8	0.0	9.7
8	Haryana	0.0	0.0	0.0	0.0	0.0	11.0	7.6	18.6
9	Himachal Pradesh	0.0	0.6	2.3	1.3	1.0	0.8	0.5	5.9
10	Jammu & Kashmir	0.4	6.8	13.5	2.3	1.4	3.9	2.2	23.2
11	Jarkhand	Included in Bihar		0.0	0.0	0.0	0.0	0.0	0.0
12	Karnataka	8.1	27.6	37.8	4.2	4.0	3.6	7.3	57.0
13	Kerala	0.0	7.1	95.7	14.7	8.4	6.8	3.3	128.9
14	Madhya Pradesh	19.8	37.8	37.8	0.0	0.0	0.0	0.0	37.8
15	Maharashtra	165.8	292.4	392.5	38.8	1.6	0.2	0.6	433.7
16	Manipur	4.1	11.2	12.6	0.3	0.7	0.2	0.5	14.3
17	Meghalaya	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	Mizoram	0.0	0.0	0.1	0.2	0.2	0.1	0.0	0.6
19	Nagaland	0.0	5.8	7.8	0.0	1.7	0.4	1.1	11.0
20	Orissa	31.3	96.1	114.4	6.6	3.0	2.3	4.6	130.9
21	Punjab	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	Rajasthan	9.2	16.3	35.0	2.5	1.4	2.1	0.9	41.9
23	Sikkim	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.1
24	Tamil Nadu	29.2	29.2	29.4	0.4	14.1	57.5	27.8	129.2
25	Tripura	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1
26	Uttar Pradesh	133.1	209.0	310.7	64.8	83.5	56.3	4.2	519.6
28	Uttaranchal	Included in Uttar Pradesh		0.0	0.0	0.0	0.0	0.0	0.0
29	West Bengal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total		423.9	773.0	1124.3	138.6	122.4	154.5	60.9	1600.7

Source : Ministry of Water Resources (CAD Wing)

Note : Totals may not tally due to rounding off

Table : 2.24 Cultivable Command Area of CAD Projects and Districts Benefitted in India

As on 01.06.2006

Sl. No.	Name of the State/ U.Ts.	Name of the Project	Culturable Command Area ('000 Ha.)	Ultimate Irrigation Potential ('000 Ha.)	Command Area Development Authority	Districts Benefitted
1	2	3	4	5	6	7
1	Andhra Pradesh	1.Sriramasagar	411.00	411.00		Karimnager, Adilabad Warangal, Nizamabad Khammam, Nalgonda
		2.Srisailam R.B.C.	76.89	76.89		Kurnool
2	Arunachal Pradesh	1.Cluster of 62 M I in 4 panchayats in the district of papumpare namely	2.76	2.76		Papumpare
		2.Cluster of 7 M I namely Kharsang Jonglim, Pather, Changlang and Simrang,Kengkut, Simari and	2.76	2.76		Lohit,Debang,Papumpare,West Siang, East Siang
		3.Cluster of 6 M I projects namely Remgong, Korong,Soso Korong and sireng	1.73	1.73		Janglong
3	ASSAM	1.Birdi Karai	16.99	25.53	Upper Assam CADA, Gauhati	Tejpur Sub-Div.under Sonipur Distt. Nowgong
		2.Kaldiya	9.83	16.50	Upper Assam CADA, Gauhati	Barpeta
		3.Dakadong	4.94	6.05	Upper Assam CADA, Gauhati	Nalbari, Barpeta, Dekadong
4	Bihar	1.Gandak	960.00	1151	6.Gandak CADA	East Champaran, Muzaffarpur, Gopalganj,Samastipur, Vaishali,Saran, Siwan Bhagalpur,Monghyr
		2.Badua and Chandan	106.38	105.26	KBC CADA	Saharsa,Katihar,Purnea,Madhepura
		3.Kosi	440.00	434	KBC CADA	Patna,Aurangabad
		4..Sone	865.00	583.4	Sone CAD	Bhojpur,Rohtas,Gaya
5	Chhattisgarh	1. Ballar	6.55		11. Mahanadi Ayacut DGVP Authority Raipur	Raipur

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Table : 2.24 Cultivable Command Area of CAD Projects and Districts Benefitted in India

As on 01.06.2006

Sl. No.	Name of the State/ U.Ts.	Name of the Project	Culturable Command Area ('000 Ha.)	Ultimate Irrigation Potential ('000 Ha.)	Command Area Development Authority	Districts Benefitted
1	2	3	4	5	6	7
		2.Mahanadi,Paury,Tandula, Jonk and Kodar	537.46	440.88	Mahanadi Ayacut DGVP Authority Raipur	Raipur,Dhamtari,Durg,Mahasamund, Kurba,Janjgir,Champa,Raigarh
		3. Hasdeo Phase-2	168.00	255.00	Hasdeo Ayacut Dev. Authority, Bilaspur	Korba, Janjgir, Champa, Raigarh
6	GUJRAT	1.Karjan	56.20	77.85		Bharuch
		2.Sardar Sarovar Phase-I	446.61	446.61		Narmadea, Bharuch,Vadodara and Panchmahal
7	Haryana	1.Bhakra canal Project	239.15	208.08	CADA Haryana,Panchkula	Sirsa,Fatehabad,Hissar,Jind,Karnal,
		2. Western Yamuna canal PhaseIV	30.00	23.40	CADA Haryana,Panchkula	Kurukshetra,Kaithal & Anbala
		3.Western Yamuna canal Phase-V	7.68	5.99	CADA Haryana,Panchkula	Rohtak, Jhajjar, Sonapat,Hissar,Jind, Bhiwani & Panipat.
8	Himachal Pradesh	1.Flow Irrgn. Project (Hydrokuhl)	0.74	0.74		Mandi
		Joginder nagar Tehsil,				
		2.14 No.FIS Chauntra Block	1.25	2.49		Mandi
		3.24 MI Scheme in Noorpur	2.08	0.00		Mandi
		Command Jawali tehsil in				
		4.Cluster of 40 MI schemes in Dtang & Sadar block of Distt. Mandi	1.38	2.75		Mandi
		5.Cluster of 38 MI schemes in pandonga haroli saloh area in Tehsli Una of Dist. Una.	1.47	1.91		Una
		6.Cluster of 3 MI schemes under IPH division of Thural	0.89	0.89		Kangra
		District Kangra				
		7.Cluster of 42 NI schemes in Tehsil Sarkaghat Dustrict Mandi	1.09	1.50		Mandi
8.Cluster of 27 MI schemes in Nallagarh area of District Solan	2.21	2.21		Solan		

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Table : 2.24 Cultivable Command Area of CAD Projects and Districts Benefitted in India

As on 01.06.2006

Sl. No.	Name of the State/ U.Ts.	Name of the Project	Culturable Command Area ('000 Ha.)	Ultimate Irrigation Potential ('000 Ha.)	Command Area Development Authority	Districts Benefitted
1	2	3	4	5	6	7
		9.Cluster of 12 MI schemes in Rampur block of District	0.77	1.53		Shimla
9	Jammu & Kashmir	1.Ego-Phey Canal	3.00	3.00	Kashmir CADA Srinagar	Ladakh
		2.Marval Stage-IV	0.64	0.64	Kashmir CADA Srinagar	Phulwama,Badam
		3.Martand	4.34	6.50	Kashmir CADA Srinagar	Anantnag
		4.Rafiabad	2.93	5.86	Kashmir CADA Srinagar	Barammulla
		5.Ravi Canal	31.80	40.49	Kashmir CADA Jammur	Jammu,Kathua
		6.Tawi Lift Irrigation	12.88	12.88	Kashmir CADA Jammu	Jammu.
		7.Anarbal Command	3.22	5.32	Kashmir CADA Srinagar	Anantnag. Pulwama
		8.Poonch Canal Command (Jammu CADA)	4.35	8.69	Kashmir CADA Srinagar	Poonch
		9.Zainegeer canal (Kashmir CADA)	5.10	8.30	Kashmir CADA Srinagar	Barammulla
		10.Bringi canal Command (Srinagar CADA)	3.37	5.93	Kashmir CADA Jammu	Anantnag
		11.Kathua canal Command (Jamu CAD	8.46	14.39	Kashmir CADA Jammur	Kathua
10	Jharkhand	1.Kanchi Weir Scheme	17.80	18.80		Ranchi
		2.Mayurakshi Left Bank Canal System	9.50	10.15		Dumka
11	Karnataka	1.Taraka	8.90	7.04		Mysore
		2.Tunga Anicut	8.70	8.70		Shimoga
		3.Ghataprabha	317.43	317.43	Malaprabha & Ghataprabha	Bijapur,Belgaum
		4.Malparabha	214.98	214.98	Malaprabha & Ghataprabha	Belgaum, Bijapur
		5.Tungbhadra	529.00	349.10	Tungabhadra Project,	Raichur, Bellary
					Munirabad	
		6.Upper Krishna	424.91	424.91	Upper Krishna Project,	Bijapur,Gulbarga,Raichur
					Bheemarayanaguid	
		7.Bhadra Reservoir	105.57	105.57	Bhadra Reservoir Project	Shimoga
					Shimoga	

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Table : 2.24 Cultivable Command Area of CAD Projects and Districts Benefitted in India

As on 01.06.2006

Sl. No.	Name of the State/ U.Ts.	Name of the Project	Culturable Command Area ('000 Ha.)	Ultimate Irrigation Potential ('000 Ha.)	Command Area Development Authority	Districts Benefitted
1	2	3	4	5	6	7
		7.Amarja	8.90	8.90	Irrigation Project Zone, Gulbarag	Gulbarga
		8.Bennithora	20.23	20.23	Irrigation Project Zone, Gulbarag	Koppal
		9.Hirehalla	8.83	8.33	Tungabhadra Project,Munirabad	Gulbarga
12	Kerala	1.Pamba	21.14	49.45	CADA,Kerala	Alapuzha Pathasnamthitta
		2.Pariyar Valley	32.80	85.60	CADA,Kerala	Ernakulam
		3.Kanhirapuzha	9.72	21.85	CADA,Kerala	Palakkad
		4.Pasis	11.53	25.85	CADA,Kerala	Kannur
13	Madhya Pradesh	1.Kolar	45.00	60.86	Tawa Ayacut WRD, Bhopal	Sehore
		2.Rani Avanti Bai (Bargi)	157.00	157.00	RAB,CAD&WM,Jabalpur	Jabalpur, Narsingpur
		3.Upper Wainganga	93.00	113.93	Wainganga Sinchai Dev.&WM	Balaghat, Seoni
					Cell,Seoni	
		4.Bagh	16.60	14.79	Wainganga Sinchai Dev.&WM	Balaghat, Seoni
		5.Harsi	68.42	53.16	Gwalior Sinchai Dev.&WM Cell,	Gwalior, Shivpuri, Guna
					Gwalior	
		6.Kunwar Chain Sagar (dudhi) Project	3.70	4.81	Tawa Ayacut WRD, Bhopal	Rajgarh
14	Maharashtra	1.Khadakwasla	77.68	62.15		Pune
		2.Kukadi	132.00	129.50		Pune,Ahmedangar, Sholapur
		3.Surya	14.70	27.20		Thane
		4.Krishna	74.00	111.72		Satara, Sangli
		5.Chaskaman	43.42	70.35		Pune
		6.Upper Penganga	104.00	104.00		Nanded, Yotmal, Parbhani
		7.Upper Wardha	83.30	103.29		Amarawati,Wardha.
		8.Lower Wunna	21.59	19.50		Nagpur, Wardha
		9.Bhima	126.00	164.05	Dev. Authority	Pune,Sholapur
		10.Wan Project	22.53	19.18		Akola

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Table : 2.24 Cultivable Command Area of CAD Projects and Districts Benefitted in India

As on 01.06.2006

Sl. No.	Name of the State/ U.Ts.	Name of the Project	Culturable Command Area ('000 Ha.)	Ultimate Irrigation Potential ('000 Ha.)	Command Area Development Authority	Districts Benefitted
1	2	3	4	5	6	7
15	Manipur	1.Imphal Barrage	4.00	6.40		Imphal, Thoubal
		2.Thoubal Multipurpose	4.00	29.67		Thoubal
		3.Loktak Lift Irrigation	16.00	40.00		Manipur
		4.Singda Multipurpose	2.40	2.40		Imphal West
		5.Culster of 8 MI Projects namely saikot, masemlok, Wangoo,Ethei Maru,Haipi, Lamlang,Sitalok and Serou	5.53	5.53		Thoubal,Candel,Senapati Ukhrul, Bishnupur
16	Meghalaya	Culster of 10 MI schemes viz. Tiengiam and Padem etc	2.44	2.44		West Lashi, Jainta, East West South Garo & Ribhoi
17	Mizoram	1.A Cluster of 40 Minor Irrigation Project consisting of 36 (29 Flow and 7 Lift) Schemes in Aizwal district and Minor	1.09	1.09		Aizwal, Lunglei
		2.Cluster of 60 MI Schemes (Phase-II I Aizwal, Lunglei and Chhimtuipui District)	3.04	6.08		Lunglei and Chhimtuipui
18	Nagaland	1.Medziphema Bowi	3.33	3.33		Kohima, Dimarpur
19	Orissa	1.Daha	4.76	7.71		Ganjam
		2.Jayamangla	7.35	7.35		Ganjam
		3.Hirakud	153.24	251.15		Sambalpur, Barage of Sonepur,Balangir
		4.Salki	19.89	21.91		Baudh
		5.Mahanadi Delta	336.30	562.54		Cuttack,Puri
		6.Rushikulya	61.23	67.23		Ganjam
		7.Salandi Right Bank Canal	40.18	53.44		Bhadrak, Balasore, Keo
		8.Baitarani	32.77	36.85		Bhadrak, Jaipur

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Table : 2.24 Cultivable Command Area of CAD Projects and Districts Benefitted in India

As on 01.06.2006

Sl. No.	Name of the State/ U.Ts.	Name of the Project	Culturable Command Area ('000 Ha.)	Ultimate Irrigation Potential ('000 Ha.)	Command Area Development Authority	Districts Benefitted
1	2	3	4	5	6	7
		9.Potteru	70.10	70.10		Koraput, Malkangiri
		10.Upper Kolab	47.72	83.50		Koraput
		11.Kansabahal	5.05	7.95		Sundergarh
		12.Kunaria	3.60	5.51		Nayagarh
20	Punjab	1.Kotla Branch	54.65	81.98		Sangroor, Bhatinda, Mansa
		2.Eastern Canal System	51.00	76.50		Feerozpur, Faridkot, Mukatsar
		3.UBDC Command	184.86	277.29		Amritsar
21	Rajasthan	1.Chambal	229.00	219.00	Chambal CADA,Kota	Bundi, Kota, Baron
		2.1.G.N.P..	1413.57		IGNP CADA,Bikanar	Bikaner, Hanumangarh, Jaisalmer
		3.Amar Singh Sub-Branch and Jassana district of Bhakra Canal System	67.21	67.21	IGNP CADA,Bikanar	Hanumangarh
		4.Sidmukh Nohar	111.46	42.76	IGNP CADA,Bikanar	Hanumangarh
22	Sikkim	1.A Cluster of 17 Minor Irrigation schemes of North and district of Sikkim	1.03	1.03		North and East District of Sikkim
		2.A Cluster of 21 Minor Irrigation schemes of South and West district of Sikkim	1.22	1.22		South & West District of Sikkim
23	Tamilnadu	1.Thoppaiyar Project salem & Dharmapuri districts.	223.30	223.30		Salem, Dharmapuri
		2.Cauvery System	634.40	634.40		Tiruchilapalli,Thanjaur, Cuddalore, Nagapattinam, Pudukottai, Salem
						Erode vallalar
		3.Parambikulam Aliyar	170.52	101.48		Coimbatore
		4.Thmbiraparani	34.85	34.85		Tirunelveli

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Table : 2.24 Cultivable Command Area of CAD Projects and Districts Benefitted in India

As on 01.06.2006

Sl. No.	Name of the State/ U.Ts.	Name of the Project	Culturable Command Area ('000 Ha.)	Ultimate Irrigation Potential ('000 Ha.)	Command Area Development Authority	Districts Benefitted
1	2	3	4	5	6	7
		5.Palar Porandalar Project in Dindigul district	7.41	11.29		Dindukal
		6.Krishnagiri	4.34	4.34		Dharmapuri
		7.Cluster of 7 Medium Irrigation Schemes	31.64	68.23		Tirunelveli, Thoothukudi, Salem Dharmapuri, Dindigul
24	Tripura	1.Cluster of 4 MI Projects	0.44	1.02		Kachigang, Noacherra. Baikhorachorra
25	Uttar Pradesh	1.Devkali Pump Canal	73.26		Sharda Sahayak CADA	Gazipur
		2.Tumaria dam canal System	49.13		Ramganga CADA	Rampur, Muradabad
		3.Sarda Canal Project	1613.00	806.00	Sharda Sahayak CADA	Pilibhit, Shahjahanpur, Hadoi, Unnao, Sitapur, Kheri
		4.Saryu Canal System-I	162.00	190.00	Sharda Sahayak CADA	Bahraich,Gonda, Siddharthnagar Basti, Gorakhpur
		5.East Ganga Canal	233.00	195.00	Ramganga CADA	Bijnaur, Moradabad
		6.East Jumuna Canal	221.00	200.00	Ramganga CADA	Ghaziabad,Saharanpur, Muzaffarnagar Meerut
		7.Betwa & Gursarai Canal	422.00	269.00	Ramganga CADA	Jhansi, Jalaun, Hamirpur
		8.Ken Canal System	222.00	112.00	Ramganga CADA	Banda
		9.Belan Pump Canal System	71.05	53.90	Ramganga CADA	Allahabad
		10.Tons Pump Canal System	34.00	33.20	Ramganga CADA	Allahabad
		11.Gyanpur Pump Canal System	62.30	65.00	Ramganga CADA	Varanasi, Allahabad, Bhadoi, Mirzapur
		12Son Pump Canal System	93.65	65.00	Ramganga CADA	Mirzapur, Sonebhadra
		13Narayanpur Pump Canal	64.79		Sjarda Sahayak CADA	Mirzapur, Varanasi
		14Uppar Ganga Canal	457.00	488	Ramganga CADA	Saharanpur, Meerut, Muzzafarnagar, Bagpat, Ghaziabad
		15Madhya Ganga Canal	229.00	178	Ramganga CADA	Bhaziabad, Bulandshahar, Hathras
26	Uttranchal	1.Laster Canals off shoots	1.12	0.96		Rudraprayag
		2.Nathuwala & Balawala Canals	1.12	1.12		Dehradum
		3.Jatowala & Prateetpurcanal	0.54	0.54		Dehradum
		4.Tumaria Dam canal System	32.53	32.53		Udham Singh Nagar

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Table : 2.24 Cultivable Command Area of CAD Projects and Districts Benefitted in India

As on 01.06.2006

Sl. No.	Name of the State/ U.Ts.	Name of the Project	Culturable Command Area ('000 Ha.)	Ultimate Irrigation Potential ('000 Ha.)	Command Area Development Authority	Districts Benefitted
1	2	3	4	5	6	7
27	West Bengal	1.D.V.C.System				
		2.Kangsabati	391.97	551.00	Damodar Valley	Bankura, Howrah, Hoogly, Burdwan
			340.75	401.46	Kangsabati	Bankura, Hoogly, Midnapur
		3.Mayurakshi	226.63	250.86	Mayurakshi	Birbhum, Burdwan
						Murshidabad
		4.Teesta Barrage				
			923.00	923.00		Cooch Bihar, Jalpaiguri
				West Dinapur, Malda		
				Darjeeling		

Source : Ministry of Water Resources (CAD Wing)

Chart 20 Percapita Consumption of Electricity - Top Ten States

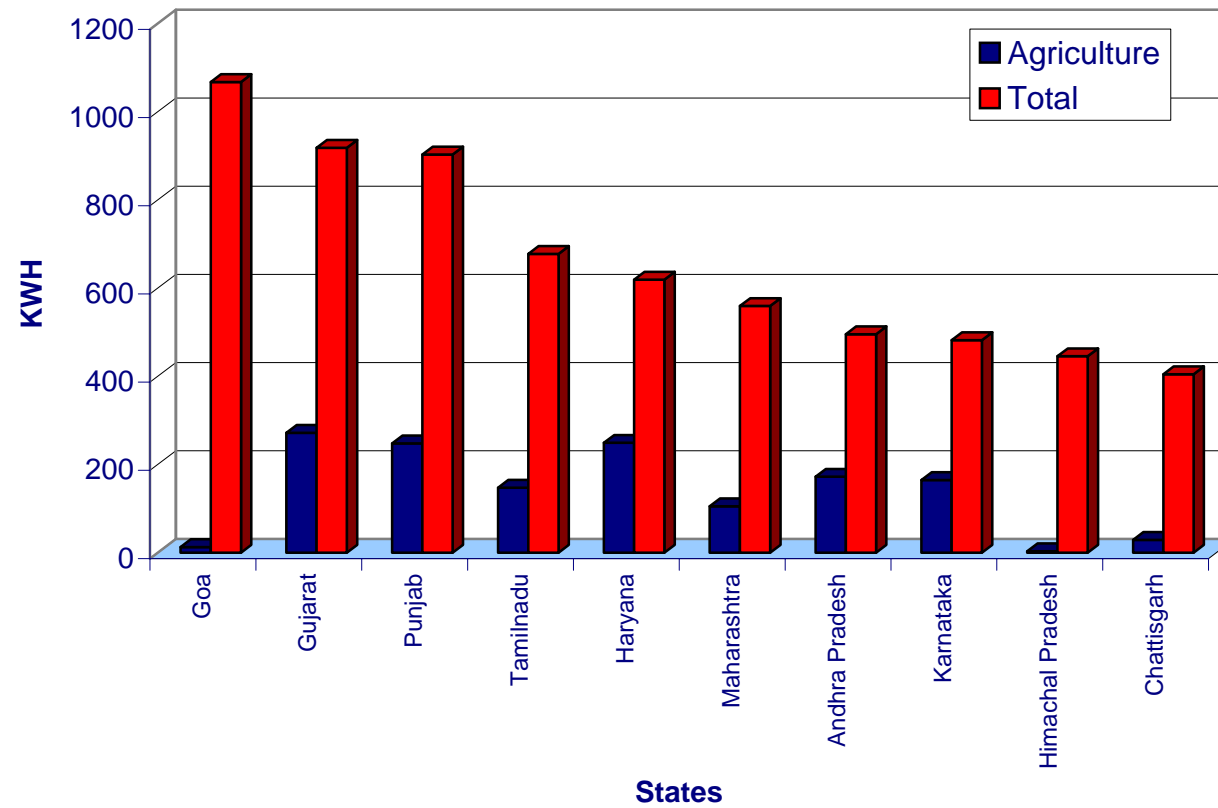


Table 2.25 Statewise Per Capita Consumption of Electricity

(Unit :KWH)

Sl. No.	State/U.Ts.	2002-03		2003-04	
		Agriculture Sector	Total	Agriculture Sector	Total
1	2	3	4	5	6
1	Andhra Pradesh	167.36	468.00	172.15	495.30
2	Arunachal Pradesh	0.00	70.70	0.00	110.33
3	Assam	1.88	105.50	1.81	105.34
4	Bihar	11.61	44.90	11.80	44.85
5	Jharkhand	1.81	310.00	4.79	394.87
6	Goa	12.92	1160.60	12.73	1067.35
7	Gujarat	249.34	838.00	271.74	917.96
8	Haryana	237.58	580.00	249.09	618.98
9	Himachal Pradesh	3.15	420.40	3.12	445.45
10	Jammu & Kashmir	10.37	316.40	10.72	327.04
11	Karnataka	157.99	462.80	164.88	481.73
12	Kerala	5.69	284.50	5.75	291.11
13	Madhya Pradesh	83.28	278.20	87.66	283.54
14	Chhatisgarh	34.29	515.80	28.90	404.51
15	Maharashtra	107.27	538.50	105.02	559.35
16	Manipur	0.35	72.90	0.25	70.55
17	Meghalya	0.15	300.80	0.20	332.27
18	Mizoram	0.00	162.30	0.00	140.28
19	Nagaland	0.00	61.40	0.00	65.47
20	Orissa	4.59	346.00	4.76	373.45
21	Punjab	234.05	870.40	247.76	902.76
22	Rajasthan	74.04	290.90	71.68	294.08
23	Sikkim	0.00	130.80	0.00	323.69
24	Tamil Nadu	143.11	645.40	147.17	677.37
25	Tripura	25.15	111.30	23.82	125.34
26	Uttar Pradesh	28.08	187.70	28.25	188.83
27	Uttranchal	42.38	311.70	35.92	342.05
28	West Bengal	8.84	224.60	9.45	237.47
29	A & N Islands	0.00	292.50	0.00	301.89
30	Chandigarh	2.45	858.80	2.45	853.34
31	Dadra & Ngr Haveli	6.52	4078.70	20.13	6631.49
32	Damman & Diu	11.29	4830.70	11.83	5428.11
33	Delhi	102.85	739.00	6.08	796.85
34	Lakshadweep	0.00	303.80	0.00	296.25
35	Pondicherry	98.62	1605.20	116.80	1828.25
	All India	80.08	373.00	81.20	390.03

Source : Central Electricity Authority (DMLF Division)

KWH : Kilowatt Hours

Table : 2.26 Regionwise/Statewise Irrigation Pumpsets Energised & Electricity Consumption in Agriculture Sector during 2002-03 and 2003-04

Sl. No.	Name of the Region/State	Irrigation Pumpsets Energised (31.3.2004) (Nos.)	ELECTRICITY CONSUMPTION IN AGRICULTURE				% of Villages (as per 1991 Census) Electrified as on 31-3-2004
			2002-2003		2003-2004		
			Quantum (GWH)	% to Total Consumption in the State	Quantum (GWH)	% to Total Consumption in the State	
1	2	3	4	5	6	7	8
I.NORTHERN REGION							
1	Haryana	450617	5165.10	44.10	5513.76	42.69	100.0
2	Himachal pradesh	8114	19.60	0.80	19.54	0.71	99.4
3	Jammu & Kashmir +	9529	109.00	3.30	115.86	3.28	97.3
4	Punjab	880902	5818.50	27.60	6242.86	28.22	100.0
5	Rajasthan	701283	4326.10	29.70	4274.37	29.09	98.3
6	Uttar Pradesh	841951	4820.90	19.10	4951.63	18.57	57.1
7	Uttaranchal	17508	369.10	15.00	318.33	11.96	84.9
8	Chandigarh	623	2.30	0.30	2.35	0.29	100.0
9	Delhi	25883	1490.30	13.90	90.82	0.76	100.0
	Sub-Total	2936410	22120.80	23.90	21529.52	21.96	76.8
II. WESTERN REGION							
1	Gujarat *	794148	12965.60	37.70	14360.58	37.82	100.0
2	Madhya Pradesh	1325092	5196.10	34.20	5582.97	35.10	97.4
3	Chhattisgarh	98035	734.10	11.60	630.89	11.64	94.0
4	Maharashtra *	2491521	10641.50	21.30	10572.01	20.40	100.0
5	Goa	7332	18.10	1.30	18.27	1.33	100.0
6	Daman & Diu	953	1.90	0.20	4.73	0.31	100.0
7	Dadra & Nagar Haveli	1006	1.50	0.20	2.00	0.22	100.0
	Sub Total	4718087	29558.80	27.10	31171.45	27.11	98.0
III.SOUTHERN REGION							
1	Andhra Pradesh *	2309605	12912.10	41.20	13448.19	39.36	100.0
2	Karnataka	1416164	8507.90	39.20	8992.48	38.86	98.9
3	Kerala	430449	184.00	2.10	188.09	2.07	100.0
4	Tamil Nadu	1821432	9030.00	24.40	9382.00	23.91	100.0
5	Pondicherry	0	97.60	6.30	0.00	0.00	100.0
6	Lakshadweep	10485	0.00	0.00	117.73	6.56	100.0
	Sub Total	5988135	30731.6	30.60	32128.49	29.90	99.6

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Table : 2.26 Regionwise/Statewise Irrigation Pumpsets Energised & Electricity Consumption in Agriculture Sector during 2002-03 and 2003-04

Sl. No.	Name of the Region/State	Irrigation Pumpsets Energised (31.3.2004) (Nos.)	ELECTRICITY CONSUMPTION IN AGRICULTURE				% of Villages (as per 1991 Census) Electrified as on 31-3-2004
			2002-2003		2003-2004		
			Quantum (GWH)	% to Total Consumption in the State	Quantum (GWH)	% to Total Consumption in the State	
1	2	3	4	5	6	7	8
IV.EASTERN REGION							
1	Bihar \$\$	278399	993.60	27.50	1028.74	27.58	71.3
2	Jharkhand		50.10	0.70	134.62	1.73	N.A.
3	Orissa (a)	74625	171.80	2.50	180.76	2.53	79.5
4	West Bengal	112815	724.60	4.30	785.39	4.41	83.6
5	A & N Islands *	1	0.00	0.00	0.00	0.00	100.0
6	Sikkim \$	0	0.00	0.00	0.00	0.00	100.0
	Sub Total	465840	1940.1	5.70	2129.51	5.79	77.0
V. NORTH-EASTERN REGION							
1	Assam	3675	51.60	2.60	50.49	2.63	77.3
2	Manipur	45	0.90	0.50	0.61	0.35	95.0
3	Meghalaya	65	0.40	0.00	0.47	0.06	63.5
4	Nagaland	176	0.00	0.00	0.00	0.00	100.0
5	Tripura	2940	82.00	22.60	78.71	19.00	95.9
6	Arunachal Pradesh	0	0.00	0.00	0.00	0.00	63.5
7	Mizoram	0	0.00	0.00	0.00	0.00	99.6
	Sub Total	6901	134.8	3.80	130.28	3.52	76.6
	Total (All India)	14115373	84486.10	24.90	87089.25	24.13	84.3

Source : Central Electricity Authority (DMLF Division).

GWH : Giga Watt Hours

Remarks : * Fully electrified. Balance not feasible for electrification by grid supply.

\$ Provisional 42 forest villages not electrified.

\$\$ Achievement as per 1981 census.

+ Achievements as per 1971 census. 1991 census not held.

(a) As on 30.6.2003.

TABLE 2.27 STATEWISE ACHIEVEMENTS UNDER ACCELERATED IRRIGATION BENEFIT PROGRAMME (AIBP) (AS ON 15.04.07)

S.No.	Name of the State	CLA RELEASED		Ultimate Irrigation Potential (000 Ha.)	Potential Created under AIBP Upto 3/2006	
		Normal (Crore)	Fast* Track (Crore)		Normal (000 Ha.)	Fast Track (000 Ha.)
1	2	3	4	5	6	7
1	Andhra Pradesh	1680.488	484.884	2185.520	189.861	115.412
2	Assam	110.719		234.376	75.661	
3	Bihar	516.503		1214.204	400.874	
4	Jharkhand	94.235		62.983	11.620	
5	Goa	151.300		38.724	9.746	
6	Gujarat	4403.830	373.000	2028.352	242.045	184.780
7	Haryana	90.540		400.500	105.133	
8	Himachal Pradesh	101.183		33.149	2.664	
9	Jammu & Kashmir	155.298		69.211	14.971	
10	Karnataka	2719.172	126.350	1133.896	379.573	15.442
11	Kerala	164.536		128.190	36.085	
12	Madhya Pradesh	2281.701	163.030	1388.514	114.024	2.824
13	Chattisgarh	135.380	140.490	687.870	55.603	48.358
14	Maharashtra	1802.423	73.121	1735.329	197.339	15.871
15	Manipur	321.626		55.945	0.000	
16	Mrghalaya	4.000		4.775	0.000	
17	Orissa	1208.828	118.964	1111.799	68.763	47.352
18	Punjab	421.567	20.220	141.326	105.656	
19	Rajasthan	1516.048	179.405	1299.786	374.944	30.174
20	Tamil Nadu	20.000		0.000	0.000	
21	Tripura	50.760		26.720	7.049	
22	U.P. / Uttranchal	2176.208	84.050	4472.919	877.598	21.560
23	West Bengal	176.897		1080.092	74.540	
Grand Total		20303.242	1763.513	19534.180	3343.749	481.773

Source : Central Water Commission (PMO)

* Fast track programme discontinued since December 2006.

Section - 3

PRODUCTION RELATED PERFORMANCE & ECONOMIC EFFICIENCY

In this Section data on agricultural production in the country and the world for important crops/group of crops, production/ output data for other water related sectors viz; Fisheries, Inland Waterways, Hydro-electric Power, etc. have been presented. In addition, the GDP in the country classified by different economic activities and elaborated further in respect of Agriculture & allied activities is also included. Salient features of important data are briefly described as follows:

Area, Yield, and Production of Crops

As per the final estimates, the area, production and productivity of food grains, rice, wheat, coarse cereals and oilseeds, are estimated to have increased during 2005-06 as compared to those during 2004-05. The area under pulses and cotton during the year 2005-06 has decreased as compared to that in 2004-05. But production for both has registered an increase during the same period thereby resulting in an increase in productivity. In the case of sugarcane productivity is estimated to have increased from 64752 kg/ha to 66928 kg/ha during the same period.

[\(Table 3.1\)](#)

From the `break-up of the production of food grains into Kharif and Rabi it is observed that Kharif production have increased by 59.5% from 68.9 m.tones during 1970-71 to

109.9 mtonnes during 2005-06 while the Rabi production has increased by 149% from 39.5 m.tones to 98.7 m.tonnes during the same period. The contribution of Kharif Crops to total food grain production has been showing a general downward trend as is evident by a decline from about 64 % in 1970-71 to 52.7% in 2005-06.

[\(Table 3.3 & Charts 21 & 22\)](#)

Time-series data of irrigated and unirrigated yield in different States has also been given for selected crops for the period 1998-99 to 2003-04. In case a particular crop is grown in two different seasons, yield rates are given season-wise. The maximum irrigated yield of rice (4158 kg. /ha.) was attained in the State of Tamil Nadu in 1999-2000 and again in 2000-01 at 4104 kg. /ha, followed by an yield of 4102 kg./ha. in Karnataka during 2003-04. Punjab is consistently maintaining a yield rate of over 3000 kg/ha. and having maximum of 3675 kg/ha. in 2003-04. In case of wheat, irrigated yield for Punjab is consistently above 4200 kg/ha, In Haryana, the yield levels for irrigated crop were slightly lower than those in Punjab. In case of Gujarat, Irrigated wheat yield is more than five times the unirrigated yield. In respect of sugarcane, Tamil Nadu has consistently reported highest irrigated yield (over 100 tonnes/ha) over the years. Gujarat has recorded highest irrigated yield of groundnut for the year 2003-04.

[\(Table 3.4\)](#)

Inland fish Production

The world today is witnessing resurgence in the consumption of fish, which is a staple food for a vast majority of population. India has the distinction of being the seventh largest

producer of fish in the world and second largest-Producer of Inland fish after China.

The Inland fish production increased quite substantially from 2 lakh tonnes in 1950-51 to 35 lakh tonnes during 2004-05. In 2004-05, the production increased by 0.67 lakh tonnes over that in the previous year. There is a steady increase in Inland fish Production since 1950-51. The Statewise Inland Fish Production during 1990-91 to 2004-05 shows that West Bengal continues to occupy the foremost position among fish producing States, accounting for about 30% of the country's total inland fish production during 2004-05 apparently facilitated by the prevalence of extensive fish pond culture in the State unlike other States which are heavily dependent on rivers/reservoirs for their fish catch. Andhra Pradesh, Uttar Pradesh Bihar, and Orissa are the other major producers of inland fish during the year 2004-05. These States along with West Bengal produced 69% of the total Inland fish production in the country. Productivity of Inland fish per hectare of water bodies during 2003-04 is, however, highest for the State of Punjab at 11.95 tonnes per hectare ([Tables 3.5 to 3.7](#) & [Charts 23 & 24](#))

Inland Water – Transport

Inland Waterways in public sector is managed by government and owned by Central Inland Water Transport Corporation (CIWTC). In addition to this, a major chunk of Inland Waterways Traffic (IWT) is operated & handled by the private sector companies. The Inland Waterways traffic constitutes only a very small part of total transport network in the country which is dominated by rail and road

transport. Apart from suffering due to the problem of spatial dimensions and inadequate drafts in many waterways for bigger vessels to operate, the performance of IWT is likely to be adversely affected by withdrawal of water for other priority consumption such as domestic use, irrigation, industry, etc. Data on cargo/traffic handled and freight earned in respect of some of private companies has been given in the present issue

([Table 3.8](#))

Hydro Power Potential and Generation

The Hydro Electric Power Potential Development in various States and region has been presented in Table 3.9. While 15.22 thousand-mega watt (MW) i.e. about 18.1% of country's total hydroelectric potential (84 .04 thousand MW at 60 % load factor) has been developed as on 1.4.2005, about 5.34 thousand MW (i.e. about 6.35 %) was under development. Contrary to the highest potential assessed in North Eastern Region, the potential actually tapped in this region is not only the lowest but also negligible as compared to other regions. Next highest in order of potential assessed is the Northern Region where again the progress seems to be rather tardy as evident from only 17.08% of the potential has been tapped so far, in addition to another 9.64 % under development. Southern region promises to be the best having tapped nearly 55.04% he assessed potential of 10.76housand MW, which in absolute terms is more than 15%of the potential developed in the Northern Region, notwithstanding the fact that the potential assessed in the northern region is nearly 3 times that in the southern Region. Among the States,

Himachal Pradesh in the Northern region having developed 55.88 % of its assessed potential has the distinction of highest potential developed in absolute terms (2546 MW) in any individual State followed closely by Karnataka (2429 MW) in Southern Region. Uttar Pradesh (83.9 %), Tripura (83.3 %), Haryana (80.7 %), Tamil Nadu (78.3 %) and Punjab (73.7 %) are such States, which have managed to tap a high level of assessed potential though the total relative output in absolute terms is not very substantial. ([Table 3.9](#))

Demand for power is rapidly increasing due to the economic reforms and pace of economic development. In the wake of industrialisation and urbanization, there has been considerable thrust on power development as evident from the expansion in the total installed capacity, which has grown manifold from a meager 1362 MW at the time of independence to 118 thousand MW in 2004-05. The corresponding increase witnessed in the case of Hydropower is from 508 MW to 30942 MW. As regards power generation, a total of 594.46 thousand GWH was generated during 2004-05 out of which the hydropower accounted for about 84.61 thousand GWH i.e. 14.22 % of the total power generation in the country. The share of hydropower development is however declining as seen from its contribution having reduced from 46 % in 1960-61 to 14.22 % in 2004-05. Keeping in view, however, the concern for environmental preservation, need for sustainable development and the importance of using renewable resources, it may be particularly relevant and necessary to promote hydropower development

([Table 3.10](#) and [Charts 25 & 26](#))

Indian Economy and Agriculture

The data on various economic parameters including Agriculture and related sectors based on the National Accounts Statistics with base year 1999-2000 reveal that a steady growth is being maintained. At current prices the combined value of output from agriculture and livestock maintained a rising trend and has reached Rs.679 thousand crores during 2005-06 from Rs.620 thousand crores in 2004-05. From Rs. 409 thousand crores in 1999-2000 (at current prices), the Gross Domestic Product (GDP) from Agriculture and allied activities increased to Rs. 536 thousand crores in 2005-06. Net Domestic Product (NDP) from agriculture and allied activities went up from Rs.390 thousand crores in 1999-2000 to Rs.503 thousand crores in 2005-06. Data at constant prices reflect the growth in a better way. At constant prices the value of inputs is around 21.5 % of the total value of output. Livestock Feed and chemical fertilisers for crops are two of the largest constituents of the inputs accounting for nearly 64 % of the total value of input. Irrigation charges are only a very small component of total input, being less than 1 % of total input value. At constant prices Gross Domestic Product from Agriculture and allied activities shows a growth of 6.31% during 2005-06 over the previous year.

([Tables 3.12 & 3.13](#))

Agriculture is still the most important sector of Indian economy despite having experienced a dilution in terms of its relative contribution in the economy over the years. From about 23% of the total GDP contributed by Agriculture Sector in 1999-2000, its share has reduced to about 18 % in

2005-06 at constant prices. During 2005-06, the GDP for all sectors recorded a growth of 8.9% at constant prices while the corresponding growth of agricultural sector is slower at 6.3 % over the previous year

[\(Table 3.15\)](#)

The Statewise figures are available upto the year 2004-05 only. Analysis of the Net Domestic Product (NDP) at State level and contribution of agriculture to it at current prices shows that agriculture played a particularly dominant role in the economies of Punjab and Haryana, during 1993-94, by way of contributing 48 % & 42 % respectively in the State NDP. The relative share of agriculture in state NDP has been generally declining except in the state of Nagaland. There is a decline in the share of agriculture sector in the economies of almost all major state over time in the wake of rapid pace of industrialisation and higher share of services sector in these States. The State level data on constant prices are available with respect to the old base 1993-94 only.

[\(Tables 3.16 & 3.17\)](#)

International Agriculture Data

The following analysis is based on international data on area, production and yield for total cereals, wheat, paddy, total pulses, sugarcane and maize for the year 2005.

The world average yield of total cereals is 3256 Kg/Ha. Lowest yield rate is in African Continent and highest in North Central America. South America and Asia need special efforts to reach at least European productivity rate for latter's highly increasing population. Among the individual

countries Belgium, Netherlands, New Zealand, UK, Cambodia, France, Ireland, Germany and USA have the yield rates of 8414, 8154, 7665, 7229, 6999,6947, 6855, 6658 and 6454 Kg/Ha against India's 2367 Kg/Ha.

[\(Table 3.22\)](#)

The average world productivity of wheat is about 2898 Kg/Ha, which is more than the corresponding average obtained in African, American and Asian countries. Only European countries contributed much higher average yield compared to the global average. Africa has the lowest average yield of 1805 Kg/Ha against the highest held by Europe having attained an average yield of 3543 Kg/Ha. As far as individual countries are concerned, world's highest yield of wheat was obtained in Netherlands (8720 Kg/Ha), followed by Belgium (8273Kg/Ha) and Ireland (8105 Kg/Ha), whereas the lowest was recorded in Venezuela (333 Kg/Ha). Agro-climatic and soil conditions besides the extent of use of modern agricultural technology are expected to play a major role in determining the yield. India though ranked, fairly well having achieved little less than the world average, could exploit the potential further by way of implementing land ceiling act & land reform measures and streamlining the land-holding sizes to optimum level. As regards Paddy, against the world yield of 4004 Kg/Ha, the corresponding yields in different continents were Oceania (7741 Kg/Ha), North America (6032 Kg/Ha), Europe (5725 Kg/Ha), Asia (4099 Kg/Ha), South America (3966Kg/Ha), and Africa (2033 Kg/Ha). The highest individual yield in any country was obtained in Australia (8600 Kg/Ha). Pulses have much lower average yield compared to wheat and paddy. The global average yield for

pulses (843 Kg/Ha) is about 1/3rd of average yield of wheat and 1/5th of paddy's yield. As far as world scenario is concerned, Europe ranked highest in yield of total pulses (2039 Kg/Ha) while the lowest was in African continent (499 Kg/Ha). The average yield of Asia was also below the average world yield of pulses. The highest and lowest yield in the case of individual countries in the world was in Ireland (5185 Kg/Ha) and Senegal (65 Kg/Ha) respectively. In Asia, Armenia had the distinction to attain the highest yield (2373 Kg/Ha) and followed by Japan (2178 Kg/Ha)

against the continent average of 780 Kg/Ha India's yield was the miserable 612 Kg/Ha much lower than the corresponding Asian average.

([Tables 3.22](#) to [3.24](#))

There is wide variation in yield of Sugarcane & Maize in countries & continents. In general food grain production as explained above have increased over the last 3-4 years and so also the yield rates.

([Tables 3.25](#) & [3.26](#))

Table : 3.1 All India Area, Production and Yield of Selected Crops

Sl. No.	Crops	Unit	1950-51	1960-61	1970-71	1980-81	1990-91	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Foodgrains	Area (M.Hectares)	97.32	115.58	124.32	126.67	127.84	121.05	122.78	113.86	123.45	120.08	121.57
		Production (M.tonnes)	50.82	82.02	108.42	129.59	176.39	196.81	212.85	174.77	213.19	198.36	208.58
		Yield (Kgs / Hectare)	522	710	872	1023	1380	1626	1734	1535	1727	1652	1716
		CUI (%)	18.1	19.1	24.1	29.7	35.1	43.4	43.0	42.8	N.A.	N.A.	N.A.
2	Rice	Area (M.Hectares)	30.81	34.13	37.59	40.15	42.69	44.71	44.90	41.18	42.59	41.91	43.66
		Production (M.tonnes)	20.58	34.58	42.22	53.63	74.29	84.98	93.34	71.82	88.53	83.13	91.79
		Yield (Kgs / Hectare)	668	1013	1123	1336	1740	1901	2079	1744	2078	1984	2102
		CUI (%)	31.7	36.8	38.4	40.7	45.5	53.6	53.2	50.2	N.A.	N.A.	N.A.
3	Wheat	Area (M.Hectares)	9.75	12.93	18.24	22.28	24.17	25.73	26.35	25.20	26.59	26.38	26.48
		Production (M.tonnes)	6.46	11.00	23.83	36.31	55.14	69.68	72.77	65.76	72.16	68.64	69.35
		Yield (Kgs / Hectare)	663	851	1307	1630	2281	2708	2762	2610	2713	2602	2619
		CUI (%)	34.0	32.7	54.3	76.5	81.1	88.1	87.4	88.0	N.A.	N.A.	N.A.
4	Coarse Cereals	Area (M.Hectares)	37.67	44.96	45.95	41.78	36.32	30.26	29.52	26.99	30.80	29.03	29.06
		Production (M.tonnes)	15.38	23.74	30.55	29.02	32.70	31.08	33.38	26.07	37.60	33.46	34.07
		Yield (Kgs / Hectare)	408	528	665	695	900	1027	1131	966	1221	1153	1172
		CUI (%)	7.9	7.7	8.3	9.2	9.0	12.5	11.3	N.A.	N.A.	N.A.	N.A.
5	Jowar	Area (M.Hectares)	15.57	18.41	17.37	15.81	14.36	9.86	9.80	9.30	9.33	9.09	8.67
		Production (M.tonnes)	5.50	9.81	8.11	10.43	11.68	7.53	7.56	7.01	6.68	7.24	7.63
		Yield (Kgs / Hectare)	353	533	466	660	814	764	771	754	716	797	880
		CUI (%)	3.0	3.6	3.6	4.7	5.6	7.9	8.3	8.5	N.A.	N.A.	N.A.

contd..

Table : 3.1 All India Area, Production and Yield of Selected Crops

Sl. No.	Crops	Unit	1950-51	1960-61	1970-71	1980-81	1990-91	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06
1	2	3	4	5	6	7	8	9	10	11	12	13	14
6	Bajra	Area (M.Hectares)	9.02	11.47	12.91	11.66	10.48	9.83	9.53	7.74	10.61	9.23	9.58
		Production (M.tonnes)	2.60	3.28	8.03	5.34	6.89	6.76	8.28	4.72	12.11	7.93	7.68
		Yield (Kgs / Hectare)	288	286	622	458	658	688	869	610	1141	859	802
		CUI (%)	3.4	2.8	4.0	5.5	5.1	8.0	6.3	9.0	N.A.	N.A.	N.A.
7	Maize	Area (M.Hectares)	3.16	4.41	5.85	6.01	5.90	6.61	6.58	6.64	7.34	7.43	7.59
		Production (M.tonnes)	1.73	4.08	7.49	6.96	8.96	12.04	13.16	11.15	14.98	14.17	14.71
		Yield (Kgs / Hectare)	547	926	1279	1159	1518	1822	2000	1681	2041	1907	1938
		CUI (%)	11.4	12.6	15.9	20.1	19.7	22.4	20.5	19.5	N.A.	N.A.	N.A.
8	Pulses	Area (M.Hectares)	19.09	23.56	22.54	22.46	24.66	20.35	22.01	20.50	23.46	22.76	22.36
		Production (M.tonnes)	8.41	12.70	11.82	10.63	14.26	11.08	13.37	11.13	14.91	13.13	13.36
		Yield (Kgs / Hectare)	441	539	524	473	578	544	607	543	635	577	597
		CUI (%)	9.4	8.0	8.8	9.0	10.5	12.5	13.3	14.4	N.A.	N.A.	N.A.
9	Gram	Area (M.Hectares)	7.57	9.28	7.84	6.58	7.52	5.19	6.42	5.91	7.05	6.71	6.90
		Production (M.tonnes)	3.65	6.25	5.20	4.33	5.36	3.86	5.47	4.24	5.72	5.47	5.58
		Yield (Kgs / Hectare)	482	674	663	657	712	744	853	717	811	815	808
		CUI (%)	12.5	11.9	15.6	20.6	20.5	30.9	30.4	32.1	N.A.	N.A.	N.A.
10	Tur (Arhar)	Area (M.Hectares)	2.18	2.43	2.66	2.84	3.59	3.63	3.33	3.36	3.52	3.52	3.58
		Production (M.tonnes)	1.72	2.07	1.88	1.96	2.41	2.25	2.26	2.19	2.36	2.35	2.74
		Yield (Kgs / Hectare)	788	849	709	689	673	618	679	651	670	667	765
		CUI (%)	0.5	0.5	0.3	2.6	5.5	4.2	4.7	4.6	N.A.	N.A.	N.A.

contd..

Table : 3.1 All India Area, Production and Yield of Selected Crops

Sl. No.	Crops	Unit	1950-51	1960-61	1970-71	1980-81	1990-91	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06
1	2	3	4	5	6	7	8	9	10	11	12	13	14
11	Nine Oilseeds	Area (M.Hectares)	10.73	13.77	16.64	17.60	24.15	22.77	22.64	21.49	23.66	27.52	27.86
		Production (M.tonnes)	5.16	6.98	9.63	9.37	18.61	18.44	20.66	14.84	25.19	24.35	27.98
		Yield (Kgs / Hectare)	481	507	579	532	771	810	913	691	1064	885	1004
		CUI (%)	N.A.	3.3	7.4	14.5	22.9	23.0	24.3	22.7	N.A.	N.A.	N.A.
12	Rapeseed & Mustard	Area (M.Hectares)	2.07	2.88	3.32	4.11	5.78	4.48	5.07	4.54	5.43	7.32	7.28
		Production (M.tonnes)	0.76	1.35	1.98	2.30	5.23	4.19	5.08	3.88	6.29	7.59	8.13
		Yield (Kgs / Hectare)	368	467	594	560	904	935	1002	854	1159	1038	1117
		CUI (%)	N.A.	12.1	25.2	43.7	59.8	66.1	68.3	69.2	N.A.	N.A.	N.A.
13	Groundnut	Area (M.Hectares)	4.49	6.46	7.33	6.80	8.31	6.56	6.24	5.94	5.99	6.64	6.74
		Production (M.tonnes)	3.48	4.81	6.11	5.01	7.51	6.41	7.03	4.12	8.13	6.77	7.99
		Yield (Kgs / Hectare)	775	745	834	736	904	977	1127	694	1357	1020	1187
		CUI (%)	N.A.	3.0	7.5	13.3	18.6	17.6	17.3	16.5	N.A.	N.A.	N.A.
14	Cotton	Area (M.Hectares)	5.88	7.61	7.61	7.82	7.44	8.53	9.13	7.67	7.60	8.79	8.68
		Production (Million bales of 170 Kg. each)	3.04	5.60	4.76	7.01	9.84	9.52	10.00	8.62	13.73	16.43	18.50
		Yield (Kgs / Hectare)	88	125	106	152	225	190	186	191	307	318	362
		CUI (%)	8.2	12.7	17.3	27.3	32.9	34.3	34.0	33.1	N.A.	N.A.	N.A.
15	Sugarcane (Cane)	Area (M.Hectares)	1.71	2.42	2.62	2.67	3.69	4.32	4.41	4.52	3.94	3.66	4.20
		Production (M.tonnes)	57.05	110.00	126.37	154.25	241.05	295.96	297.21	287.38	233.86	237.09	281.17
		Yield (Kgs / Hectare)	33422	45549	48322	57844	65395	68577	67370	63576	59380	64752	66928
		CUI (%)	67.3	69.3	72.4	81.2	86.9	92.1	91.6	91.3	N.A.	N.A.	N.A.

contd..

Table : 3.1 All India Area, Production and Yield of Selected Crops

Sl. No.	Crops	Unit	1950-51	1960-61	1970-71	1980-81	1990-91	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06
1	2	3	4	5	6	7	8	9	10	11	12	13	14
16	Tobacco	Area (M.Hectares)	0.36	0.40	0.45	0.45	0.41	0.26	0.35	0.33	0.37	0.37	0.37
		Production (M.tonnes)	0.26	0.31	0.36	0.48	0.56	0.34	0.55	0.49	0.55	0.55	0.55
		Yield (Kgs / Hectare)	731	766	810	1065	1353	1318	1565	1506	1486	1498	1481
		CUI (%)	N.A.	21.9	23.7	33.7	43.2	52.8	43.6	N.A.	50.0	N.A.	N.A.

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

CUI: Coverage Under Irrigation

N.A. : Not Available.

Table : 3.2 Statewise Total Foodgrain : Area, Production and Yield

Item	1980-81	1985-86	1990-91	1995-96	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06
1	2	3	4	5	6	7	8	9	10	11	12
Andhra Pradesh											
Area ('000 Hectares)	8756	7827	7762	6890	7138	7673	7056	6289	6807	6267	7168
Produ. ('000 Tonnes)	9992	10374	12330	11670	13696	16029	14836	10654	13697	13396	16951
Yield (Kg / Hectare)	1141	1325	1588	1693	1919	2089	2102	1694	2012	2138	2365
Arunachal Pradesh											
Area ('000 Hectares)					187	188	188	198	191	193	199
Produ. ('000 Tonnes)					210	215	217	242	244	227	241
Yield (Kg / Hectare)					1125	1148	1154	1226	1277	1178	1212
Assam											
Area ('000 Hectares)	2521	2727	2719	2730	2869	2859	2755	2749	2742	2576	2598
Produ. ('000 Tonnes)	2706	3031	3442	3560	4042	4167	4023	3894	4035	3618	3678
Yield (Kg / Hectare)	1073	1111	1266	1306	1409	1457	1460	1417	1472	1405	1416
Bihar											
Area ('000 Hectares)	10025	9405	9428	8990	8898	7117	7021	7070	7005	6463	6548
Produ. ('000 Tonnes)	9911	10956	12259	12950	14388	12056	11682	11085	11213	7704	8587
Yield (Kg / Hectare)	989	1165	1300	1440	1617	1694	1664	1568	1601	1192	1311
Chhattisgarh											
Area ('000 Hectares)						4925	5168	5030	5256	5129	5146
Produ. ('000 Tonnes)						2901	5779	3275	6470	5023	5715
Yield (Kg / Hectare)						589	1118	651	1231	979	1111
Gujarat											
Area ('000 Hectares)	4473	4367	4622	3750	3416	3070	3469	3201	4034	3724	3967
Produ. ('000 Tonnes)	4475	2736	4844	4100	4052	2539	4906	3566	6571	5258	6154
Yield (Kg / Hectare)	1001	627	1048	1094	1186	827	1414	1114	1629	1412	1551
Goa											
Area ('000 Hectares)					68	69	59	60	63	63	64
Produ. ('000 Tonnes)					220	153	136	143	181	156	160
Yield (Kg / Hectare)					3228	2227	2293	2382	2866	2456	2509
Haryana											
Area ('000 Hectares)	3982	4024	4073	3990	4287	4345	4252	3973	4300	4240	4269
Produ. ('000 Tonnes)	6045	8141	9561	10140	13063	13294	13298	12329	13193	13109	12998
Yield (Kg / Hectare)	1518	2023	2348	2539	3047	3060	3128	3103	3068	3092	3045
Himachal Pradesh											
Area ('000 Hectares)	876	873	875	850	823	814	819	813	807	839	798
Produ. ('000 Tonnes)	1184	1201	1434	1360	1444	1112	1600	1123	1399	1612	1381
Yield (Kg / Hectare)	1352	1376	1639	1602	1754	1366	1954	1381	1733	1923	1731
Jammu & Kashmir											
Area ('000 Hectares)	836	862	889	880	881	911	881	877	899	889	882
Produ. ('000 Tonnes)	1307	1404	1344	470	1329	1115	1326	1322	1530	1499	1482
Yield (Kg / Hectare)	1563	1628	1512	1672	1508	1224	1505	1508	1701	1686	1680
Jharkhand											
Area ('000 Hectares)						1836	1870	1797	1950	1872	1896
Produ. ('000 Tonnes)						2011	2242	1893	2905	2311	2043
Yield (Kg / Hectare)						1095	1199	1053	1490	1234	1077
Karnataka											
Area ('000 Hectares)	6622	7225	7034	6860	7666	7782	7175	7024	6882	7563	7596
Produ. ('000 Tonnes)	5880	5862	6399	650	9859	10986	8697	6665	6562	10495	13489
Yield (Kg / Hectare)	888	811	910	61	1286	1412	1212	949	954	1388	1776
Kerala											
Area ('000 Hectares)	842	719	594	500	379	365	343	325	299	295	288
Produ. ('000 Tonnes)	1298	1203	1111	970	793	765	719	700	579	671	638
Yield (Kg / Hectare)	1541	1672	1872	1943	2094	2094	2097	2151	1935	2278	2219
Madhya Pradesh											
Area ('000 Hectares)	17797	18393	17988	17510	17604	10777	11850	11394	12789	12473	11678
Produ. ('000 Tonnes)	12412	15293	17998	18070	21272	10185	13607	10749	15957	14105	13195
Yield (Kg / Hectare)	697	831	1001	1032	1208	945	1148	943	1248	1131	1130
Maharashtra											
Area ('000 Hectares)	14050	14091	14400	13270	13637	13383	12800	12809	12008	12605	12746
Produ. ('000 Tonnes)	9758	8779	12184	11600	12701	10135	11188	10834	10323	10541	12087
Yield (Kg / Hectare)	695	623	846	874	931	757	874	846	860	836	948

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Table : 3.2 Statewise Total Foodgrain : Area, Production and Yield

Item	1980-81	1985-86	1990-91	1995-96	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06
1	2	3	4	5	6	7	8	9	10	11	12
Manipur											
Area ('000 Hectares)					161	168	174	155	166	187	178
Produ. ('000 Tonnes)					376	396	401	344	392	448	399
Yield (Kg / Hectare)					2328	2359	2306	2217	2355	2390	2241
Meghalaya											
Area ('000 Hectares)					136	135	135	135	135	135	126
Produ. ('000 Tonnes)					209	216	225	227	234	225	183
Yield (Kg / Hectare)					1531	1598	1667	1686	1733	1674	1455
Mizoram											
Area ('000 Hectares)					59	61	66	69	75	66	74
Produ. ('000 Tonnes)					106	124	126	129	139	125	130
Yield (Kg / Hectare)					1781	2036	1917	1866	1854	1888	1754
Nagaland											
Area ('000 Hectares)					216	230	258	248	263	256	263
Produ. ('000 Tonnes)					211	323	355	388	410	404	425
Yield (Kg / Hectare)					977	1406	1380	1565	1561	1577	1615
Orissa											
Area ('000 Hectares)	6909	6906	6924	5660	5488	5245	5407	4992	5388	5300	5457
Produ. ('000 Tonnes)	5977	6883	6942	6800	5623	4984	7564	3574	7157	6890	7360
Yield (Kg / Hectare)	865	997	1003	1201	1025	950	1399	716	1328	1300	1349
Punjab											
Area ('000 Hectares)	4843	5392	5679	5710	6256	6281	6160	6137	6294	6354	6318
Produ. ('000 Tonnes)	11903	17189	19249	19810	25201	25324	24887	23491	24729	25671	25184
Yield (Kg / Hectare)	2458	3188	3390	3471	4028	4032	4040	3828	3929	4040	3986
Rajasthan											
Area ('000 Hectares)	12344	12786	12655	11900	10953	11373	12744	8629	13972	12055	12449
Produ. ('000 Tonnes)	6497	7933	10935	9570	10684	10041	14004	7536	17994	12151	11445
Yield (Kg / Hectare)	526	620	864	804	975	883	1099	873	1288	1008	919
Sikkim											
Area ('000 Hectares)					78	76	77	72	72	74	74
Produ. ('000 Tonnes)					103	103	99	97	100	104	100
Yield (Kg / Hectare)					1317	1356	1289	1334	1395	1406	1354
Tamil Nadu											
Area ('000 Hectares)	4109	4617	3901	3340	3828	3501	3501	2756	2864	3296	3317
Produ. ('000 Tonnes)	5487	7174	7438	6410	8969	8617	7732	4442	4407	6176	6127
Yield (Kg / Hectare)	1335	1554	1907	1918	2343	2461	2209	1612	1539	1874	1847
Tripura											
Area ('000 Hectares)					242	254	259	267	250	255	257
Produ. ('000 Tonnes)					514	523	598	612	529	556	564
Yield (Kg / Hectare)					2119	2060	2311	2289	2121	2179	2194
Uttar Pradesh											
Area ('000 Hectares)	20472	20713	20509	20340	20862	20295	20398	19116	20187	19294	19641
Produ. ('000 Tonnes)	24945	31424	35671	38370	45650	42715	44137	38142	44247	37836	40410
Yield (Kg / Hectare)	1218	1517	1739	1886	2188	2105	2164	1995	2192	1961	2057
Uttaranchal											
Area ('000 Hectares)						1008	980	1034	1031	1038	1030
Produ. ('000 Tonnes)						1726	1708	1559	1724	1761	1594
Yield (Kg / Hectare)						1712	1742	1508	1672	1697	1548
West Bengal											
Area ('000 Hectares)	6099	5902	6495	6570	6849	6192	6807	6539	6612	6476	6442
Produ. ('000 Tonnes)	8281	9128	11270	12880	14916	13815	16501	15522	16010	16055	15609
Yield (Kg / Hectare)	1358	1547	1735	1960	2178	2231	2424	2374	2421	2479	2423
All India											
Area ('000 Hectares)	126667	128023	127835	121010	123104	121048	122780	113860	123447	120078	121569
Produ. ('000 Tonnes)	129589	150440	176390	180420	209802	196814	212851	174771	213189	198363	208577
Yield (Kg / Hectare)	1023	1175	1380	1491	1704	1626	1734	1535	1727	1652	1716

Source : Directorate of Economics & Statistics, Ministry of Agriculture

Chart 21 Share of Kharif Production to Total Foodgrain Production in India

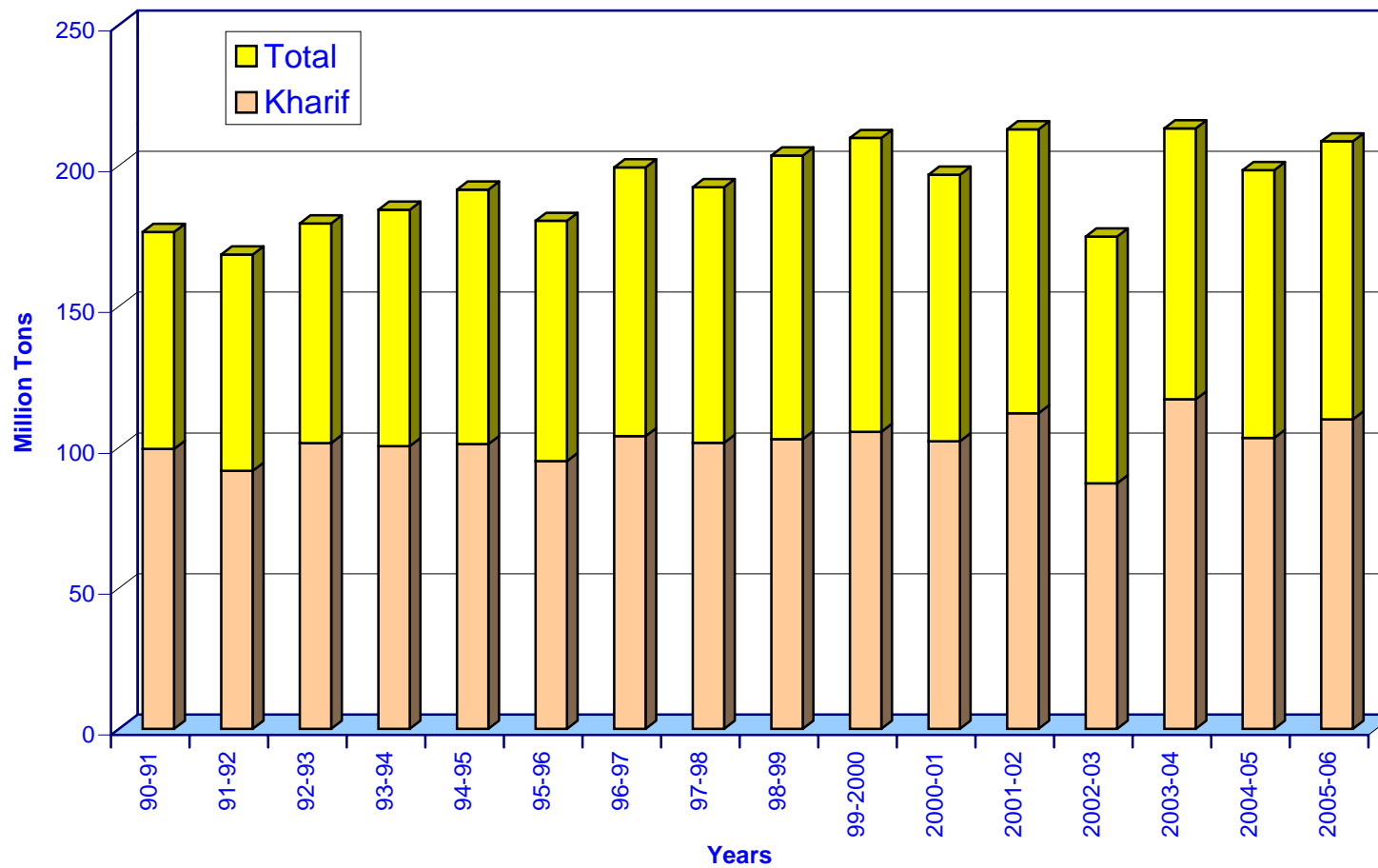


Chart 22 Foodgrain Production in India - Season Wise

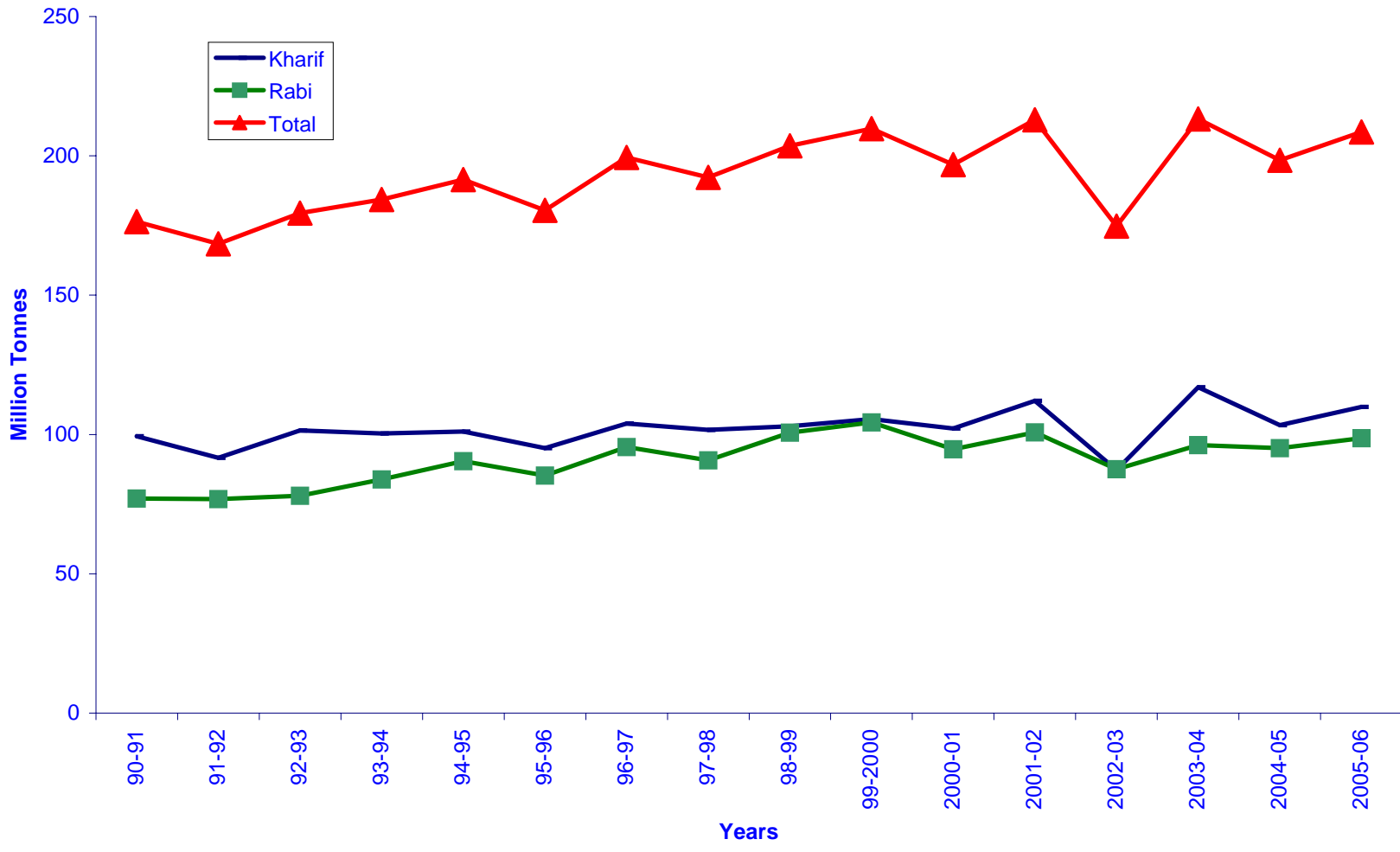


Table : 3.3 All India Seasonwise Foodgrains Production

(Unit: Million Tonnes)

S. No.	Year	Food Grain Production				Total Production
		Kharif		Rabi		
		Production	% = (3)*100/(7)	Production	% = (5)*100/(7)	
1	2	3	4	5	6	7
1	1950-51	NA	NA	NA	NA	50.8
2	1955-56	NA	NA	NA	NA	66.8
3	1960-61	NA	NA	NA	NA	82.0
4	1965-66	NA	NA	NA	NA	72.3
5	1970-71	68.9	63.6	39.5	36.4	108.4
6	1975-76	73.9	61.1	47.1	38.9	121.0
7	1980-81	77.6	59.9	51.9	40.1	129.5
8	1985-86	85.2	56.6	65.2	43.4	150.4
9	1990-91	99.4	56.3	77.0	43.7	176.4
10	1991-92	91.6	54.0	76.8	45.6	168.4
11	1992-93	101.5	57.0	78.0	43.0	179.5
12	1993-94	100.4	54.0	83.9	46.0	184.3
13	1994-95	101.1	53.0	90.4	47.0	191.5
14	1995-96	95.1	53.0	85.3	47.0	180.4
15	1996-97	103.9	52.0	95.5	48.0	199.4
16	1997-98	101.6	52.8	90.7	47.2	192.3
17	1998-99	102.9	50.5	100.7	49.5	203.6
18	1999-00	105.5	50.3	104.3	49.7	209.8
19	2000-01	102.1	51.9	94.7	48.1	196.8
20	2001-02	112.1	52.7	100.8	47.3	212.8
21	2002-03	87.2	49.9	87.5	50.1	174.8
22	2003-04	117.0	54.9	96.2	45.1	213.2
23	2004-05	103.3	52.1	95.1	47.9	198.4
24	2005-06	109.9	52.7	98.7	47.3	208.6

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

NA : Not Available % : Percentage

Table : 3.4 Statewise Irrigated and Unirrigated Yield of Principal Crops (1998-99 to 2003-04)

(Unit: Kilogram Per Hectare)

Sl. No.	Name of the State	Season	Irrigated						Un-Irrigated					
			1998-99	1999-2000	2000-01	2001-02	2002-03	2003-04	1998-99	1999-2000	2000-01	2001-02	2002-03	2003-04
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
			RICE											
1	Andhra Pradesh	Kharif	2569	2547	2789	2670	2332	2848	1714	1457	1293	1695	611	1866
		Rabi	3258	3075	3338	3404	3039	3455	-	-	-	-	-	-
2	Assam	Autumn	1371	2368	1526	1550	1444	1374	934	1159	1109	1006	1005	1041
		Winter	-	-	1752	1497	1825	1449	1367	1490	1549	1575	1515	1606
		Summer	2332	2266	2425	2312	2244	2070	1361	1371	1516	1325	1464	1081
3	Bihar	Bha	1521	1541	1605	1382	1401	1327	963	1068	1237	1191	1095	1204
		Agh	1822	1775	1751	1795	1752	1830	1014	1262	1169	1064	1048	1151
		Gar	1993	1969	1615	1916	1641	1457	-	-	-	-	-	-
4	Chhattisgarh		-	-	890	1879	1184	1256	-	-	575	1340	575	939
5	Goa	Kharif	-	-	-	-	-	-	2508	2294	2262	2296	2336	3182
		Rabi	2877	2610	2726	2724	2584	3038	-	-	-	-	-	-
6	Gujarat	Kharif	1980	1868	1532	1958	1696	2156	1107	824	799	1006	786	1234
		Summer	-	-	-	2689	2992	3106	-	-	-	-	-	-
7	Haryana		2239	2366	2559	2652	2724	2749	-	-	-	-	-	-
8	Himachal Pradesh		1876	1667	1845	1974	1520	1807	1442	1419	1520	1693	847	1468
9	Jammu & Kashmir		2260	2260	1750	1709	1832	1998	1405	1405	1493	1574	1385	1443
10	Karnataka	Kharif	3019	2992	3036	2903	2765	2911	1779	1784	1916	1396	1267	1552
		Rabi	2156	1828	2152	1962	2135	3045	-	-	-	-	-	-
		Summer	3398	3089	3216	2832	2642	4102	-	-	-	-	-	-
11	Kerala	Autumn	2124	2623	2122	2477	2454	2144	1962	1940	1958	2056	1996	2177
		Winter	2129	2285	2142	2318	2264	1823	1752	2079	1893	2013	1926	1894
		Summer	2545	2530	2809	2401	2228	2274	2699	1804	1871	1919	1392	1804
12	Madhya Pradesh		1645	1732	1184	1804	1211	1798	941	1135	508	869	562	962
13	Maharashtra	Kharif	1324	1536	1118	1574	785	1652	1750	1713	1305	1791	801	1904
		Summer	1940	2002	2012	2209	2307	2211	-	-	-	-	-	-
14	Meghalaya	Autumn	881	1191	1191	1422	1277	1285	-	-	-	-	-	-
		Winter	1582	1409	1409	1377	1415	1487	-	-	-	-	-	-

Contd..

Table : 3.4 Statewise Irrigated and Unirrigated Yield of Principal Crops (1998-99 to 2003-04)

(Unit: Kilogram Per Hectare)

Sl. No.	Name of the State	Season	Irrigated						Un-Irrigated					
			1998-99	1999-2000	2000-01	2001-02	2002-03	2003-04	1998-99	1999-2000	2000-01	2001-02	2002-03	2003-04
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
15	Orissa	Autumn	1084	1309	1176	1431	864	1365	583	924	524	981	359	981
		Winter	1688	1126	1519	2042	1163	1799	1094	1020	903	1556	581	1535
		Summer	1908	2413	2157	2148	2125	2133	-	-	-	-	-	-
16	Punjab		3163	3185	3248	3537	3498	3675	1763	2041	2179	1847	1670	2245
17	Rajasthan		1527	1779	1545	1922	1316	2419	861	552	97	461	255	532
18	Tamil Nadu	K/K/S	4083	4158	4104	3991	3495	3474	-	-	-	-	-	-
		S/T/P	3549	3456	3582	3206	2913	2233	2109	1049	2142	1561	1049	-
		N/K	3730	3693	3535	3543	2954	2954	-	-	3380	-	-	-
19	West Bengal	Aus	2177	2108	3292	2269	2267	2315	1500	1863	2751	1998	1910	1893
		Aman (Winter)	2295	2172	3135	2494	2504	2514	1573	1890	2944	2216	2088	2130
		Summer	2711	2920	5144	2851	2940	3074	-	-	-	-	2443	2200
21	Dadra Nagar Haveli		-	-	-	-	-	-	-	-	-	-	2807	1906
22	Delhi		-	-	-	-	2117	2635	-	-	-	-	-	-
23	Daman Diu		-	-	-	-	-	-	-	-	-	-	1701	1900
24	Pondicherry	I	-	-	-	-	2757	2759	-	-	-	-	-	-
		II	-	-	-	-	1979	2609	-	-	-	-	-	-
		III	-	-	-	-	2789	2714	-	-	-	-	-	-
JOWAR														
1	Andhra Pradesh	Kharif	3137	2108	3256	2782	2621	4592	731	714	915	928	946	941
		Rabi	1058	2098	2712	3593	2896	3885	660	591	809	947	815	756
2	Chhattisgarh		-	-	-	-	-	-	-	-	665	973	740	1001
3	Gujarat	Kharif	923	1024	882	825	-	-	952	1348	701	1124	811	1128
		Rabi	1189	916	986	830	1090	639	791	750	402	732	575	810
4	Karnataka	Kharif	2303	2249	2389	2316	2030	1874	1455	1256	1417	1180	1084	905
		Rabi	1397	1313	1352	1219	1205	1655	708	741	682	670	582	302
		Summer	2792	1198	2137	2065	-	-	-	-	-	-	-	-
5	Madhya Pradesh	Kharif	-	-	-	-	-	-	-	-	-	-	900	1187
6	Maharashtra	Kharif	-	-	-	-	-	-	1425	1324	1259	1164	1413	1331
		Rabi	1089	1131	947	946	818	584	531	584	425	486	421	241
7	Rajasthan	Kharif	174	472	240	737	531	364	292	285	277	403	119	716
8	Tamil Nadu	Kharif	2041	1549	1617	1797	1512	1266	900	949	873	840	626	571

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Table : 3.4 Statewise Irrigated and Unirrigated Yield of Principal Crops (1998-99 to 2003-04)

(Unit: Kilogram Per Hectare)

Sl. No.	Name of the State	Season	Irrigated						Un-Irrigated					
			1998-99	1999-2000	2000-01	2001-02	2002-03	2003-04	1998-99	1999-2000	2000-01	2001-02	2002-03	2003-04
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
BAJRA														
1	Andhra Pradesh		1700	1710	1746	1767	1321	1125	782	719	913	650	613	979
2	Gujarat	Kharif	1332	1110	1159	1535	1352	-	900	468	483	1262	752	1320
		Sum	2301	2139	1936	1797	1648	2084	1040	1749	0	-	-	-
3	Haryana		1341	1201	1191	1615	1009	1752	826	784	755	1336	632	1377
4	Karnataka		1186	1054	1353	900	938	1054	667	558	722	516	359	588
5	Madhya Pradesh		-	-	-	-	-	-	-	-	-	-	581	1015
6	Maharashtra		1178	1231	1061	888	1080	877	823	611	569	575	720	667
7	Punjab		1230	793	941	-	-	-	379	568	388	-	-	-
8	Rajasthan		925	776	906	1381	597	1352	434	287	423	731	178	1139
9	Tamil Nadu		3257	3190	3056	2956	1438	1390	1140	1178	1075	1067	749	1117
10	Delhi						1807	2473						-
11	Daman Diu												780	2610
MAIZE														
1	Andhra Pradesh	Kharif	3712	3755	3521	3927	3557	4091	2931	2692	2256	2553	1837	2803
		Rabi	3733	3852	4620	4922	4556	4661	4261	5019	5063	6219	4061	4545
2	Chhattisgarh		-	-	-	-	-	-	-	-	1353	743	1305	1370
3	Bihar	Bha	1106				1907	1668		1575	1752	1822	1537	-
		Rabi	-	3003	2919	3186	2610	3006	3005	-	-	-	-	-
		Garma	2370	2539	2952	2650	2684	2777	-	-	-	-	-	-
4	Gujarat	Kharif	1960	1983	1331	-	-	-	1670	1084	671	1952	1683	1762
5	Haryana	Kharif	2098	2637	2755	2706	1955	2637	1960	2509	2370	2489	1684	2402
6	Himachal Pradesh	Kharif	2895	2245	2085	2700	2171	2518	2392	2546	2487	2769	1758	2814
7	Jammu & Kashmir	Kharif	1041	1041	970	1015	1014	1295	1757	1757	1664	1712	1449	1687
8	Karnataka	Kharif	3635	3274	3349	2977	2734	3352	3585	2387	3519	2501	1816	1563
		Rabi	2159	2169	2652	2532	2654	2090	-	-	-	1957	-	-
		Sum		543	2960	2720								
9	Madhya Pradesh	Kharif	-	-	-	-	1440	6049	-	-	-	-	1366	1710

Contd..

Table : 3.4 Statewise Irrigated and Unirrigated Yield of Principal Crops (1998-99 to 2003-04)

(Unit: Kilogram Per Hectare)

Sl. No.	Name of the State	Season	Irrigated						Un-Irrigated					
			1998-99	1999-2000	2000-01	2001-02	2002-03	2003-04	1998-99	1999-2000	2000-01	2001-02	2002-03	2003-04
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
10	Maharashtra	Kharif	-	-	-	-	-	-	1998	1532	831	1804	2090	2162
		Rabi	1490	1542	-	-	1622	-	-	-	1638	1834	-	1382
11	Orissa	Autumm	917	4235	2109	1161	1330	2638	1312	1452	1031	900	968	1392
		Winter	673	847	990	1682	1390	1200	770	669	666	708	664	1624
		Summer	872	1183	1145	1490	1556	1980	-	-	-	-	-	-
12	Punjab		2393	2858	3048	2988	2316	3180	1922	2030	2054	1860	1521	2193
13	Rajasthan		1203	1115	1390	1825	794	2185	1019	940	979	1360	906	1949
14	West Bengal		4580	-	3492	3541	1720	3581	1966	1983	5316	2114	1590	1855
RAGI														
1	Andhra Pradesh	Kharif	2145	1832	2167	2218	2892	-	904	920	999	1073	871	1147
		Rabi	1798	1635	1720	1760	1339	1751	-	2094	2573	-	-	-
2	Bihar		-	-	-	-	-	-	891	980	1041	850	682	688
3	Goa		-	-	-	-	-	-	1014	1104	1082	887	891	921
4	Gujarat	Kharif	-	-	-	-	918	-	1013	1116	726	1022	659	1145
5	Karnataka	Kharif	2762	2283	3075	2425	1935	2318	1737	1596	1867	1694	940	1209
		Rabi	1529	761	1634	1442	1653	965	1373	873	817	1182	591	111
		Summer	2368	930	2087	1607	1208	1252	-	-	-	-	-	-
6	Maharashtra	Autumn	-	-	-	-	-	-	1013	1075	830	1205	851	1157
7	Orissa	Aut	655	733	443	-	-	-	658	691	591	603	495	594
		Winter	516	944	747	957	333	879	620	601	445	581	435	661
		Summer	692	799	727	780	691	761	-	-	-	-	-	-
8	Tamil Nadu		2946	2641	2960	2868	2338	2484	1560	1682	1567	1486	1313	1391
9	Dadra Nagar Haveli		-	-	-	-	-	-	-	-	-	-	1362	1112
WHEAT														
1	Assam		-	1871	1752	1088	1195	1285	980	1245	1184	1185	1149	1028
2	Bihar		2125	2243	2189	2104	1932	1820	1586	1726	1738	1679	1558	1384
3	Chhattisgarh		-	-	1500	1373	1266	1226	-	-	461	667	651	784
4	Gujarat		2742	2419	2290	2581	2144	2895	536	514	229	384	476	548
5	Haryana		3943	4227	4127	4125	4074	3971	2780	1411	1670	1651	2104	2341

Contd..

Table : 3.4 Statewise Irrigated and Unirrigated Yield of Principal Crops (1998-99 to 2003-04)

(Unit: Kilogram Per Hectare)

Sl. No.	Name of the State	Season	Irrigated						Un-Irrigated					
			1998-99	1999-2000	2000-01	2001-02	2002-03	2003-04	1998-99	1999-2000	2000-01	2001-02	2002-03	2003-04
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
6	Himachal Pradesh		1770	2184	1714	2273	2367	2063	1297	1610	597	1782	1378	1387
7	Jammu & Kashmir		1794	1794	846	1401	2376	2182	1449	1449	419	1304	1392	1693
8	Karnataka		1456	1358	1556	1300	1194	883	456	387	563	400	260	122
9	Madhya Pradesh		2191	2258	1884	2007	1776	2091	1041	1016	817	988	892	1050
10	Maharashtra		1492	1639	1400	1543	1410	1322	753	573	555	619	648	419
11	Orissa		1150	1299	1469	1515	1243	1465	-	747	-	-	-	-
12	Punjab		4365	4758	4595	4539	4216	4212	2250	2042	1241	2338	1829	2422
13	Rajasthan		2572	2647	2494	2855	2644	2724	1305	1074	923	1275	1295	1363
14	West Bengal		1990	2265	3878	2198	2031	2297	1265	1543	2205	1431	1392	1387
15	Delhi	-	-	-	-	-	4014	4052	-	-	-	-	-	-
BARLEY														
1	Bihar		-	-	-	-	-	-	1150	1220	1168	1256	1175	1151
2	Chhattisgarh		-	-	-	-	-	-	-	-	840	826	757	997
3	Haryana		2797	3040	2726	2880	2658	2826	2100	1968	2415	-	1415	1499
4	Himachal Pradesh		1602	6629	1778	1586	1744	2502	1052	1304	730	1507	1362	1249
5	Madhya Pradesh		-	-	-	-	-	-	-	-	-	-	1833	1505
6	Punjab		3206	3493	3309	3210	3243	3356	1478	2549	-	-	-	-
7	Rajasthan		2124	2049	1891	2588	2384	2309	1266	1310	560	1949	976	1308
8	West Bengal		1332	1080	2298	1060	1139	1302	1381	707	1088	632	911	1203
GRAM														
1	Andhra Pradesh		-	-	-	-	489	650	-	-	-	1256	977	1060
2	Bihar		-	-	-	-	-	-	1083	977	1022	957	1009	1015
3	Chhattisgarh		-	-	-	-	-	-	-	-	519	735	615	964
4	Gujarat		914	625	671	-	749	1170	847	492	428	567	448	727
5	Haryana		1011	703	683	895	769	968	776	499	610	806	428	680
6	Karnataka		791	782	665	619	672	452	577	532	684	618	538	339
7	Madhya Pradesh		-	-	-	-	766	1028	-	-	-	-	660	861
8	Maharashtra		692	714	-	-	-	659	596	617	518	596	563	474
9	Punjab		931	1050	1014	867	918	1096	576	621	495	453	902	843

Contd..

Table : 3.4 Statewise Irrigated and Unirrigated Yield of Principal Crops (1998-99 to 2003-04)

(Unit: Kilogram Per Hectare)

Sl. No.	Name of the State	Season	Irrigated						Un-Irrigated					
			1998-99	1999-2000	2000-01	2001-02	2002-03	2003-04	1998-99	1999-2000	2000-01	2001-02	2002-03	2003-04
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
10	Rajasthan		1027	855	979	1007	835	1058	676	660	466	679	463	476
11	West Bengal		764	920	1834	864	789	966	785	773	1641	826	724	942
SUGARCANE														
1	Andhra Pradesh	Planted	87000	88000	87000	89000	75000	78000	45000	58000	45000	68000	33000	56000
		Ratoon	76000	78000	80000	79000	66000	71000	30000	46000	57000	50000	26000	36000
2	Assam		-	-	-	-	-	-	39571	40848	37164	36873	37840	37460
3	Bihar		49223	44819	46255	51779	48213	46169	46791	40500	40253	44457	40128	39718
4	Haryana		55040	55770	57130	57580	56350	58200	-	-	-	-	-	26500
5	Karnataka		108000	-	-	-	-	-	-	104	108000	85000	89000	69000
6	Maharashtra		89000	90000	83270	78070	74360	58010	-	-	-	-	-	-
7	Orissa		65824	58199	55502	58610	53128	58915	-	35255	35150	-	-	-
8	Punjab		57393	61236	65400	6532	-	54940	46349	47304	-	5401	-	40900
9	Rajasthan		48081	41062	-	47300	42648	53804	43704	30373	-	129000	22472	19004
10	Tamil Nadu		118000	109000	117000	114000	106233	107678	-	-	-	-	-	-
11	West Bengal		68001	59237	66846	73129	73078	72501	-	61613	41023	70599	69712	69078
GROUNDNUT														
1	Andhra Pradesh	Kharif	1248	924	1298	1059	1011	1398	952	437	1046	580	423	464
		Rabi	1663	1498	1582	1716	1404	1644	1200	1399	1746	1950	1829	1296
2	Chhattisgarh		-	-	-	-	-	-	-	-	916	1235	1140	1108
3	Gujarat	Kharif	1557	867	821	2152	973	2782	1097	156	201	2081	392	2064
		Sum	1648	1686	1728	1461	1574	1525	-	298	-	-	-	-
4	Karnataka	Kharif	693	798	946	1008	849	1087	981	614	1057	604	561	425
		Sum	1247	1121	1156	1176	1179	1023	2105	1686	1485	1826	1766	1653
5	Madhya Pradesh	Kharif	-	-	-	-	-	-	-	-	-	-	632	1231
		Rabi	-	-	-	-	-	-	-	-	-	-	-	-
6	Maharashtra	Kharif	-	-	-	-	-	-	1164	950	893	1081	958	1095
		Sum	-	-	-	1445	1679	1491	-	-	-	-	-	-
7	Orissa	Aut	1470	200	940	-	350	-	845	898	613	-	670	844
		Winter	1173	1089	1238	1440	865	1260	800	917	756	726	809	1033
		Sum	1119	1360	1155	1239	1193	1458	729	1155	871	1025	996	1423
8	Punjab	Kharif	815	1043	934	-	-	-	744	827	773	1200	-	-

Contd..

Table : 3.4 Statewise Irrigated and Unirrigated Yield of Principal Crops (1998-99 to 2003-04)

(Unit: Kilogram Per Hectare)

Sl. No.	Name of the State	Season	Irrigated						Un-Irrigated					
			1998-99	1999-2000	2000-01	2001-02	2002-03	2003-04	1998-99	1999-2000	2000-01	2001-02	2002-03	2003-04
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
9	Rajasthan	Kharif	1376	1324	1399	1565	1062	1868	938	791	681	938	510	1215
10	Tamil Nadu		2618	2519	2658	2646	2400	2521	1393	1330	1587	1538	1091	1251
RAPSEED & MUSTARD														
1	Assam		-	353	685	664	808	748	487	465	506	495	492	537
2	Bihar		-	-	-	-	-	-	979	788	869	835	689	1031
3	Chhattisgarh		-	-	-	-	-	-	-	-	332	371	331	412
4	Gujarat		1377	977	1163	1100	981	1402	540	290	2080	200	625	295
5	Haryana		1260	1349	1393	1520	1177	1591	1071	1089	1107	1163	940	1353
6	Madhya Pradesh		-	-	-	-	935	935	-	-	-	-	606	606
7	Orissa		195	305	253	254	251	304	114	128	100	134	95	162
8	Punjab		1010	1127	1107	1172	923	1075	692	779	610	850	626	564
9	Rajasthan		1004	1118	1067	1177	1049	1453	878	689	693	862	867	922
10	West Bengal		709	809	3763	785	865	969	369	439	1881	147	414	481
COTTON														
1	Andhra Pradesh		286	347	399	338	306	429	179	221	234	278	215	368
2	Gujarat		622	1088	1319	1506	607	726	254	310	396	617	230	208
3	Haryana		255	408	424	195	340	463	-	-	-	-	-	227
4	Karnataka		317	350	436	370	375	408	264	194	253	148	120	114
5	Madhya Pradesh		-	-	-	-	126	191	-	-	-	-	111	179
6	Maharashtra		257	247	223	182	232	268	137	160	95	136	155	187
7	Punjab		175	332	41	338	350	414	-	-	-	-	-	-
8	Rajasthan		278	287	273	92	116	349	154	234	129	167	56	443
9	Tamil Nadu		427	415	407	342	342	333	254	255	233	180	112	140
JUTE														
1	Assam		-	-	1042	-	3172	1456	1676	1692	1827	1782	1771	1786
2	Bihar		-	-	-	-	-	-	864	1332	1510	1257	1186	1336

Contd..

Table : 3.4 Statewise Irrigated and Unirrigated Yield of Principal Crops (1998-99 to 2003-04)

(Unit: Kilogram Per Hectare)

Sl. No.	Name of the State	Season	Irrigated						Un-Irrigated					
			1998-99	1999-2000	2000-01	2001-02	2002-03	2003-04	1998-99	1999-2000	2000-01	2001-02	2002-03	2003-04
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
3	Meghalaya		-	-	-	1652	-	-	1352	526	526	-	-	1461
4	Orissa		1856	1941	2095	2359	1918	1633	1187	1649	1452	1436	1613	1215
5	West Bengal		2437	2551	34125	2762	2757	2844	1997	2064	29208	2212	2164	2200
TOBACCO														
1	Andhra Pradesh	Natu Variet	2366	2038	2401	1991	2629	2105	1081	600	1447	1066	1249	1359
		Virginia	1290	1315	-	1364	1564	1600	1035	945	-	1229	1028	1276
2	Gujarat		1718	1871	1768	1683	1799	1851	861	535	681	763	-	-
3	Karnataka		742	-	-	-	-	-	-	569	778	851	757	592
4	Maharashtra		-	-	-	-	-	-	846	1196	1148	1085	1485	1140

Source : NSSO, Consolidated Results of Crop estimation Survey on Principal Crops.

K/K/S - Kar / Kurivai / Pissanan

S/T/P- Sambas/ Thaladi/ Pissanam

N/K- Navari / Kodai

Chart 23 All India Fish Production

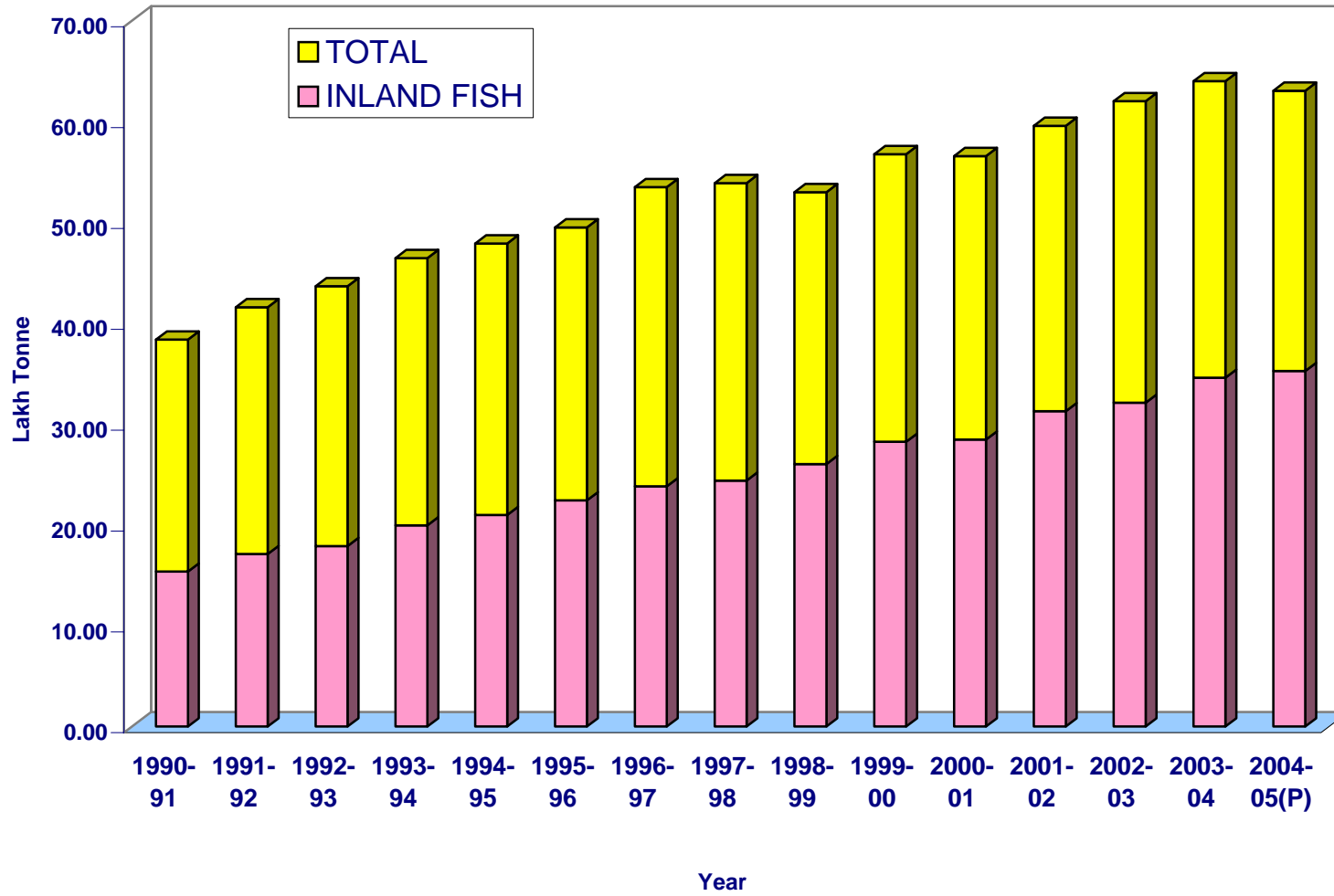


Table : 3.5 Yearwise Fish Production in India

(Unit : Lakh Tonnes)

Sl. No.	Year	Inland Fish Production	Marine Fish Production	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	9.99	14.45	24.44
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	28.30	59.56
26	2002-03	32.10	29.90	62.00
27	2003-04	34.58	29.41	63.99
28	2004-05(P)	35.25	27.79	63.04

Source : Fisheries Division, Department of Animal Husbandary, Dairying & Fisheries,

Ministry of Agriculture

P : Provisional

**Chart 24 Inland Fish Production during
(2003-04) in Major Producing States 2004-05**

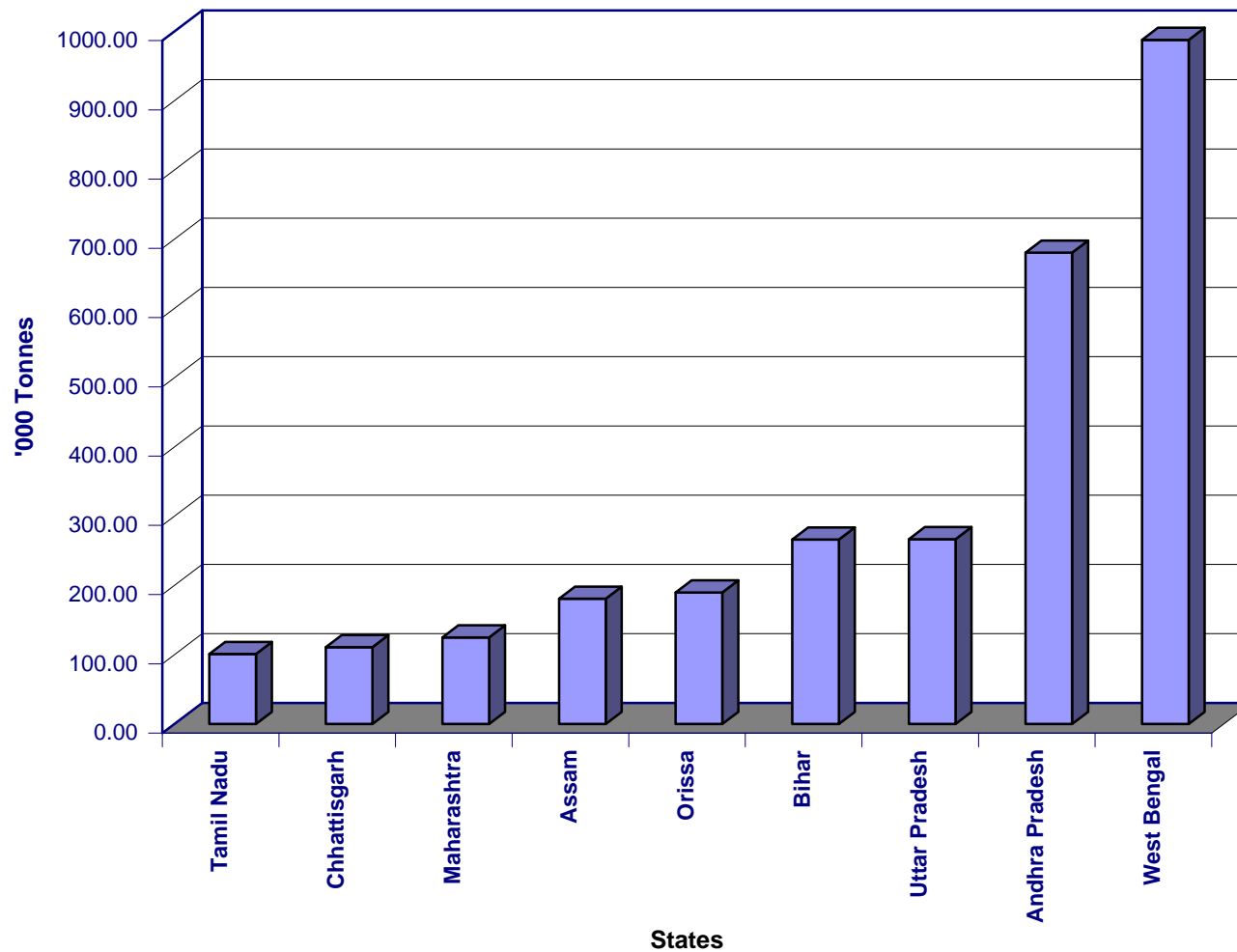


Table : 3.6 Statewise Inland Fish Production

(Unit: '000 Tonnes)

Sl. No.	Name of the States/UTs	1990-91	1995-96	1999-00	2001-02	2001-02	2002-03	2003-04	2004-05 (P)
1	2	3	4	5	6	7	8	9	10
STATES									
1	Andhra Pradesh	136.3	204.0	380.6	407.2	471.2	579.4	680.7	642.3
2	Arunachal Pradesh	1.3	1.9	2.4	2.5	2.6	2.6	2.7	2.7
3	Assam	76.0	155.1	159.8	158.6	161.5	165.5	181.0	186.3
4	Bihar	159.9	239.6	254.7	222.2	240.4	261.0	266.5	267.5
5	Jharkhand	Included in Bihar			43.4	101.0	45.4	75.4	22.0
6	Goa	3.1	3.6	3.5	4.2	3.4	4.3	3.6	4.2
7	Gujarat	45.0	60.0	70.3	40.3	50.8	34.3	45.5	50.4
8	Haryana	23.2	28.0	30.0	33.0	34.6	35.2	39.1	42.1
9	Himachal Pradesh	5.2	5.9	7.0	7.0	7.2	7.2	6.5	6.9
10	Jammu & Kashmir	13.0	16.5	19.0	17.5	18.9	19.8	19.8	19.1
11	Karnataka	53.0	87.4	126.7	127.5	121.2	86.3	70.0	80.0
12	Kerala	36.3	49.6	74.1	85.2	78.0	75.0	76.2	76.5
13	Madhya Pradesh	37.0	91.3	127.4	48.8	47.5	42.2	50.8	62.1
14	Chattishgarh	Included in MP			42.6	95.8	99.8	111.1	120.1
15	Maharashtra	64.0	77.0	135.4	123.3	122.8	127.2	125.1	130.3
16	Manipur	8.5	12.5	15.5	16.1	16.5	16.6	17.6	17.8
17	Meghalaya	1.5	3.6	4.7	6.2	5.0	5.4	5.2	5.6
18	Mizoram	3.0	2.5	2.9	2.9	3.2	3.3	3.4	3.7
19	Nagaland	0.8	3.0	5.0	5.5	5.2	5.5	5.6	4.9
20	Orissa	83.3	134.9	135.3	138.6	168.1	172.5	190.0	193.7
21	Punjab	11.2	26.0	47.2	52.0	58.0	66.0	83.7	77.7
22	Rajasthan	6.0	12.4	13.0	12.1	14.3	25.6	14.3	16.4
23	Sikkim	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1
24	Tamil Nadu	82.0	108.0	112.0	113.6	114.0	102.0	101.1	151.7
25	Tripura	21.2	25.7	29.3	29.4	29.5	29.5	18.0	19.8
26	Uttar Pradesh	104.3	145.7	192.7	208.3	225.4	249.8	267.0	277.1
27	Uttarnchal	Included in UP			9.1	6.4	2.6	2.6	2.6
28	West Bengal	555.0	740.0	865.7	879.0	915.8	938.5	988.0	1035.5
UNION TERRITORIES TOTAL		6.2	8.2	8.6	8.5	8.3	7.4	7.5	6.9
All INDIA		1536.3	2242.3	2823.0	2844.8	3126.2	3209.9	3457.9	3525.9

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

Neg. : Negligible.

P : Provisional

**Table : 3.7 Statewise Inland Fish Production Per Hectare
Area of Water Bodies 2003-2004**

SI No.	Name of the State/UT.	Total Water Bodies ('000 Hectare)	Inland Fish Production (2003-04) ('000 Tonnes)	Yield (Tonnes / Hectare)
1	2	3	4	5
1	Andhra Pradesh	811.00	680.71	0.84
2	Arunachal Pradesh	318.00	2.65	0.01
3	Assam	135.00	181.00	1.34
4	Bihar	160.00	266.49	1.67
5	Chhattisgarh	147.00	111.05	0.76
6	Goa	6.00	3.60	0.60
7	Gujarat	426.00	45.48	0.11
8	Haryana	20.00	39.13	1.96
9	Himachal Pradesh	43.00	6.53	0.15
10	Jammu & Kashmir	30.00	19.75	0.66
11	Jharkhand	123.00	75.38	0.61
12	Karnataka	740.00	70.00	0.09
13	Kerala	543.00	76.18	0.14
14	Madhya Pradesh	287.00	50.82	0.18
15	Maharashtra	348.00	125.12	0.36
16	Manipur	10.00	17.60	1.76
17	Meghalaya	10.00	5.15	0.52
18	Mizoram	2.00	3.38	1.69
19	Nagaland	67.00	5.56	0.08
20	Orissa	980.00	190.02	0.19
21	Punjab	7.00	83.65	11.95
22	Rajasthan	300.00	14.30	0.05
23	Sikkim	3.00	0.14	0.05
24	Tamil Nadu	693.00	101.14	0.15
25	Tripura	18.00	17.98	1.00
26	Uttar Pradesh	432.00	267.00	0.62
27	Uttaranchal	21.00	2.56	0.12
28	West Bengal	545.00	988.00	1.81
UNION TERRITORIES				
29	Andaman & Nicobar	124.00	0.09	0.00
30	Chandigarh	0.00	0.08	0.00
31	Dadra and Nagar Haveli	5.00	0.05	0.01
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	1.00	5.20	5.20
TOTAL		7359.00	3457.89	0.47

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

**Table : 3.8 Cargo Carried, Freight Earned by Inland
Water Transport Companies**

(As on 31st March 2005)

Sl. No.	Name of the Company	Year	Cargo Carried (Tonnes)	Freight Earned (Rs. lakhs)
1	2	3	4	5
1.	V.M. Salgaocar & Bros.Ltd, Goa	2003	555020	276.12
		2004	569045	284.24
		2005	51994	25.97
2	Shivanand V. Salgaocar, Goa	2003	393957	195.99
		2004	433048	216.31
		2005	610502	290.07
3	D.V.Salgaocar, Goa	2003	400529	199.26
		2004	449171	224.36
		2005	685832	319.94
4	V.M.Salgaocar Sales International	2003	-	-
		2004	-	-
		2005	7275	3.90
5	V. S. Dempo & Co. Ltd., Goa	2003	1292593	(A)
		2004	1507647	(A)
		2005	1166642	(A)
6	Chowgule & Co Ltd. Goa	2003	265911	(A)
		2004	288170	(A)
		2005	199676	(A)
7	Sesa Goa Ltd.,Goa	2003	-	-
		2004	-	-
		2005	3515761	(A)
8	Sociedade De Fomento Ind Ltd, Goa	2003	572583	(A)
		2004	647432	(A)
		2005	528492	(A)
9	Fomento Barges Pvt. Goa	2003	496913	(A)
		2004	637354	(A)
		2005	98199	(A)
10	Maina Ore Transport Ltd., Goa	2003	124635	(A)
		2004	145384	(A)
		2005	28410	(A)
11	Orient (Goa) Ltd., Goa	2003	120000	60.66
		2004	120000	60.66
		2005	-	-

Contd..

Table : 3.8 Cargo Carried, Freight Earned by Inland Water Transport Companies

(As on 31st March 2005)

Sl. No.	Name of the Company	Year	Cargo Carried (Tonnes)	Freight Earned (Rs. lakhs)
1	2	3	4	5
12	SKUB Industries Pvt. Ltd Goa	2003	155000	75.87
		2004	155000	75.87
		2005	-	-
13	Kerala Shipping & Inland Naigation Corporation Ltd.	2003	604905(C)	-
		2004	624064(C)	-
		2005	-	-
14	C.I.W.T.C .,Kolkata	2003	85669	560.12
		2004	66158	497.25
		2005	54502	463.29
15	Indo Swiss Trading Co. Pvt., Ltd. Kolkata	2003	-	60.99
		2004	-	72.00
		2005	-	76.00
16	Vivada Inland Water ways Ltd., Kolkata	2003	160220	496.37
		2004	344000	525.00
		2005	557000	695.00
17	W. Bengal Surface Tansport Cor.,Ltd. Kolkata	2003	7954(D)	323.00(B)
		2004	8321(D)	401.00(B)
		2005	8640(D)	401.24(B)
18	Hooghly Nadi Jalapath Paribahan Samabaya Samity Kolkata	2003	-	620.46
		2004	-	668.00
		2005	-	739.00
19	West Bengal Tourism Devel. Corp.Ltd., Kolkata	2003	-	69.47
		2004	-	75.00
		2005	-	71.00
20	Eastern Navigation (P) Ltd., West Bengal, Kolkata	2003	11095	16.82
		2004	51000	535.00
		2005	15000	912.00
21	Pradeep Boating Company W. Bengal, Kolkata	2003	7600	11.20
		2004	10000	12.00
		2005	5100	9.00
22	Government of W. Bengal Tourism Department, Kolkata	2003	-	4.35
		2004	-	3.20
		2005	-	3.30

Contd..

**Table : 3.8 Cargo Carried, Freight Earned by Inland
Water Transport Companies**

(As on 31st March 2005)

Sl. No.	Name of the Company	Year	Cargo Carried (Tonnes)	Freight Earned (Rs. lakhs)
1	2	3	4	5
23	Hindustan Petroleum Corpn. Ltd. Budge-Budge, West Bengal	2003	28680	33.60
		2004	31200	40.70
		2005	29240	39.40
24	Costa River Transport Pvt. Ltd. Goa	2003	1094300	546.06
		2004	1717400	856.99
		2005	3206178	1720.11
25E	Ghatal steam Naigation (P) Ltd. Kolkota	2003	-	-
		2004	-	19.00
		2005	-	22.00
26E	Diamond Harbour Municipality, Kolkota	2003	-	-
		2004	-	70.00
		2005	-	75.00
27E	Karya Autota Pvt. Ltd., Kolkota	2003	--	-
		2004	-	-
		2005	1200	46.00
28E	Chandannagar Municipality, Kolkota	2003	-	-
		2004	-	-
		2005	-	11.66
29E	Mata Parvati Marine Carrier	2003	140875	66.94
		2004	-	-
		2005	140875	76.04
30E	Shree Mangesh Enterprises (Marine)Pvt.Ltd.	2003	128000	64.00
		2004	-	-
		2005	140250	74.00
31E	Sai Waterways Pvt.Ltd.	2003	222000	26.00
		2004	222000	26.00
		2005	222000	26.00
32E	Super Services	2003	568750	284.38
		2004	568750	284.38
		2005	-	-

Contd..

**Table : 3.8 Cargo Carried, Freight Earned by Inland
Water Transport Companies**

(As on 31st March 2005)

Sl. No.	Name of the Company	Year	Cargo Carried (Tonnes)	Freight Earned (Rs. lakhs)
1	2	3	4	5
33E	Rashmi Ore Carriers Pvt. Ltd.	2003	-	-
		2004	282237	181.44
		2005	282237	181.44
34E	Goa Ore Carriers	2003	-	-
		2004	360000	381.96
		2005	802000	441.1
35E	Madhusudan Shipping Agent Pvt. Ltd., Goa	2003	-	-
		2004	360000	381.96
		2005		
36E	Vasco Galvanizers fabricators & Engineers, Goa	2003	-	-
		2004	149136	53.05
		2005	149136	53.05
37E	Sacoale Shipping Ltd.	2003	-	-
		2004	-	-
		2005	500000	168.31
38E	M.N. Shipping	2003	--	-
		2004	--	-
		2005	123525	73.80
39E	Kothari Overseas Private Ltd.	2003	-	-
		2004	-	-
		2005	209100	114.21

Source : Ministry of Shipping, Road Transport & Highways (Transport Research Wing)

Note : (A): Vessels Used for Captive purpose.

(B): This includes freight collected from passengers also

(C) As supplied by IWA

(D): Data relates to no. of vehicles carried.

(E): New Companies included since 2003, 2004 & 2005.

This table covers only those IWT operators from whom the data is received by TRW.

Table 3.9 Statewise and Regionwise Hydro Electric Power Potential Development

(As on 31.03.2006)

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 Development At 60% Load Factor (MW) (% of Col.3)	Percentage of Total Pot. Developed & Under Development
1	2	3	4	5	6
I Northern Region					
1	Jammu & Kashmir	7487	515.00 (6.88)	533.27 (7.12)	14.00
2	Himachal Pradesh	11647	2545.57 (21.86)	1102.78 (9.47)	31.32
3	Haryana	64	51.67 (80.73)	0.00 (0.00)	80.73
4	Punjab	922	679.50 (73.70)	0.00 (0.00)	73.70
5	Rajasthan	291	188.67 (64.83)	0.00 (0.00)	64.83
6	Utaranchel	9341	899.52 (9.63)	1258.33 (13.47)	23.10
7	Uttar Pradesh	403	337.90 (83.85)	0.00 (0.00)	83.85
Sub-Total (NR)		30155	5217.82 (17.30)	2894.38 (9.60)	26.71
II. Western Region					
1	Gujarat	409	253.82 (62.06)	0.00 (0.00)	62.06
2	Maharashtra	2460	1314.61 (53.44)	0.00 (7.59)	53.44
3	Madhya Pradesh	2774	1393.10 (50.22)	472.5 (17.03)	67.25
4	Goa	36	0.00 (0.00)	0.00 (0.00)	0.00
Sub Total (WR)		5679	2961.52 (52.15)	472.50 (8.32)	60.47
III Southern Region					
1	Andhra Pradesh	2909	1405.45 (48.31)	30.23 (1.04)	49.35
2	Karnataka	4347	2429.28 (55.88)	0.00 (0.00)	55.88
3	Kerala	2301	1144.17 (49.72)	82.03 (3.57)	53.29
4	Tamil Nadu	1206	992.33 (82.28)	65.45 (5.43)	87.71
Sub Total (SR)		10763	5971.23 (55.48)	177.72 (1.65)	57.13

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**TABLE 3.9 STATEWISE AND REGIONWISE HYDRO ELECTRIC
POWER POTENTIAL DEVELOPMENT**

(As on 31.03.2006)

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 Development At 60% Load Factor (MW) (% of Col.3)	Percentage of Total Pot. Developed & Under Development
1	2	3	4	5	6
IV. Eastern Region					
1	Jharkhand	478	75.17 (15.73)	0.00 (0.00)	15.73
2	Bihar	60	44.78 (74.64)	0.00 (0.00)	74.64
3	Orissa	1983	1100.50 (55.50)	31.17 (1.57)	57.07
4	West Bengal	1786	91.33 (5.11)	102.98 (5.77)	10.88
5	Sikkim	1283	52.50 (4.09)	121.07 (9.44)	13.53
Sub Total (ER)		5590	1364.28 (24.41)	255.22 (4.57)	28.97
V. North-Eastern Region					
1	Assam	351	111.67 (31.81)	74.17 (21.13)	52.94
2	Meghalaya	1070	121.67 (11.37)	23.58 (2.20)	13.57
3	Tripura	9	7.50 (83.33)	0.00 (0.00)	83.33
4	Arunachal Pradesh	26756	122.67 (0.46)	743.50 (2.78)	3.24
5	Manipur	1176	71.67 (6.09)	42.50 (3.61)	9.71
6	Mizoram	1455	0.00 (0.00)	30.83 (2.12)	2.12
7	Nagaland	1040	81.83 (7.87)	0.00 (0.00)	7.87
Sub Total (NER)		31857	517.00 (1.62)	914.58 (2.87)	4.49
Total (All Regions)		84044	16031.85 (19.08)	4714.40 (5.61)	24.68

Source : Central Electricity Authority, HP&I Division.

Remark : Figures in brackets are the percentages.

MW : Mega Watts.

Chart 25 Percentage Share of H.E. Power in Total Installed Capacity and Total Power Generation

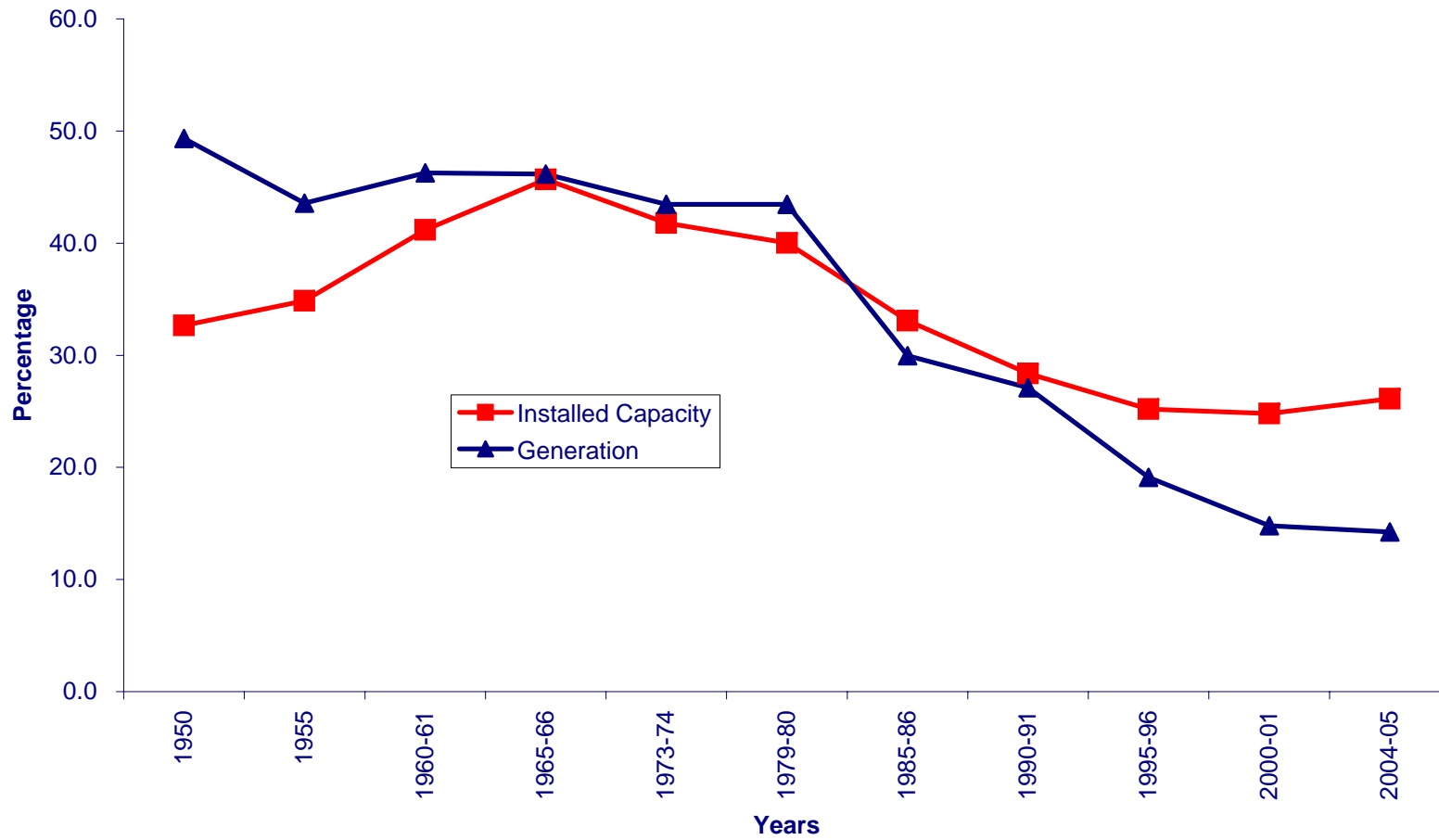


Chart 26 Hydro Electric Power Generation

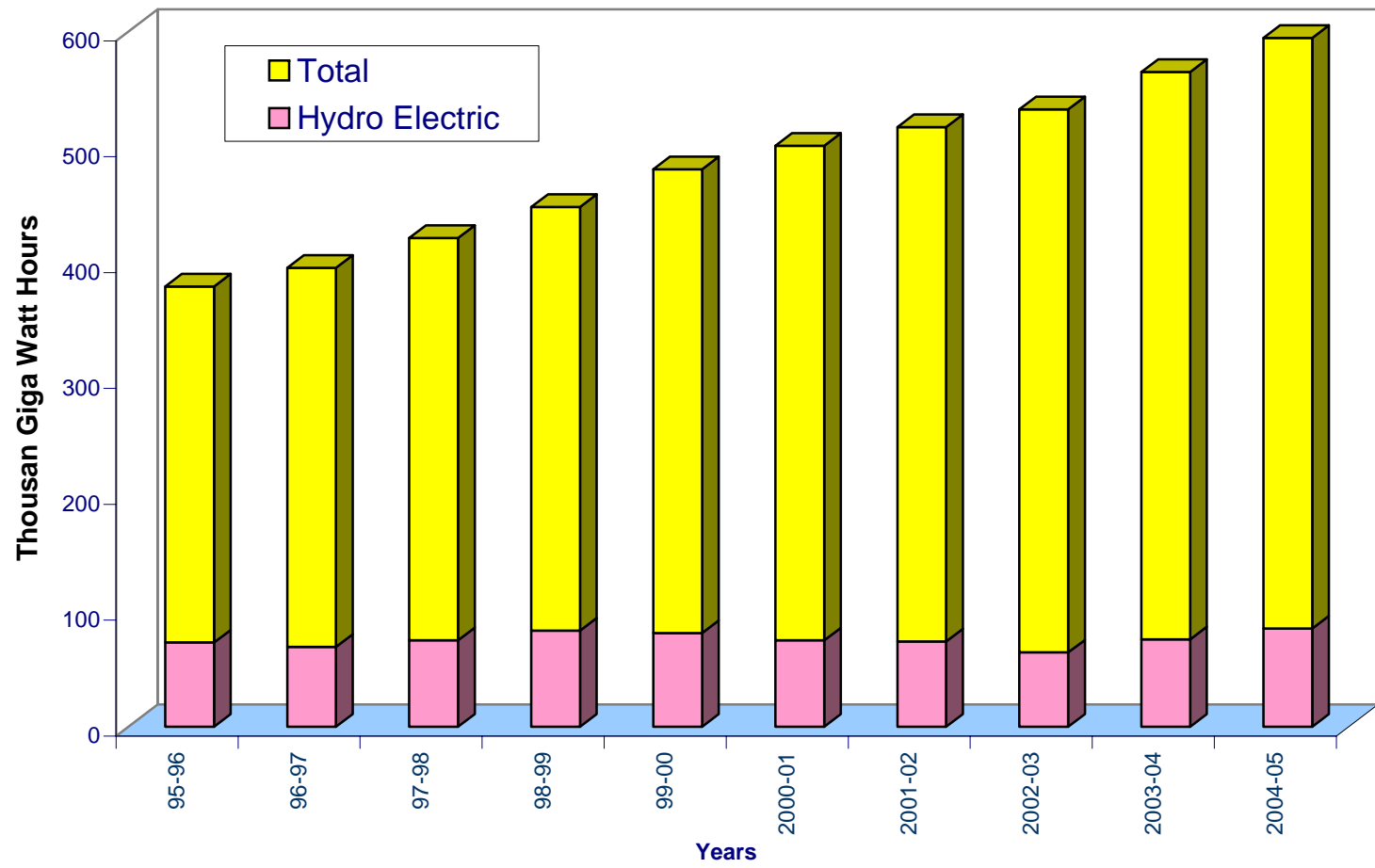


Table : 3.10 Hydro Electric Power Installed Capacity and Generaltion - All India

Sl. No.	Year	Installed Capacity			Generation			Load Factor
		Total (MW)	Hydro (MW)	Percentage Installed Capacity of Total	Total (GWH)	Hydro (GWH)	Percentage Generation of Total	
1	2	3	4	5	6	7	8	9
1	1947	1361.8	508.1	37.3	4073.3	2194.5	53.9	49
2	1950	1712.5	559.3	32.7	5106.7	2519.8	49.3	51
3	1955	2694.8	939.5	34.9	8592.5	3742.2	43.6	45
4	1960-61	4653.1	1916.7	41.2	16937.0	7836.6	46.3	47
5	1965-66	9027.0	4123.7	45.7	32990.1	15225.0	46.2	42
6	1973-74	16663.6	6965.3	41.8	66689.0	28971.8	43.5	47
7	1979-80	28447.8	11384.0	40.0	104627.3	45477.6	43.5	46
8	1985-86	46796.0	15471.6	33.1	170350.1	51020.8	30.0	38
9	1989-90	63627.3	18307.6	28.8	245437.9	62116.1	25.3	39
10	1990-91	66086.3	18753.4	28.4	264328.6	71641.3	27.1	44
11	1995-96	83293.5	20985.6	25.2	379877.1	72579.2	19.1	NA
12	1996-97	85795.4	21658.1	25.2	395889.5	68900.8	17.4	NA
13	1997-98	89102.3	21904.5	24.6	421747.3	74581.7	17.7	NA
14	1998-99	93293.5	22479.1	24.1	448544.1	82922.6	18.5	NA
15	1999-00	97884.5	23856.8	24.4	481055.2	80755.5	16.8	NA
16	2000-01	101626.2	25152.9	24.8	501204.1	74361.9	14.8	NA
17	2001-02	105046.0	26268.8	25.0	517439.4	73579.9	14.2	NA
18	2002-03	107877.4	26766.8	24.8	532693.0	64013.7	12.0	N.A.
19	2003-04	112683.5	29506.8	26.2	565101.7	75242.5	13.3	N.A.
20	2004-05	118425.7	30942.2	26.1	594456.2	84610.4	14.2	N.A.

Sources: Central Electricity Authority (DMLF Division)

MW : Mega Watt

GWH : Giga Watt Hours

NA : Not Available

Table : 3.11 Hydel Performance during 2003-04 and 2004-05

Sl. No.	State / Organisation	Power Station	Station Capacity as on 31.03.2005 (MW)	April To March Generation (MU)		% of Preceeding Year's Generation
				2003-04	2004-05	
1	2	3	4	5	6	7
Northern Region						
1	Bhakra - Beas Management Board	Bhakra Left	540.00	5775	3379	58.51
		Bhakra Right	660.00			
		Ganguwal	77.25	1183	965	81.57
		Kotla	77.25			
		Dehar	990.00	3299	3151	95.51
		Pong	360.00	1185	884	74.60
		Total	2704.50	11442	8379	73.23
2	N.H.P.C.(Northern region)	Baira siul	180.00	688	689	100.15
		Salal- I &II	690.00	3478	3445	99.05
		Tanakpur	120.00	512	496	96.88
		Chamera	540.00	2464	2104	85.39
		Uri	480.00	2872	2207	76.85
		Chamera ST II	300.00	182	1347	740.11
		Total	2310.00	10196	10288	100.90
	Nathapa Jhakri(HP)		1500.00	1121	5109	455.75
	Total Central		6514.50	22759	23776	104.47
3	Haryana	W. Yamuna Canal	62.40	256	290	113.28
4	Himachal Pradesh	Giri Bata	60.00	169	156	92.31
		Bassi	60.00	315	270	85.71
		Binwa	6.00	34	33	97.06
		Andhra	16.95	69	52	75.36
		Sanjay	120.00	581	583	100.34
		Gaj	10.50	48	51	106.25
		Baner	12.00	40	43	107.50
		Thirot	4.50	31	11	35.48
		Ghanvi	22.50	73	74	101.37
		Total	312.45	1360	1273	93.60
	Total (Private)		386.00	1454	1461	100.48
	Total		698.45	2814	2734	97.16
5	Jammu & Kashmir	Lower Jhelum	105.00	507	429	84.62
		Upper Sindh I &II	127.60	275	178	64.73
		Ganderbal	15.00	24	28	116.67
		Chenani -I &II	30.80	71	78	109.86
		Mohara	9.00	0	1	0.00
		stakna	4.00	0	0	0.00
		Kargil	3.75	4	9	225.00
		Sewa	9.00	10	10	100.00
		Total	304.15	891	733	82.27
6	Punjab	Shanan	110.00	563	517	91.83
		U.B.D.C.	90.00	427	380	88.99
		Anandpur Sahib	134.00	820	502	61.22
		Mukerian	207.00	1029	811	78.81
		Ranjit Sagar	600.00	1549	1145	73.92
Total	1141.00	4388	3355	76.46		

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Table : 3.11 Hydel Performance during 2003-04 and 2004-05

Sl. No.	State / Organisation	Power Station	Station Capacity as on 31.03.2005 (MW)	April To March Generation (MU)		% of Preceeding Year's Generation	
				2003-04	2004-05		
1	2	3	4	5	6	7	
7	Rajasthan	R.P.Sagar	172.00	240	376	156.67	
		Jawahar Sagar	99.00	204	282	138.24	
		Mahi Bajaj I & II	140.00	199	278	139.70	
		Anoopgarh -I & II	9.00	0	0	0.00	
		Suratgarh	4.00	0	0	0.00	
		RMC Mangrol	6.00	0	0	0.00	
		Total		430.00	643	936	145.57
8	Uttar Pradesh	Rihand	300.00	1110	482	43.42	
		Obra (H)	99.00	436	203	46.56	
		Matatila	30.00	136	154	113.24	
		Ganga Canal	5.00	80	52	65.00	
		Khara	72.00	383	282	73.63	
		Total		506.00	2145	1173	54.69
9	Uttanchal	Khatima	41.40	173	183	105.78	
		RamGanga	198.00	199	212	106.53	
		Dakrani	33.75	160	127	79.38	
		Dhalipur	51.00	231	184	79.65	
		Kulhal	30.00	154	129	83.77	
		Chibro	240.00	814	636	78.13	
		Chilla	144.00	688	745	108.28	
		Pathari	20.40	97	101	104.12	
		Khodrii	120.00	388	302	77.84	
		Maneri Bhali	90.00	488	458	93.85	
		Mohamdpur	9.30	0	31	0	
		Sobla	6.00	0	0	0.00	
		Total (UJVNL)		983.85	3392	3108	91.63
Total Northern Region			10640.35	37288	36105	96.83	
Western Region							
10	Sardar Sarovar		450.0	0	261	0.00	
11	Gujarat	Ukai(H)	300.0	756	467	61.77	
		Ukai L.B.C	5.0	1	55	5500.00	
		Kadana PSS	240.0	101	307	303.96	
		Total		545.0	858	829	96.62
		Total GEB	995.0	858	1090	127.04	
12	Madhya Pradesh	Gandhi Sagar	115.0	142	343	241.55	
		Pench	160.0	464	233	50.22	
		Bargi	90.0	585	488	83.42	
		Ban Sagar Tons I, II, & III	405.0	1316	1034	78.57	
		Birsinghpur	20.0	64	39	60.94	
		Rajghat	45.0	141	86	60.99	
		Total		835.0	2712	2223	81.97
				Indrasagar	1000.0	192	1347
		MP(Pvt)	13.5	0	30	0.00	
		Total (MP)	1848.5	2904	3600	123.97	

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Table : 3.11 Hydel Performance during 2003-04 and 2004-05

Sl. No.	State / Organisation	Power Station	Station Capacity as on 31.03.2005 (MW)	April To March Generation (MU)		% of Preceeding Year's Generation		
				2003-04	2004-05			
1	2	3	4	5	6	7		
13	Chhatisgarh	Gangral	5.0	0	5			
		Hasdeo Bango	120.0	295	382	129.49		
	Total CBSE		125.0	295	387	131.19		
14	Maharashtra	Koyna I To IV &Koyna DPH	1920.0	3319	3347	100.84		
		Vaitarna	60.0	150	107	71.33		
		Tillari	60.0	64	10	15.63		
		Bhira Tail Race	80.0	84	85	101.19		
		Paithan	12.0	7	3	42.86		
		Pawana	10.0	10	8	80.00		
		Bhatsa	15.0	53	65	122.64		
		Bandhardhara I, II	44.0	34	39	114.71		
		Khadakwasla I &II	16.0	59	65	110.17		
		Veer	9.0	15	40	266.67		
		Bhatgar	16.0	34	38	111.76		
		Eladari	22.5	32	7	21.88		
		Ujjaini PSS	12.0	3	23	766.67		
		Dudhganga	24.0	30	62	206.67		
		Radhanagari	4.8	15	12	80.00		
		Kanher	4.0	5	6	120.00		
		surya	6.0	7	13	185.71		
		Manikdoh	6.0	4	4	100.00		
		Dhimbe	5.0	13	9	69.23		
		Warna	16.0	51	62	121.57		
			Total(MSEB)		2342.3	3989	4005	100.40
			Tata(Private)		447.0	1347	1439	106.83
	Total		2789.3	5336	5444	102.02		
Total Western Region			5757.8	9585	10521	109.77		
Southern Region								
15	Andhra Pradesh	Machkund	114.8	529	899	169.94		
		T.B.Dam Hampi	72.0	102	149	146.08		
		NagarjunasagarPSS	810.0	369	504	136.59		
		Nagarjunasagar RBC	60.0	0	0	0.00		
		Nagarjunasagar LBC	60.0	0	0	0.00		
		Nagarjunasagar EXT	30.0	0	5	0.00		
		Upper Sileru I &II	240.0	401	544	135.66		
		Lower Sileru	460.0	977	1171	119.86		
		Srisaillam	770.0	309	940	304.21		
		Nizam Sagar	10.0	6	0	0.00		
		Donkarayi	25.0	111	133	119.82		
		Pochampad	27.0	64	0	0.00		
		Penna Ahobilam	20.0	0	0	0.00		
		Singur	15.0	14	1	7.14		
		Srisaillam Lb	900.0	328	1411	430.18		
		Mini	0.0	0	6	0.00		
			Total		3613.8	3210	5811	181.03
			Total (Pvt.)		3.7	0	0	0.00
	Total (AP)		3617.5	3210	5811	181.03		

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Table : 3.11 Hydel Performance during 2003-04 and 2004-05

Sl. No.	State / Organisation	Power Station	Station Capacity as on 31.03.2005 (MW)	April To March Generation (MU)		% of Preceeding Year's Generation
				2003-04	2004-05	
1	2	3	4	5	6	7
16	Karnataka	Sharavathy	891.0	3316	3855	116.25
		Kalinadi	810.0	1718	1721	100.17
		Supa DPH	100.0	241	294	121.99
		Bhadra L,R &RBC	39.0	11	43	390.91
		Linganamakki	55.0	120	194	161.67
		Varahi	230.0	721	973	134.95
		Ghataprabha	32.0	62	96	154.84
		Mallapur	9.0	0	0	0.00
		Mani DPH	9.0	11	22	200.00
		Kadra	150.0	223	232	104.04
		Kodasali	120.0	214	216	100.93
		Gerusoppa	240.0	358	437	122.07
		Jog	120.0	160	173	108.13
		Shivasamudram	42.0	79	192	243.04
		Shimsapura	17.2	57	94	164.91
		Munirabad	27.0	41	69	168.29
			Total	2891.2	6995	8223
	Total (Private)	53.2	127	161	126.77	
	Total Karnataka	3124.6	7459	8912	119.48	
17	Kerala	Iddukki	780.0	1246	2003	160.75
		Sabarigiri	300.0	698	1224	175.36
		Kuttiadi	125.0	259	371	143.24
		Sholiyar	54.0	202	264	130.69
		Sengulam	48.0	128	166	129.69
		Nariamangalam	45.0	196	233	118.88
		Palivasal	37.5	193	223	115.54
		Poringalkuttu	32.0	230	182	79.13
		Poringalkuttu LB	16.0	0	107	0.00
		Panniar	30.0	76	142	186.84
		Kallada	15.0	36	75	208.33
		Idamalayar	75.0	155	337	217.42
		L.Periyar	180.0	363	514	141.60
		Peppara (3MW)	0.0	0	0	0.00
		Kakkad	50.0	126	211	167.46
		Mini/Small Hdoro	0.0	9	22	244.44
			Total (KSEB)	1787.5	3917	6074
	Total Pvt.	33.0	40	70	175.00	
	Total	1820.5	3957	6144	155.27	

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Table : 3.11 Hydel Performance during 2003-04 and 2004-05

Sl. No.	State / Organisation	Power Station	Station Capacity as on 31.03.2005 (MW)	April To March Generation (MU)		% of Preceeding Year's Generation
				2003-04	2004-05	
1	2	3	4	5	6	7
18	Tamil Nadu	Pykara	70.0	141	218	154.61
		Moyar	36.0	53	90	169.81
		Kundah 1 to 5	555.0	429	1567	365.27
		Suruliyar	35.0	41	102	248.78
		Aliyar	60.0	86	162	188.37
		Mettur Dam	240.0	182	335	184.07
		Tunnels	0.0	0	0	0.00
		L.Mettur 1 To 4	120.0	0	255	0.00
		Periyar	140.0	213	493	231.46
		Papanasam	28.0	47	88	187.23
		Sarkarpathy	30.0	51	116	227.45
		Sholayar I & II	95.0	199	351	176.38
		Kodayar I & II	100.0	141	205	145.39
		Servalar	20.0	19	33	173.68
		Kadamparai PSS	400.0	408	257	62.99
		Vagai Dam	6.0	16	15	93.75
		L.Bhawani	8.0	0	61	0.00
		L.Bhawani Dam RBc	8.0	0	0	0.00
		Sathnur	7.5	0	10	0.00
Parson'S Valley	30.00	18	55	305.56		
	Total	1988.5	2044	4413	215.90	
Total Southern Region			10551.1	16670	25280	151.65
Eastern Region						
198	Bihar	Kosi	20.0	7	3	42.86
		Sonewest Canal	6.6	16	13	81.25
		Sone east Canal	3.3	11	12	109.09
		E.G.Canal	15.0	18	21	116.67
		Total	44.9	52	49	94.23
20	Jharkhand					
		Subernarekha I & II	130.0	142	147	103.52
		Total	130.0	142	147	103.52
21	D.V.C.	Maithon	60.0	118	114	96.61
		Panchet & Extn.	80.0	177	135	76.27
		Tilaya	4.0	8	12	150.00
		Total	144.0	303	261	86.14
22	Orissa	Balimela	360.0	1144	1527	133.48
		Hirakud I & II	307.5	952	842	88.45
		Rengali	250.0	1051	749	71.27
		Upper Kolab	320.0	656	896	136.59
		Upper Indravati	600.0	2132	2850	133.68
		Total	1837.5	5935	6864	115.65

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Table : 3.11 Hydel Performance during 2003-04 and 2004-05

Sl. No.	State / Organisation	Power Station	Station Capacity as on 31.03.2005 (MW)	April To March Generation (MU)		% of Preceeding Year's Generation
				2003-04	2004-05	
1	2	3	4	5	6	7
23	West Bengal	Jaldhaka I & II	35.0	159	163	102.52
		Massanjore	4.0	0	0	0.00
		Rammam	50.0	240	241	100.42
		Teesta Falls I to III	67.5	92	106	115.22
		Total	156.5	491	510	103.87
24	Sikkim	Lower Lagyap Moyangchu Upper Rognichu Small Hydro	24.0	36	62	172.22
		Total	24.0	36	62	172.22
		A& N ISLAND	Kalpong	5.3		
NHPC Rangit			60.0	345	371	107.54
Total Estern Region			2402.2	7304	8270	113.23
25	Meghalaya	Kyrdemkulai	60.0	134	129	96.27
		Umian I, II & IV	114.0	239	433	272.33
		Umtru	11.2	152	52	34.21
		Total	185.2	525	614	116.95
26	Tripura	Gumti	15.0	67	69	102.99
27	Arunachal Pradesh	Tago & Nuranan	10.5	11	2	18.18
		Total	10.5	11	2	18.18
	Nagaland	Likim	24.0	0	0	0.00
28	NEEPCO	Kopili & Kopil Ext.	275.0	876	1110	126.71
		Khongang Doyang (Nagaland)	75.0	164	254	154.88
		Ranganadi (Ar. Pr.)	405.0	973	1641	168.65
		Total	755.0	2013	3005	149.28
29	NHPC	Loktak (Manipur)	105.0	504	629	124.80
		Total	105.0	504	629	124.80
Total Central			860.0	2517	3634	144.38
Total N.E.Region			1094.7	3120	4319	138.43
ALL INDIA			30446.1	73967	84495	114.23

Source : Central Electricity Authority (HP & I Division)

MU : Million Unit , MW : Mega watt

**Table : 3.12 Domestic Product from Agriculture and Allied
Activites at Current Prices**

(Unit: Rs. Crore)

S. No.	Items	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06
1	2	3	4	5	6	7	8	9
1	Total Output	512363	512516	553344	540523	615795	620137	679665
	(i)Agriculture	382833	373543	406247	386467	452874	449325	494499
	(ii) Livestock	129531	138973	147097	154056	162921	170812	185166
2	Total Inputs	113628	115343	123823	129146	143455	148930	159586
	(I)Seed	9022	8810	9242	9418	10120	10173	11195
	(ii)Organic manure	5821	6157	5621	5795	6095	6421	6763
	(iii)Chemical Fertilisers	21205	20689	21000	21297	20956	21378	21808
	(iv) Current repairs, maintenance of fixed assets and other operational costs	1894	2009	2135	2245	2392	2621	3319
	(v) Feed of livestock	53840	52724	58264	60093	68380	68711	73236
	(vi) Irrigation Charges	547	827	727	861	1187	1406	1793
	(vii) Market Charges	9037	8818	9589	9123	10689	10605	11670
	(viii) Electricity	2932	3388	3504	5526	5825	6006	6193
	(ix) Pesticides & Insecticides	986	1000	1379	1439	1473	1509	1545
	(x) Diesel oil	5609	7804	8774	9406	11381	14869	16364
	(xi) Financial Intermediation Services Indirectly measured	2735	3117	3586	3943	4957	5232	5700
3	Gross Domestic Product	409660	409113	442910	426141	484330	484999	536196
	(i) Agriculture & allied activities (1-2)	398735	397173	429522	411378	472340	471206	520080
	(ii)Operation of Govt. Irrigation system	10925	11940	13388	14763	11990	13793	16116
4	Less Consumption of Fixed Capital	19374	20600	22784	24698	26681	30014	33223
5	Net Domestic Product (3-4)	390286	388513	420126	401443	457648	454986	502972

Source : Central Statistical Organisation.

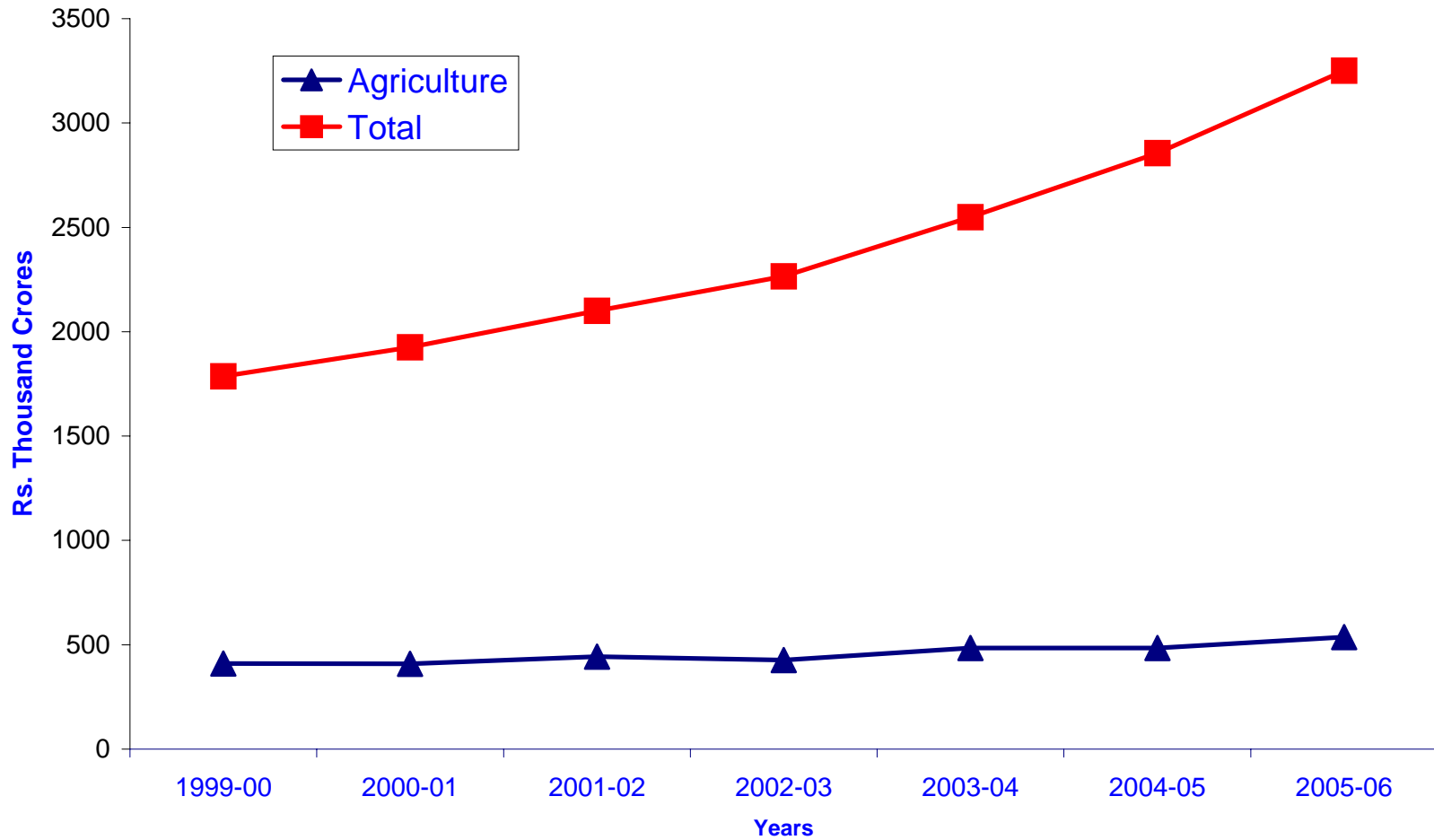
**Table : 3.13 Domestic Product from Agriculture and Allied Activities
at Constant (1999-00) Prices**

Unit : (Rs. Crores)

S. No.	Items	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06
1	2	3	4	5	6	7	8	9
1	Total Output	512363	506694	538386	500370	549572	550098	581994
	i.Agriculture	382833	373069	398593	356741	402272	397848	420699
	ii.Livestock	129531	133625	139793	143629	147300	152250	161294
2	Total Inputs	113628	111308	116645	113877	119642	121030	125279
	i.Seed	9022	8476	8496	8219	8505	8452	8938
	ii.Organic manure	5821	6029	5969	5781	5702	5791	5981
	iii.Chemical Fertilisers	21205	18811	18393	18378	18210	18574	19650
	iv. Current repairs, maintenance of fixed asests and other operational costs	1894	1903	1916	1922	1930	1939	2462
	v.Feed of livestock	53840	53977	58544	56555	60607	60821	61005
	vi.Irrigation Charges	547	716	717	673	665	698	738
	vii.Market Charges	9037	8807	9409	8422	9496	9391	9930
	viii.Electricity	2932	2668	2476	2716	2454	2509	2566
	ix.Pesticides & Insecticides	986	994	1251	1273	1295	1318	1341
	x.Diesel oil	5609	5839	6096	6383	6704	7065	7471
	xi.Financial Intermedation Services indirectly measured	2735	3087	3377	3556	4075	4472	5196
3	Gross Domestic Product	409660	407368	433756	398560	441958	441124	468953
	(i) Agriculture & allied activities (1-2)	398735	395386	4231741	386494	429931	429067	456715
	(ii) Operation of Govt.Irrigation System	10925	11982	12015	12067	12028	12057	12238
4	Less Consumption of Fixed Capital	19374	20305	21461	22528	23529	24552	25711
5	Net Domestic Product (3-4)	390286	387063	412295	376032	418429	416572	443242

Source : Central Statistical Organisation

Chart 27 Gross Domestic Product at Current Prices



**Table : 3.14 Gross Domestic Product by Economic Activity
at Current Prices**

(Unit: Rs.Crores)

S. No.	Industry	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06
1	2	3	4	5	6	7	8	9
1	Agriculture	409660	409113	442910	426141	484330	484999	536196
2	Forestry & Logging	17916	19298	20913	21048	22374	22855	24104
3	Fishing	18939	21336	23240	25491	26938	28775	34758
4	Mining & Quarrying	41594	45706	47871	62742	63882	84464	90482
5	Manufacturing	264113	300392	315314	346029	388549	453603	519746
6	Electricity, Gas & Water Supply	44526	46040	47482	54531	56675	60607	65979
7	Construction	102007	111999	120865	135172	156806	185669	222110
8	Trade, Hotels & Restaurant	254143	280934	313105	347255	398983	464333	540415
9	Transport, storage & communication	133371	147921	164731	180314	211256	250214	284521
10	Financing, Insurance, Real Estate & Business Services	233550	254772	293035	332115	375606	413129	464493
11	Community, Social & Personal Services	266707	287905	310721	334466	364019	407285	468128
Gross Domestic Product at factor cost (Total 1to 11)		1786525	1925415	2100187	2265304	2549418	2855933	3250932

Source : Central Statistical Organisation.

**Table : 3.15 Gross Domestic Product by Economic Activity
at constant (1999-00) Prices**

(Unit : Rs.Crores)

S. No.	Industry	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06
1	2	3	4	5	6	7	8	9
1	Agriculture	409660	407368	433756	398560	441958	441124	468953
2	Forestry & Logging	17916	18399	18964	19090	18872	19169	19482
3	Fishing	18939	19828	20810	21671	22444	22787	23713
4	Mining & Quarrying	41594	42589	43335	47168	48626	52250	54128
5	Manufacturing	264113	284571	291803	311685	332363	361115	393956
6	Electricity, Gas & Water Supply	44526	45439	46228	48423	50735	54531	57401
7	Construction	102007	108362	112692	121650	136225	155431	177543
8	Trade, Hotels & Restaurant	254143	267326	293075	313221	345424	374313	404919
9	Transport, storage & communication	133371	148339	160516	182273	209879	241711	275318
10	Financing, Insurance, Real Estate & Business Services	233550	243087	260791	281611	297326	323187	358535
11	Community, Social & Personal Services	266707	279465	290942	302381	318739	344042	370585
Gross Domestic Product at factor Cost (Total 1 to 11)		1786525	1864773	1972912	2047733	2222591	2389660	2604532

Source : Central Statistical Organisation.

Table : 3.16 Contribution of Agriculture in State Net Domestic Product at Current Prices

(Unit : Rs Crores)

S.No.	State/UT	1993-94	1998-99	1999-2000	2000-01	2001-02	2002-03	2003-04	2004-05
1	2	3	4	5	6	7	8	9	10
1	Andhra Pradesh	16860 33	31515 30	31232 28	35530 28	35559 26	32789 22	39831 24	42434 23
2	Arunachal Pradesh	281 35	405 30	488 33	531 33	526 30	539 28	593 27	570 25
3	Assam	5022 37	9001 40	10157 39	9735 34	10175 33	10550 31	10942 31	11623 30
4	Bihar	9947 48	15380 44	14303 37	15960 38	15074 36	17857 37	15672 34	17360 34
5	Jharkhand	3049 23	5017 19	6693 26	3921 17	6646 24	6898 22	7554 22	8271 22
6	Goa	226 11	366 7	454 8	568 9	562 8	460 5	502 6	586 7
7	Gujarat	9231 22	21544 24	15369 17	13597 15	17158 17	16358 14	26855 19	23957 16
8	Haryana	8201 42	13088 34	13795 32	14643 30	14578 27	14945 26	16632 25	17403 24
9	Himachal Pradesh	1155 27	2320 24	2526 23	2749 23	3243 24	3224 22	3680 23	4144 23
10	J&K	1739 32	3288 30	3562 29	3671 29	3899 28	4546 30	4959 30	5366 30
11	Karnataka	12839 35	22322 28	24206 29	25971 28	21228 22	20740 20	17889 15	21187 16
12	Kerala	6256 26	11147 22	12221 21	10678 17	10265 16	11868 16	12198 15	12479 14
13	Madhya Pradesh	13569 40	21409 35	22789 33	16556 26	22039 30	18435 26	27266 31	26352 29
14	Chattishgarh	3718 31	4804 24	4685 22	3788 18	5854 23	3850 15	6173 19	5259 16
15	Maharashtra	19343 19	29405 16	33820 16	31100 15	34070 14	33876 13	32864 11	34684 11
16	Manipur	356 31	630 30	685 28	750 30	793 27	831 27	871 26	895 24
17	Meghalaya	341 26	645 25	756 26	842 25	927 25	977 25	1027 24	1076 23

Contd..

Table : 3.16 Contribution of Agriculture in State Net Domestic Product at Current Prices

(Unit : Rs Crores)

S.No.	State/UT	1993-94	1998-99	1999-2000	2000-01	2001-02	2002-03	2003-04	2004-05
1	2	3	5	6	7	8	9	10	11
18	Mizoram	171 28	310 27	279 22	446 27	436 25	457 23	N.A	NA
19	Nagaland	261 21	558 26	606 26	942 27	1161 30	1356 30	N.A	NA
20	Orissa	6175 38	11596 37	11114 32	9687 29	11241 31	11322 30	15188 32	15085 29
21	Punjab	12962 48	20544 41	23138 43	24716 42	25622 41	24908 38	27333 38	29408 37
22	Rajasthan	9587 33	21943 33	20405 29	17363 25	20882 27	13404 18	25669 27	22978 23
23	Sikkim	128 35	160 23	174 23	196 22	203 21	248 22	272 22	287 21
24	Tamil Nadu	12354 24	19535 18	17886 16	19381 15	19423 15	15242 11	15695 11	18700 11
25	Tripura	509 31	986 28	1200 29	1130 23	1426 26	1447 24	1518 23	NA
26	Uttar Pradesh	28357 40	48048 36	52576 36	53548 36	55343 35	59025 35	64638 35	69223 34
27	Uttaranchal	1763 35	3047 35	3395 36	3880 36	3584 31	3774 29	4043 27	4298 24
28	West Bengal	14559 30	33695 32	34340 29	34472 27	36943 26	35802 24	39227 23	40616 21
29	A & N Islands	129 28	182 24	175 21	196 23	246 26	325 31	N.A	NA
30	Chandigarh	35 3	49 2	52 1	48 1	52 1	59 1	62 1	61 1
31	Delhi	771 4	724 2	682 1	763 1	778 1	832 1	841 1	877 1
32	Pondicherry	80 10	117 4	146 5	140 4	130 3	146 3	146 3	121 2

Source : Central Statistical Organisation.

Note : Figures Shown below the values in each cell are percentage share of Net Domestic product from Agriculture to Net Domestic Product for the State.

N.A. : Not Available

TABLE : 3.17 Contribution of Agriculture in State Net Domestic Product at Constant (1993-94) Prices

(Unit : Rs.Crores)

S.No.	State/UT	1993-94	1998-99	1999-2000	2000-01	2001-2002	2002-03	2003-04	2004-05
1	2	3	4	5	6	7	8	9	10
1	Andhra Pradesh	16860 33	19269 28	18449 26	21419 28	21125 26	18177 22	21307 23	22158 23
2	Arunachal Pradesh	281 35	268 29	298 31	309 31	287 28	289 26	303 26	290 24
3	Assam	5022 37	5195 36	5189 34	5087 32	5620 34	5678 33	5558 31	5504 29
4	Bihar	9947 48	11428 46	10316 64	13479 43	11054 39	13881 42	10819 37	12950 39
5	Jharkhand	3049 23	3510 18	4142 23	3383 19	4253 24	4721 23	4956 23	5203 23
6	Goa	226 11	265 8	299 9	261 8	288 8	300 7	334 10	360 10
7	Gujarat	9231 22	15699 24	10628 16	9219 15	12672 19	10599 14	17593 20	15704 17
8	Haryana	8201 42	8754 35	9161 34	9366 32	9344 31	9265 29	10104 29	10470 28
9	Himachal Pradesh	1155 27	1252 21	1186 18	1276 19	1378 20	1358 18	1539 19	1691 19
10	Jammu & Kashmir	1739 32	2246 32	2362 32	2336 32	2462 32	2530 31	2705 32	2832 32
11	Karnataka	12839 35	14818 27	16344 29	18521 30	15386 24	13963 21	11582 17	13588 18
12	Kerala	6256 26	6900 23	7017 21	5448 16	5312 15	5394 14	5492 14	5586 13
13	Madhya Pradesh	13569 40	14720 34	15760 33	11083 26	13992 30	11140 25	15938 31	15339 29
14	Chattisgarh	3718 31	3147 23	2867 21	2237 17	3408 22	3193 19	3510 19	2798 15
15	Maharashtra	19343 19	20981 16	22845 16	21252 16	22602 16	22131 14	20453 12	20017 11
16	Manipur	356 31	382 27	410 26	432 28	446 26	431 24	444 24	458 23
17	Meghalaya	341 26	458 25	530 27	550 25	575 25	588 24	599 23	611 22

Contd..

**TABLE : 3.17 Contribution of Agriculture in State Net Domestic Product at Constant (1993-94)
Prices**

(Unit : Rs.Crores)

S.No.	State/UT	1993-94	1998-99	1999-2000	2000-01	2001-2002	2002-03	2003-04	2004-05
1	2	3	4	5	6	7	8	9	10
18	Mizoram	NA	NA	NA	NA	177	159	N.A	NA
19	Nagaland	261 21	401 25	455 28	676 30	795 33	907 34	N.A	NA
20	Orissa	6175 38	6356 33	5691 27	5212 26	6326 29	4773 22	6272 25	6514 24
21	Punjab	12962 48	13743 41	14780 42	15169 41	15316 41	14781 39	15636 38	16340 38
22	Rajasthan	9587 33	14985 32	12841 28	11119 24	14460 29	8704 19	17362 29	15154 25
23	Sikkim	128 35	109 22	111 22	118 22	121 21	142 23	151 22	155 22
24	Tamil Nadu	12354 24	14161 20	13309 18	13934 17	13907 18	10423 13	10094 12	11697 13
25	Tripura	509 31	617 26	638 25	624 21	688 22	690 21	712 19	NA
26	Uttar Pradesh	28357 40	30798 36	33701 37	33173 36	34069 36	34581 35	35535 34	35880 33
27	Uttaranchal	1763 35	2045 34	2034 34	2179 33	2079 30	2119 28	2225 26	2277 24
28	West Bengal	14559 30	17975 26	18520 25	19028 24	20979 25	19934 22	20666 21	20779 20
29	A & N Islands	129 28	125 23	120 21	133 24	142 25	152 26	N.A	NA
30	Chandigarh	35 3	30 1	31 1	29 1	30 1	35 1	31 1	30 1
31	Delhi	771 4	488 2	433 1	511 1	504 1	501 1	489 1	497 1
32	Pondicherry	80 10	85 5	89 5	91 4	77 3	71 3	69 2	58 2

Source Central Statistical Organisation

Note : Figures Shown below the values in each cell are percentage share of Net Domestic product from Agriculture to Net Domestic Product for the State.

N.A. : Not Available

Table : 3.18(A) Quantity and Value of Monthly Average Consumption of Different Cereals Per Person for Rural Areas of each State and All - India NSS 57th Round July 2001- June 2002

RURAL

Sl.No	State/ Cereal	AP	Assam	Bihar	Gujarat	Haryana	Himachal Pradesh	J & K	Karnataka	Kerala	MP	Maharashtra
1	2	3	4	5	6	7	8	9	10	11	12	13
		Quantity (kg)										
1	Rice	11.17	12.61	7.97	2.03	0.60	4.55	9.06	5.33	8.40	2.80	3.34
2	Wheat	0.22	0.60	5.81	4.03	9.08	5.86	3.36	1.18	0.87	6.79	3.07
3	Jowar	0.58	0.00	0.00	0.79	0.00	0.00	0.00	2.86	0.00	0.27	3.39
4	Bajra	0.05	0.00	0.00	2.10	0.20	0.01	0.00	0.08	0.00	0.01	1.00
5	Maize	0.01	0.00	0.36	0.64	0.08	1.84	1.20	0.05	0.00	1.28	0.04
6	Other Cereals	0.36	0.00	0.00	0.01	0.00	0.18	0.00	1.64	0.01	0.00	0.11
Total Cereals		12.40	13.21	14.14	9.60	9.95	12.44	13.62	11.15	9.29	11.16	10.96
		Value (Rs.)										
7	Rice	106.99	134.12	67.33	24.70	7.29	44.36	97.96	53.49	92.76	23.01	34.17
8	Wheat	2.83	5.54	39.32	32.61	55.57	47.72	35.52	11.12	11.45	43.84	24.82
9	Jowar	3.10	0.00	0.00	5.49	0.01	0.00	0.00	18.18	0.00	1.22	19.24
10	Bajra	0.27	0.00	0.01	12.77	0.87	0.03	0.01	0.45	0.00	0.07	5.95
11	Maize	0.05	0.02	1.82	3.85	0.52	10.26	7.92	0.23	0.00	6.07	0.22
12	Other Cereals	2.07	0.01	0.00	0.05	0.00	2.07	0.00	7.43	0.11	0.00	0.87
Total cereals		115.31	139.69	108.49	79.47	64.26	104.43	141.41	90.90	104.33	74.22	85.26

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Table : 3.18(A) Quantity and Value of Monthly Average Consumption of Different Cereals Per Person for Rural Areas of each State and All - India NSS 57th Round July 2001- June 2002

RURAL

Sl.No	State/ Cereal	Orissa	Punjab	Raja- sthan	Tamil Nadu	Tripura	UP	WB	Jharkh and	Chhatis garh	North- Eastern States	Gropup of Uts	All India
1	2	14	15	16	17	18	19	20	21	22	23	24	25
		Quantity (kg)											
1	Rice	12.64	0.77	0.18	9.79	12.03	3.81	12.01	11.58	11.91	12.81	8.58	6.77
2	Wheat	0.36	9.23	8.22	0.30	0.15	8.19	1.08	3.13	0.39	0.19	1.84	4.12
3	Jowar	0.00	0.00	0.02	0.02	0.00	0.01	0.00	0.00	0.29	0.00	0.19	0.44
4	Bajra	0.00	0.00	3.26	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.03	0.36
5	Maize	0.00	0.33	1.17	0.00	0.00	0.31	0.00	0.31	0.00	0.13	0.00	0.30
6	Other Cereals	0.37	0.00	0.03	0.31	0.00	0.00	0.00	0.10	0.05	0.04	0.23	0.16
Total Cereals		13.38	10.34	12.88	10.44	12.17	12.43	13.10	15.11	12.64	13.18	10.88	12.15
		Value (Rs.)											
7	Rice	95.68	8.80	2.54	85.98	124.52	28.20	115.89	99.59	103.11	144.65	88.15	61.12
8	Wheat	3.91	60.95	54.81	4.07	1.37	48.24	8.82	23.78	2.82	2.15	18.52	27.58
9	Jowar	0.00	0.00	0.11	0.12	0.00	0.03	0.00	0.00	2.41	0.00	1.35	2.62
10	Bajra	0.02	0.00	13.40	0.14	0.00	0.46	0.00	0.00	0.00	0.01	0.18	1.80
11	Maize	0.02	2.36	5.79	0.01	0.00	1.42	0.03	1.48	0.01	1.00	0.00	1.50
12	Other Cereals	1.78	0.00	0.13	1.80	0.00	0.01	0.02	0.39	0.26	0.41	2.17	0.85
Total cereals		101.41	72.11	76.79	92.12	125.89	78.36	124.75	125.24	108.62	148.22	110.36	95.47

Source : NSSO, Ministry of Statistics & Programme Implementation (NSS 57th Round July2001 - June 2002)

**Table : 3.18(B) Quantity and Value of Monthly Average Consumption of Different Cereals Per Person for Rural Areas of each State and All - India
NSS 58th Round July 2002 - Dec 2002**

RURAL											
Sl.No	State/ Cereal	AP	Assam	Bihar	Gujarat	Haryana	J & K	Karnataka	Kerala	MP	Maharashtra
1	2	3	4	5	6	7	8	9	10	11	12
		Quantity (kg)									
1	Rice	11.06	12.47	7.22	1.89	0.74	8.25	5.48	8.71	2.61	3.01
2	Wheat	0.27	0.53	6.34	3.58	9.55	3.83	0.93	0.88	7.48	3.37
3	Jowar	0.37	0.00	0.00	0.62	0.00	0.00	2.30	0.00	0.51	2.94
4	Bajra	0.04	0.00	0.01	2.40	0.12	0.01	0.06	0.00	0.05	1.24
5	Maize	0.01	0.00	0.51	0.93	0.01	0.61	0.12	0.00	1.20	0.03
6	Other Cereals	0.23	0.00	0.00	0.13	0.00	0.00	1.83	0.00	0.02	0.13
Total Cereals		11.98	13.00	14.09	9.54	10.43	12.69	10.72	9.59	11.87	10.71
		Value (Rs.)									
7	Rice	105.83	133.12	62.84	20.32	9.41	87.86	54.33	97.79	22.52	30.29
8	Wheat	3.58	5.38	43.45	25.94	58.28	35.15	8.76	11.68	49.28	27.35
9	Jowar	2.46	0.00	0.00	4.51	0.02	0.00	16.05	0.00	2.47	18.51
10	Bajra	0.26	0.00	0.04	15.31	0.69	0.06	0.31	0.00	0.27	7.75
11	Maize	0.04	0.01	2.66	4.83	0.07	3.88	0.64	0.00	6.34	0.18
12	Other Cereals	1.29	0.01	0.02	0.66	0.01	0.00	8.65	0.10	0.11	0.93
Total cereals		113.44	138.52	109.01	71.56	68.48	126.94	88.94	109.58	80.99	85.02

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**Table : 3.18(B) Quantity and Value of Monthly Average Consumption of Different Cereals Per Person for Rural Areas of each State and All - India
NSS 58th Round July 2002 - Dec 2002**

RURAL											
Sl.No	State/ Cereal	Orissa	Punjab	Raja- sthan	Tamil Nadu	UP	WB	Jharkhand	North- Eastern States	Gropup of Uts	All India
1	2	13	14	15	16	17	18	19	20	21	22
Quantity (kg)											
1	Rice	13.60	0.74	0.18	9.50	3.57	12.23	10.40	12.73	7.98	6.52
2	Wheat	0.59	8.88	9.13	0.27	8.74	0.77	2.47	0.21	1.91	4.34
3	Jowar	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.18	0.43
4	Bajra	0.00	0.00	2.30	0.02	0.10	0.00	0.01	0.00	0.04	0.35
5	Maize	0.02	0.11	1.10	0.00	0.09	0.00	0.22	0.14	0.03	0.27
6	Other Cereals	0.26	0.00	0.13	0.35	0.01	0.01	0.01	0.04	0.12	0.17
Total Cereals		14.47	9.72	12.85	10.15	12.52	13.01	13.12	13.12	10.26	12.08
Value (Rs.)											
7	Rice	98.74	8.36	2.45	80.88	28.79	114.27	88.95	135.93	78.91	59.67
8	Wheat	6.23	58.16	63.77	3.94	52.96	6.72	20.35	2.78	17.92	29.77
9	Jowar	0.00	0.00	0.06	0.07	0.01	0.00	0.00	0.00	1.48	2.78
10	Bajra	0.01	0.00	14.89	0.13	0.56	0.00	0.04	0.00	0.30	2.20
11	Maize	0.09	0.90	6.20	0.03	0.49	0.00	1.04	1.08	0.23	1.45
12	Other Cereals	1.27	0.00	0.89	2.16	0.05	0.05	0.05	0.43	0.92	0.86
Total cereals		106.35	67.42	88.26	87.20	82.87	121.05	110.43	140.22	99.76	96.74

Source : NSSO, Ministry of Statistics & Programme Implementation (NSS 58th Round July 2002 - Dec 2002)

**TABLE : 3.18(C) Quantity and Value of Monthly Average Consumption of Different Cereals
Per Person for Rural Areas of Each State and All - India
NSS 59th Round Jan 2003 - Dec 2003**

RURAL

Sl.No	State/ Cereal	AP	Assam	Bihar	Gujarat	Haryana	Himachal Pradesh	J & K	Karna taka	Kerala	MP	Mahar-asthra	Manipur
1	2	3	4	5	6	7	8	9	10	11	12	13	14
		Quantity (kg)											
1	Rice	11.17	12.24	7.27	1.98	0.85	4.08	9.14	5.80	8.71	2.41	3.22	16.10
2	Wheat	0.21	0.68	5.95	3.37	8.84	6.18	3.51	0.95	0.98	7.82	3.21	0.05
3	Jowar	0.51	0.00	0.00	0.43	0.00	0.01	0.01	2.17	0.00	0.51	3.16	0.00
4	Bajra	0.01	0.00	0.00	2.61	0.41	0.02	0.02	0.03	0.00	0.15	1.08	0.00
5	Maize	0.02	0.00	0.47	1.08	0.06	1.52	0.70	0.05	0.00	1.24	0.04	0.01
6	Other Cereals	0.20	0.00	0.00	0.09	0.00	0.12	0.11	2.06	0.00	0.05	0.11	0.00
Total Cereals		12.12	12.92	13.70	9.57	10.16	11.93	13.28	11.06	9.69	12.19	10.82	16.16
		Value (Rs.)											
7	Rice	106.64	126.29	62.66	22.75	9.93	42.66	99.06	56.22	98.36	21.01	32.51	190.95
8	Wheat	2.83	5.63	42.02	27.64	59.16	50.37	32.48	9.50	13.08	50.42	25.71	0.76
9	Jowar	3.22	0.00	0.00	3.10	0.02	0.04	0.04	16.00	0.00	2.40	18.85	0.00
10	Bajra	0.07	0.00	0.02	17.38	2.06	0.13	0.11	0.21	0.00	0.75	6.82	0.00
11	Maize	0.13	0.02	2.39	5.62	0.37	9.45	4.12	0.26	0.01	6.09	0.21	0.06
12	Other Cereals	1.30	0.00	0.02	0.61	0.01	0.89	0.83	11.47	0.04	0.24	0.88	0.00
Total cereals		114.19	131.95	107.12	77.10	71.54	103.55	136.64	93.67	111.50	80.91	85.00	191.77

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**TABLE : 3.18(C) Quantity and Value of Monthly Average Consumption of Different Cereals
Per Person for Rural Areas of Each State and All - India
NSS 59th Round Jan 2003 - Dec 2003**

RURAL

SI.No	State/ Cereal	Mega- laya	Orissa	Punjab	Raja- sthan	Tamil Nadu	Tripura	UP	WB	Jhar- khand	Chhatis- garh	North- Eastern States	Gropup of Uts	All India
1	2	15	16	17	18	19	20	21	22	23	24	25	26	27
		Quantity (kg)												
1	Rice	11.39	13.98	0.73	0.28	9.48	11.90	4.89	12.57	10.62	12.57	12.62	7.29	6.83
2	Wheat	0.25	0.43	9.24	8.67	0.35	0.18	8.47	0.89	2.43	0.64	0.24	1.90	4.22
3	Jowar	0	0.00	0.00	0.03	0.01	0.00	0.02	0.00	0.00	0.00	0.00	0.22	0.44
4	Bajra	0	0.00	0.03	2.45	0.04	0.00	0.13	0.00	0.04	0.00	0.00	0.08	0.37
5	Maize	0.1	0.01	0.20	1.41	0.00	0.00	0.13	0.00	0.21	0.07	0.10	0.01	0.31
6	Other Cereals	0	0.22	0.01	0.01	0.35	0.00	0.01	0.00	0.04	0.04	0.06	0.20	0.17
Total Cereals		11.75	14.63	10.20	12.86	10.23	12.08	13.67	13.47	13.33	13.32	13.02	9.70	12.34
		Value (Rs.)												
7	Rice	122.88	103.42	8.55	3.66	86.19	114.92	32.57	120.89	89.25	110.16	134.98	74.26	61.45
8	Wheat	3.96	4.91	61.66	58.46	4.69	2.24	54.02	26.30	21.19	5.83	3.23	19.03	31.18
9	Jowar	0.00	0.00	0.00	0.17	0.09	0.00	0.08	0.00	0.00	0.04	0.00	1.63	2.75
10	Bajra	0.00	0.00	0.17	12.68	0.29	0.00	0.60	0.00	0.15	0.00	0.04	0.64	2.18
11	Maize	0.54	0.04	1.65	7.34	0.02	0.00	0.70	0.05	0.98	0.33	0.87	0.12	1.61
12	Other Cereals	0.06	1.21	0.09	0.02	2.51	0.01	0.12	0.01	0.19	0.30	0.68	1.47	1.02
Total cereals		127.44	109.60	72.12	82.34	93.79	117.18	88.09	147.25	111.76	116.66	139.82	97.15	100.19

Source : NSSO, Ministry of Statistics & Programme Implementation (NSS 59th Round Jan 2003 - Dec 2003)

**Table : 3.19(A) Quantity and Value of Monthly Average Consumption of Different Cereals
Per Person for Urban Areas of Each State and All - India
NSS 57th Round July 2001 - June 2002**

URBAN

Sl. No	Cereal\State	AP	Assam	Bihar	Gujarat	Haryana	Himachal Pradesh	Jammu & Kashmir	Karnataka	Kerala	MP	Maharashtra	Manipur	Mizoram
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
		Quantity (kg)												
1	Rice	9.24	10.24	5.81	1.85	0.93	3.62	7.90	5.25	7.78	2.24	3.26	15.25	10.90
2	Wheat	0.86	1.53	6.21	5.01	7.77	6.48	4.07	1.98	1.17	7.52	4.41	0.15	0.84
3	Jowar	0.29	0.00	0.00	0.12	0.00	0.00	0.00	1.69	0.00	0.08	0.98	0.00	0.00
4	Bajra	0.00	0.00	0.00	1.04	0.01	0.03	0.00	0.00	0.00	0.01	0.22	0.00	0.00
5	Maize	0.00	0.00	0.06	0.14	0.04	0.21	0.01	0.04	0.00	0.08	0.00	0.00	0.13
6	Other Cereals	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.79	0.00	0.00	0.00	0.00	0.00
	Total Cereals	10.48	11.77	12.07	8.17	8.73	10.34	11.97	9.76	8.95	9.92	8.88	15.41	11.87
		Value (Rs.)												
7	Rice	107.79	122.61	57.84	26.12	13.47	48.54	89.30	72.20	92.39	26.11	44.09	170.48	127.25
8	Wheat	10.80	17.75	46.00	44.86	56.78	60.41	47.00	24.61	16.30	54.37	45.70	2.27	18.92
9	Jowar	1.79	0.00	0.00	1.05	0.00	0.00	0.00	12.99	0.00	0.36	7.47	0.00	0.00
10	Bajra	0.02	0.00	0.00	7.49	0.05	0.15	0.00	0.01	0.00	0.03	1.44	0.00	0.00
11	Maize	0.03	0.01	0.31	0.96	0.34	1.41	0.05	0.19	0.00	0.40	0.00	0.00	1.29
12	Other Cereals	0.55	0.00	0.00	0.01	0.01	0.01	0.00	4.26	0.03	0.03	0.13	0.00	0.00
	Total cereals	120.98	140.37	104.14	80.49	70.64	110.51	136.36	114.27	108.73	81.30	98.83	172.75	147.46

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**Table : 3.19(A) Quantity and Value of Monthly Average Consumption of Different Cereals
Per Person for Urban Areas of Each State and All - India
NSS 57th Round July 2001 - June 2002**

														URBAN
Sl. No	Cereal\State	Orissa	Punjab	Rajas- than	TN	Tripura	UP	WB	Delhi	Jhar- khand	Chhatis- garh	North-Est State	Group of Uts	All India
1	2	16	17	18	19	20	21	22	23	24	25	26	27	28
		Quantity (kg)												
1	Rice	10.42	0.96	0.59	8.25	11.08	2.35	7.77	1.55	6.49	8.80	11.94	5.00	4.72
2	Wheat	2.22	7.92	9.46	0.61	0.34	7.52	2.66	6.64	5.44	2.88	0.64	3.98	4.51
3	Jowar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.31
4	Bajra	0.00	0.00	0.60	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.01	0.13
5	Maize	0.00	0.03	0.35	0.00	0.00	0.02	0.00	0.00	0.01	0.00	0.04	0.05	0.04
6	Other Cereals	0.03	0.00	0.01	0.05	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.12	0.08
	Total Cereals	12.67	8.91	11.01	8.91	11.42	9.94	10.45	8.20	11.94	11.69	12.63	9.20	9.79
		Value (Rs.)												
7	Rice	95.15	11.69	8.83	90.10	138.71	23.71	93.35	20.86	69.19	93.18	141.60	63.38	55.44
8	Wheat	24.88	57.36	68.53	9.25	4.31	52.73	27.48	60.54	48.88	27.96	10.11	38.35	38.46
9	Jowar	0.00	0.00	0.02	0.00	0.00	0.03	0.00	0.00	0.02	0.00	0.00	0.32	2.31
10	Bajra	0.00	0.00	2.60	0.02	0.00	0.22	0.01	0.00	0.00	0.00	0.00	0.07	0.83
11	Maize	0.00	0.29	1.77	0.00	0.00	0.13	0.00	0.06	0.04	0.12	0.46	0.47	0.25
12	Other Cereals	0.20	0.01	0.06	0.36	0.00	0.00	0.06	0.00	0.01	0.03	0.00	0.75	0.47
	Total cereals	120.24	69.36	81.80	99.74	143.02	76.83	120.90	81.46	118.13	121.28	152.18	103.35	97.77

Source : NSSO, Ministry of Statistics & Programme Implementation (NSS 57th Round July2001 - June 2002)

**Table : 3.19(B) Quantity and Value of Monthly Average Consumption of Different Cereals
Per Person for Urban Areas of Each State and All - India
NSS 58th Round July 2002 - Dec 2002**

URBAN

Sl. No	Cereal\State	AP	Assam	Bihar	Gujarat	Haryana	Jummu & Kashmir	Karna-taka	Kerala	MP	Mahar-asthra
1	2	3	4	5	6	7	8	9	10	11	12
		Quantity (kg)									
1	Rice	8.99	10.43	6.45	1.95	1.03	8.85	5.68	7.30	2.44	3.23
2	Wheat	0.86	1.65	6.38	5.10	7.62	3.59	1.66	1.18	7.77	4.45
3	Jowar	0.18	0.00	0.00	0.06	0.00	0.00	1.31	0.00	0.15	1.20
4	Bajra	0.00	0.00	0.00	0.77	0.01	0.00	0.00	0.00	0.02	0.23
5	Maize	0.00	0.00	0.04	0.04	0.01	0.02	0.00	0.00	0.07	0.00
6	Other Cereals	0.05	0.00	0.00	0.00	0.00	0.00	1.05	0.00	0.00	0.00
	Total Cereals	10.08	12.08	12.87	7.92	8.67	12.46	9.70	8.48	10.45	9.11
		Value (Rs.)									
7	Rice	108.09	123.88	59.59	30.44	15.52	92.90	76.18	84.87	27.30	44.40
8	Wheat	11.31	18.45	48.54	49.65	55.61	41.50	20.68	16.76	56.60	46.50
9	Jowar	1.35	0.00	0.00	0.49	0.00	0.00	9.95	0.00	0.75	9.12
10	Bajra	0.00	0.00	0.00	5.54	0.04	0.00	0.00	0.00	0.12	1.64
11	Maize	0.00	0.09	0.18	0.27	0.11	0.12	0.00	0.00	0.36	0.01
12	Other Cereals	0.43	0.00	0.01	0.01	0.00	0.00	5.97	0.09	0.00	0.08
	Total cereals	121.18	142.41	108.31	86.40	71.27	134.52	112.78	101.73	85.13	101.75

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**Table : 3.19(B) Quantity and Value of Monthly Average Consumption of Different Cereals
Per Person for Urban Areas of Each State and All - India
NSS 58th Round July 2002 - Dec 2002**

URBAN

Sl. No	Cereal\State	Orissa	Punjab	Rajas- than	TN	UP	WB	Delhi	Jhar- khand	North-Est Stat	Group of Uts	All India
1	2	13	14	15	16	17	18	19	20	21	22	23
		Quantity (kg)										
1	Rice	9.56	0.84	0.51	8.19	2.65	7.71	1.79	6.55	12.02	4.16	4.74
2	Wheat	2.33	7.84	9.44	0.75	7.69	2.65	6.26	5.68	0.69	3.93	4.59
3	Jowar	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.28
4	Bajra	0.00	0.00	0.63	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.12
5	Maize	0.00	0.07	0.15	0.00	0.01	0.00	0.01	0.02	0.01	0.06	0.02
6	Other Cereals	0.05	0.00	0.05	0.08	0.00	0.00	0.00	0.00	0.01	0.01	0.07
	Total Cereals	11.95	8.74	10.82	9.03	10.35	10.36	8.06	12.25	12.74	8.21	9.83
		Value (Rs.)										
7	Rice	86.24	11.53	8.25	94.22	29.22	91.73	23.45	69.78	140.78	53.41	56.55
8	Wheat	26.52	60.02	74.75	11.51	57.55	26.99	56.18	50.77	11.30	36.94	40.54
9	Jowar	0.00	0.00	0.34	0.00	0.00	0.00	0.00	0.00	0.00	0.23	2.10
10	Bajra	0.00	0.01	4.44	0.02	0.02	0.01	0.07	0.00	0.00	0.15	0.85
11	Maize	0.02	0.71	0.85	0.00	0.05	0.02	0.06	0.14	0.14	0.76	0.14
12	Other Cereals	0.25	0.01	0.34	0.67	0.00	0.00	0.04	0.00	0.07	0.08	0.45
	Total cereals	113.04	72.28	88.98	106.42	86.55	118.75	79.79	120.69	152.29	91.56	100.64

Source : NSSO, Ministry of Statistics & Programme Implementation (NSS 58th Round July 2002 - Dec 2002)

**Table : 3.19(C) Quantity and Value of Monthly Average Consumption of Different Cereals
Per Person for Urban Areas of Each State and All - India
NSS 59th Round Jan 2003 - Dec 2003**

URBAN											
Sl. No	Cereal\State	AP	Assam	Bihar	Gujarat	Haryana	Jummu & Kashmir	Karna-taka	Kerala	MP	Mahar-asthra
1	2	3	4	5	6	7	8	9	10	11	12
		Quantity (kg)									
1	Rice	9.45	10.26	6.41	2.14	1.19	7.27	5.90	7.57	2.24	3.26
2	Wheat	0.73	1.47	6.39	4.93	7.99	5.22	1.50	1.24	7.60	4.34
3	Jowar	0.31	0.00	0.00	0.22	0.01	0.00	1.00	0.00	0.12	0.82
4	Bajra	0.00	0.00	0.00	0.81	0.05	0.00	0.00	0.00	0.01	0.24
5	Maize	0.00	0.00	0.05	0.08	0.01	0.06	0.00	0.00	0.22	0.00
6	Other Cereals	0.06	0.00	0.00	0.00	0.00	0.00	1.28	0.00	0.01	0.00
Total Cereals		10.55	11.73	12.85	8.18	9.24	12.55	9.69	8.81	10.19	8.67
		Value (Rs.)									
7	Rice	114.00	120.77	59.23	29.81	16.41	90.53	79.73	91.94	26.52	43.27
8	Wheat	10.22	17.83	50.58	48.14	61.35	47.75	19.12	17.47	57.73	45.48
9	Jowar	2.30	0.00	0.00	1.71	0.02	0.00	8.21	0.00	0.55	6.28
10	Bajra	0.03	0.00	0.00	5.98	0.29	0.00	0.00	0.00	0.04	1.71
11	Maize	0.00	0.00	0.29	0.54	0.06	0.55	0.00	0.00	1.14	0.00
12	Other Cereals	0.40	0.00	0.00	0.02	0.00	0.00	8.31	0.03	0.05	0.10
Total cereals		126.96	138.60	110.11	86.19	78.13	138.83	115.36	109.44	86.04	96.84

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**Table : 3.19(C) Quantity and Value of Monthly Average Consumption of Different Cereals
Per Person for Urban Areas of Each State and All - India
NSS 59th Round Jan 2003 - Dec 2003**

URBAN												
Sl. No	Cereal/State	Orissa	Punjab	Rajas- than	TN	UP	WB	Delhi	Jhar- khand	North-Est State	Group of Uts	All India
1	2	13	14	15	16	17	18	19	20	21	22	23
		Quantity (kg)										
1	Rice	10.66	1.03	0.48	8.39	2.61	7.64	1.68	6.99	11.68	4.83	4.82
2	Wheat	2.12	8.01	8.94	0.79	8.04	2.67	6.61	5.45	0.61	4.64	4.59
3	Jowar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24
4	Bajra	0.00	0.00	0.47	0.00	0.01	0.00	0.00	0.00	0.00	0.02	0.12
5	Maize	0.00	0.08	0.41	0.00	0.02	0.00	0.00	0.01	0.01	0.01	0.05
6	Other Cereals	0.03	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.01	0.01	0.09
	Total Cereals	12.81	9.13	10.30	9.26	10.68	10.31	8.30	12.46	12.32	9.51	9.90
		Value (Rs.)										
7	Rice	95.99	14.01	7.96	101.31	27.15	90.44	22.87	76.05	138.47	57.31	57.47
8	Wheat	23.65	63.59	68.82	11.94	61.09	27.19	61.35	51.65	10.42	44.50	40.97
9	Jowar	0.03	0.04	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.02	1.82
10	Bajra	0.00	0.00	2.73	0.01	0.06	0.00	0.03	0.00	0.00	0.19	0.80
11	Maize	0.00	0.80	2.15	0.00	0.12	0.03	0.00	0.06	0.09	0.08	0.26
12	Other Cereals	0.16	0.00	0.03	0.83	0.02	0.01	0.00	0.02	0.16	0.08	0.63
	Total cereals	119.82	78.44	81.69	114.11	88.45	117.66	84.26	127.78	149.14	102.19	101.95

Source : NSSO, Ministry of Statistics & Programme Implementation (NSS 59th Round Jan 2003 - Dec 2003)

TABLE : 3.20 Average Monthly Per Capita Quantity and Value of Consumption of Cereals in Rural and Urban Areas Over Different NSS Rounds - All India

Sl. No.	Cereal	Average monthly per capita consumption																	
		Quantity (Kg)									Value (Rs.)								
		51st round	52nd round	53rd round	54th round	55h round	56th round	57th round	58th round	59th round	51st round	52nd round	53rd round	54th round	55th round	56th round	57th round	58th round	59th round
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
RURAL																			
1	Rice	7.1	7.0	6.7	6.8	6.8	6.7	6.8	6.5	6.8	48.2	51.7	52.2	55.4	66.2	62.6	61.1	59.7	61.5
2	Wheat	4.3	4.2	4.5	4.3	4.6	4.6	4.1	4.3	4.2	19.3	20.3	26.6	25.1	32.4	30.1	27.6	29.8	31.2
3	Jowar	0.7	0.7	0.7	0.6	0.5	0.4	0.4	0.4	0.4	3.1	3.5	3.4	3.2	3.6	2.3	2.6	2.8	2.8
4	Bajra	0.4	0.5	0.4	0.4	0.4	0.3	0.4	0.4	0.4	1.8	2.1	2.2	1.7	2.6	2.0	1.8	2.2	2.2
5	Maize	0.3	0.3	0.3	0.2	0.3	0.2	0.3	0.3	0.3	1.2	1.4	1.2	1.0	1.9	1.3	1.5	1.5	1.6
Total cereal		13.2	12.9	12.8	12.5	12.7	12.4	12.2	12.1	12.3	75.1	80.2	86.5	87.2	107.8	99.1	95.5	96.7	100.2
URBAN																			
6	Rice	5.1	5.3	5.2	5.3	5.2	5.0	4.7	4.7	4.8	42.1	47.9	49.5	52.2	61.1	58.5	55.4	56.6	57.5
7	Wheat	4.9	4.7	4.6	4.7	4.8	4.6	4.5	4.6	4.5	27.4	27.7	33.4	34.1	41.2	38.9	38.5	40.5	41.0
8	Jowar	0.4	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.2	2.3	2.0	1.6	2.0	1.9	1.9	2.3	2.1	1.8
9	Bajra	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.8	0.5	0.7	0.4	0.7	0.7	0.8	0.9	0.8
10	Maize	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.3	0.1	0.3
Total cereal		10.7	10.6	10.3	10.4	10.4	10.1	9.8	9.8	9.9	73.1	78.6	85.8	89.1	105.6	100.7	97.8	100.6	102.0

Source : NSSO, Ministry of Statistics and Programme Implementation

Survey Round

51st Round : July 1994 - June 1995

52nd Round : July 1995 - June 1996

53rd Round : January 1997 - December 1997

54th Round : January - June 1998

55th Round : July1999 - June 2000

56th Round : July2000-June2001

57th Round : July2001-June2002

58th Round : July2002-Dec2002

59th Round : Jan 2003 - Dec 2003

Chart 28 Comparative Yield of Important Crops during 2005 (Kg./Ha.)

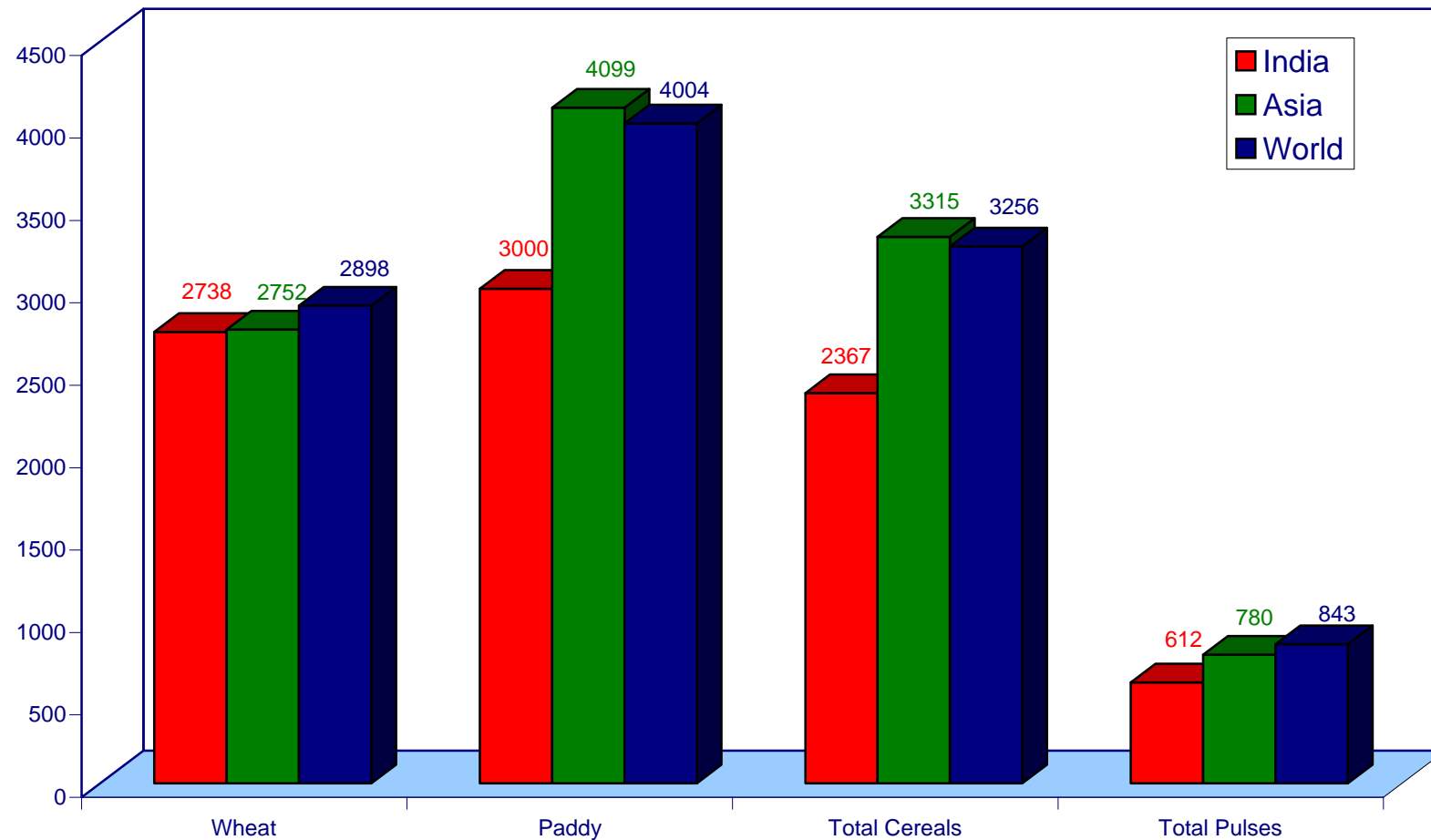


TABLE : 3.21 Countrywise Area Harvested, Yield and Production of Total Cereals in 2005

S.No.	Name of the country	Area Harvested (Ha.)	Yield (Kg/Ha.)	Production (MT)
1	2	3	4	5
AFRICA				
1	ALGERIA	2725700	1466	3996000
2	ANGOLA	1457756	597	870789
3	BENIN	967615	1145	1109465
4	BOTSWANA	187550	241	45250
5	BURKINA FASO	3084961	941	2901973
6	BURUNDI	210700	1329	280095
7	CAMEROON	881300	1727	1522400
8	CAPE VERDE	25963	156	4042
9	CENTRAL AFRICAN REP.	184500	1042	192180
10	CHAD	1807113	671	1212904
11	COMOROS	15700	1338	21000
12	CONGO REPUBLIC	10800	806	8700
13	COTE DIVOIRE	1747000	1262	2205000
14	DJIBOUTI	6	1500	9
15	EGYPT	2964741	7516	22283961
16	ERITREA	374144	405	151672
17	ETHIOPIA	7510350	1244	9339500
18	GABON	19500	1641	32000
19	GAMBIA	189403	1123	212702
20	GHANA	1332716	1458	1942546
21	GUINEA	778000	1468	1142000
22	GUINEA BISSAU	140500	1220	171375
23	KENYA	2116400	1322	2798500
24	LESOTHO	264540	936	247550
25	LIBERIA	120000	917	110000
26	LIBYA	340700	627	213465
27	MADAGASCAR	1424440	2380	3390646
28	MALAWI	1695200	1097	1860200
29	MALI	3391300	839	2845005
30	MAURITANIA	52800	1448	76469
31	MAURITIUS	55	3455	190
32	MOROCCO	5465700	814	4448430
33	MOZAMBIQUE	2100900	959	2015100
34	NAMIBIA	243900	447	109000
35	NIGER	6732900	394	2654100
36	NIGERIA	21563000	1057	22783000
37	REUNION	2540	6724	17080
38	RWANDA	359445	1016	365042

Contd..

TABLE : 3.21 Countrywise Area Harvested, Yield and Production
of Total Cereals in 2005

S.No.	Name of the country	Area Harvested (Ha.)	Yield (Kg/Ha.)	Production (MT)
1	2	3	4	5
39	SAO TOME & PRINCIPE	1100	2455	2700
40	SENEGAL	1081184	975	1053583
41	SIERRA LEONE	253000	1223	309400
42	SOUTH AFRICA	4416230	3330	14707186
43	SUDAN	9109800	398	3625748
44	SWAZILAND	61250	1160	71070
45	TANZANIA	3410000	1472	5019500
46	TOGO	744000	1058	787100
47	TUNISIA	1264000	1450	1933000
48	UGANDA	1549000	1695	2625000
49	WESTN SAHARA	2600	769	2000
50	CONGO, DEM REPUBLIC	2051638	767	1572930
51	ZAMBIA	855400	1595	1364200
52	ZIMBABWE	1655645	717	1187300
TOTAL		99604785	1286	128085057
N.C.AMERICA				
53	ANTIGUA & BARABUBA	38	1579	60
54	BAHAMAS	165	2152	355
55	BARBADOS	25	10400	260
56	BELIZE	19559	2524	49364
57	CANADA	16615400	3031	50362600
58	COSTA RICA	61618	3803	234342
59	CUBA	336900	3117	1050195
60	DOMINICA	135	1333	180
61	DOMINICAN REPUBLIC	146900	4136	607500
62	EL-SALVADOR	330905	2485	822195
63	GRENDA	300	1000	300
64	Guadeloupe	0	0	0
65	GUATEMALA	665990	1760	1171788
66	HAITI	461000	796	367000
67	HONDURAS	416429	1488	619724
68	JAMAICA	875	1160	1015
69	MEXICO	11020538	2866	3125084
70	MONTSERRAT	16	1875	30
71	NICARAGUA	524466	1789	938407
72	PANAMA	211200	1960	414000
73	PUERTO RICO	260	1731	450
74	Saint Lucia	0	0	0
75	ST VINCENT	200	3250	650
76	TRINIDAD & TOBAGO	2220	2725	6050
77	USA	56404000	6454	364019526
TOTAL		87219139	5181	451916875

Contd..

TABLE : 3.21 Countrywise Area Harvested, Yield and Production of Total Cereals in 2005

S.No.	Name of the country	Area Harvested (Ha.)	Yield (Kg/Ha.)	Production (MT)
1	2	3	4	5
SOUTH AMERICA				
78	ARGENTINA	10207000	4017	40998000
79	BOLIVIA	750070	1787	1340700
80	BRAZIL	19087142	2919	5572261
81	CHILE	677205	5813	3936457
82	COLOMBIA	1193870	3614	4314425
83	ECUADOR	831568	2624	2182048
84	FRENCH GUIANA	6040	3896	23530
85	GUYANA	133200	3795	505500
86	PARAGUAY	766670	2092	1604040
87	PERU	1160460	3540	4108315
88	SURINAME	51350	3799	195070
89	URUGUAY	612495	4213	2580560
90	VENEZUELA	1060450	3362	3265150
TOTAL		36537520	3314	121076056
ASIA				
91	ARMENIA	192200	2467	474200
92	AZERBAIJAN	800938	2754	2191241
93	BANGLA DESH	11627833	3551	41291000
94	BHUTAN	78870	1615	127350
95	BRUNEI DARSM	500	1240	620
96	CAMBODIA	2230000	6999	4458000
97	CHINA	82963870	5105	423531448
98	CYPRUS	49400	2175	107450
99	TIMOR-LESTE	70400	1926	135608
100	GAZA STRIP	0	0	0
101	GEORGIA	316700	2315	733200
102	INDIA	9855000	2367	233960000
103	INDONESIA	15305135	4312	65998299
104	IRAN	8755000	2560	22410000
105	ISRAEL	87300	3624	316400
106	JAPAN	1999360	6028	12051450
107	JORDAN	61853	1335	82568
108	KAZAKHSTAN	13782500	1020	14055500
109	KOREA DEMO. REPU.	1302000	3426	4461000
110	KOREA REPUBLIC	1075803	6283	6759006
111	KUWAIT	1730	1965	34000

Contd..

TABLE : 3.21 Countrywise Area Harvested, Yield and Production of Total Cereals in 2005

S.No.	Name of the country	Area Harvested (Ha.)	Yield (Kg/Ha.)	Production (MT)
1	2	3	4	5
112	KYRGYZSTAN	519600	3303	1716430
113	LAOS	810000	3161	2560000
114	LEBANON	60800	2380	144700
115	MALAYSIA	702000	3285	2306000
116	MALDIVES	5	1000	5
117	MONGOLIA	175000	820	143450
118	MYANMAR	6668000	3443	22957000
119	NEPAL	3320966	2282	7577432
120	OMAN	2500	2340	5850
121	PAKISTAN	12570100	2563	32214600
122	PALESTINE OCCUPIED	32260	2243	72350
123	PHILIPPINES	6615000	3023	20000000
124	QATAR	1935	3507	6785
125	SAUDI ARABIA	620852	4565	2834199
126	SRI LANKA	922650	3438	3172220
127	SYRIA	3286831	1710	5620317
128	TAJIKISTAN	387200	2357	912700
129	THAILAND	11566300	2723	31490300
130	TURKEY	14069500	2457	34569700
131	TURKMENISTAN	940000	3302	3104000
132	UNITED ARAB EMIRATES	35	3429	120
133	UZBEKISTAN	1799900	3466	6239000
134	VIETNAM	8334500	4780	39841000
135	WEST BANK	0	0	0
136	YEMEN	691448	809	559210
TOTAL		319313274	3315	1058579510
EUROPE				
137	ALBANIA	135000	3822	515900
138	AUSTRIA	772243	5788	4469571
139	BELGIUM-LUXEMBOURG	0	0	0
140	BELARUS	1837000	3193	5865000
141	BELGIUM	322435	8414	2713082
142	BULGARIA	1830487	3030	5547000
143	Bosnia and Herzegovina	381000	3232	1231500
144	CROATIA	705545	4504	3177855
145	CZECH REP	1595329	5064	8079008
146	DENMARK	1503000	6130	9212703
147	ESTONIA	277300	2569	712482
148	FINLAND	1185400	3463	4105000
149	FRANCE	9171000	6947	63706000
150	GERMANY	6879926	6658	45803100

Contd..

TABLE : 3.21 Countrywise Area Harvested, Yield and Production of Total Cereals in 2005

S.No.	Name of the country	Area Harvested (Ha.)	Yield (Kg/Ha.)	Production (MT)
1	2	3	4	5
151	GREECE	1272600	3617	4603200
152	HUNGARY	2932750	5507	16149350
153	IRELAND	270800	6855	1856400
154	ITALY	3944153	5426	21401177
155	LATVIA	484800	2070	1003500
156	LITHUANIA	936900	3111	2914832
157	Luxembourg	28580	5608	160264
158	MACEDONIA	200627	3133	628486
159	MALTA	2750	4218	11600
160	MOLDOVA REPUBLIC	821400	2952	2425100
161	NETHERLANDS	227300	8154	1853300
162	NORWAY	325700	4052	1319700
163	POLAND	8286696	3171	26274422
164	PORTUGAL	481000	2474	1190000
165	ROMANIA	41176000	1852	76262500
166	RUSSIAN FEDERATION	5857000	3177	18605000
167	SLOVAKIA	798544	4540	3625400
168	SLOVENIA	95819	5908	566166
169	SPAIN	6554300	2104	13791520
170	SWEDEN	1017580	4973	5059900
171	SWITZERLAND	165000	6197	1022516
172	UK	2925000	7229	21146000
173	UKRAINE	14161000	2627	37198000
174	Serbia and Montenegro	2107550	4535	9557250
TOTAL		121669514	3483	423763734
		OCEANIA		
175	AUSTRALIA	17223500	2032	35005500
176	FIJI-ISLANDS	7020	2326	16330
177	GUAM	15	2000	30
178	NEW CALEDONIA	1076	3634	3910
179	NEW ZEALAND	116600	7665	893700
180	PACIFIC IS	0	0	0
181	PAPUA NEW GUINEA	3000	353	10600
182	SOLOMON ISLAND	1400	3929	5500
183	VANUATU	1300	539	700
TOTAL		17353911	2071	35936270
WORLD		681698143	3256	2219357500

SOURCE : Website of FAO: www.fao.org

MT: Metric Tonnes

Ha : Hectare

Kg/Ha : Kilogram Per Hectare

**TABLE : 3.22 Countrywise Area Harvested, Yield and Production
of Wheat 2005**

S.No.	Name of the Country	Area Harvested (Ha.)	Yield (Kg/Ha.)	Production (MT)
1	2	3	4	5
AFRICA				
1	ALGERIA	1800000	1444	2600000
2	ANGOLA	2400	1667	4000
3	BOTSWANA	350	1571	550
4	BURUNDI	9000	833	7493
5	CAMROON	300	1333	400
6	CHAD	0	0	0
7	EGYPT	1254741	6488	8140961
8	ERITREA	15125	44	672
9	ETHIOPIA	1200000	1375	1650000
10	KENYA	150000	2533	380000
11	LESOTHO	30500	1672	51000
12	LIBYA	165000	758	125000
13	MADAGASCAR	4200	2381	10000
14	MALAWI	2200	773	1700
15	MALI	3000	2981	8942
16	MAURITANIA	400	1063	425
17	MOROCCO	2966000	1026	3043000
18	MOZAMBIQUE	1900	1105	2100
19	NAMIBIA	900	8889	8000
20	NIGER	5800 -	1000	5800
21	NIGERIA	61000	1164	71000
22	RWANDA	24157	908	21942
23	SOUTH AFRICA	800500	2541	2034300
24	SUDAN	170000	2647	450000
25	SWAZILAND	200	1500	300
26	TANZANIA	70000	1071	75000
27	TUNISIA	827000	1645	1360000
28	UGANDA	9000	1667	15000
29	CONGO, DAM REPUBLIC OF	10000	1100	11000
30	ZAMBIA	21000	6429	135000
31	ZIMBABWE	40000	3500	140000
TOTAL		9647273	2110	20354585
N. C. AMERICA				
32	CANADA	9830900	2599	25546900
33	GUATEMALA	4690	2418	11339
34	HONDURAS	2000	500	1000
35	MEXICO	600000	5000	3000000
36	USA	20226410	2823	57105552
TOTAL		30664000	2794	85664791

Contd..

**TABLE : 3.22 Countrywise Area Harvested, Yield and Production
of Wheat 2005**

S.No.	Name of the Country	Area Harvested (Ha.)	Yield (Kg/Ha.)	Production (MT)
1	2	3	4	5
SOUTH AMERICA				
37	ARGENTINA	6069000	2636	16000000
38	BOLIVIA	115470	934	107870
39	BRAZIL	2373730	2191	5200840
40	CHILE	419660	4413	1851940
41	COLOMBIA	17976	2226	40018
42	ECUADOR	22811	630	14366
43	PARAGUAY	300000	2100	630000
44	PERU	133000	1353	180000
45	URUGUAY	177400	3002	532600
46	VENEZUELA	450	333	150
TOTAL		9629497	2550	24557784
ASIA				
47	ARMENIA	125000	3000	375000
48	AZERBAIJAN	600000	2750	1650000
49	BANGLA DESH	600000	2000	1200000
50	BHUTAN	4100	1171	4800
51	CHINA	22800100	4218	96160250
52	CYPRUS	6000	2167	13000
53	GAZA STRIP	0	0	0
54	GEORGIA	95000	2368	225000
55	INDIA	26300000	2738	72000000
56	IRAN	6200000	2339	14500000
57	ISRAEL	75000	2533	190000
58	JAPAN	215000	3954	850000
59	JORDAN	24418	1358	33154
60	KAZAKHSTAN	11500000	983	11300000
61	KOREA D. REPUBLIC	70000	2500	175000
62	KOREA REPUBLIC	2000	3500	7000
63	KUWAIT	290	2069	600
64	KYRGYZSTAN	388000	3093	1200000
65	LEBANON	46000	2609	120000
66	MONGOLIA	170000	824	140000
67	MYANMAR	120000	1125	135000
68	NEPAL	675807	2134	1442442
69	OMAN	450	3222	1450
70	PAKISTAN	8341200	2589	21591400
71	PALESTINE OCCUPIED TR	22000	2273	50000
72	QATAR	15	2333	35
73	SAUDI ARABIA	462000	5195	2400000
74	SYRIA	1903830	2452	4668750

Contd..

**TABLE : 3.22 Countrywise Area Harvested, Yield and Production
of Wheat 2005**

S.No.	Name of the Country	Area Harvested (Ha.)	Yield (Kg/Ha.)	Production (MT)
1	2	3	4	5
75	TAJIKISTAN	320000	2438	780000
76	THAILAND	1300	615	800
77	TURKEY	9300000	2258	21000000
78	TURKMENISTAN	800000	3625	2900000
79	UNITED A. EMIRATES	35	3429	120
78	UZBEKISTAN	1600000	3650	5840000
79	WEST BANK	0	0	0
80	YEMEN	82921	1294	107322
TOTAL		96600466	2752	265878123
EUROPE				
81	ALBANIA	70000	3714	260000
82	AUSTRIA	288960	5029	1453072
83	BELGIUM-LUXEMBURG	0	0	0
84	BELARUS	220000	4091	900000
85	BELGIUM-	213748	8273	1768410
86	BULGARIA	1134354	3235	3670000
87	BOSINIA AND HERZEGOVIN/	110000	2273	250000
88	CROATIA	215000	3954	850000
89	CZECH REP	820440	5529	4536040
90	DENMARK	674000	7160	4826013
91	ESTONIA	86900	2800	243320
92	FINLAND	214900	3704	796000
93	FRANCE	5288000	6982	36922000
94	GERMANY	3187800	7396	23578000
95	GREECE	850000	2118	1800000
96	HUNGARY	1130000	4495	5079000
97	IRELAND	89200	8105	723000
98	ITALY	2127866	3539	7530133
99	LATVIA	189000	2534	479000
100	LITHUANIA	368000	4010	1475800
101	LUXEMBOURG	12022	5861	70460
102	MACEDONIA	107328	3074	329871
103	MALTA	2200	4273	9400
104	MOLDOVA REPUBLIC	270000	3889	1050000
105	NETHERLANDS	143700	8720	1253000
106	NORWAY	83000	4518	375000
107	POLAND	2233957	3830	8556248
108	PORTUGAL	195000	1410	275000
109	RUSSIAN FEDERATION	23280000	1955	45500000
110	ROMANIA	2462000	2854	7027000

Contd..

TABLE : 3.22 Countrywise Area Harvested, Yield and Production
of Wheat 2005

S.No.	Name of the Country	Area Harvested (Ha.)	Yield (Kg/Ha.)	Production (MT)
1	2	3	4	5
111	SLOVAKIA	375801	4524	1700000
112	SLOVENIA	30086	4696	141293
113	SPAIN	2242800	1689	3788200
114	SWEDEN	355550	6329	2250100
118	SWITZERLAND	91170	6054	551932
119	UK	1870000	7995	14950000
120	UKRAINE	6500000	2769	18000000
121	SERBIA AND MONTENEGRO	700000	3857	2700000
TOTAL		58232782	3532	205667292
OCEANIA				
122	AUSTRALIA	11359000	2119	24067000
123	NEWCALEDONIA	6	1667	10
124	NEWZEALAND	39000	7103	277000
TOTAL		11398006	2136	24344010
GRAND TOTAL : WORLD		216172024	2898	626466585

Source : Website of FAO: www.fao.org

MT : Metric Tonnes,

Ha : Hectare,

Kg/Ha: Kilogram per Hectare

TABLE : 3.23 Countrywise Area Harvested, Yield and Production of Rice, Paddy in 2005

S. No.	Name of the Country	Area Harvested (Ha.)	Yield (Kg/Ha.)	Production (MT)
1	2	3	4	5
A F R I C A				
1	ALGERIA	200	1500	300
2	ANGOLA	12397	698	8650
3	BENIN	24754	2614	64699
4	BURKINA FASO	49513	1505	74501
5	BURUNDI	19500	3309	64532
6	CAMEROON	20000	3100	62000
7	CENTRAL A. REPUBLIC	14500	2048	29700
8	CHAD	93848	971	91083
9	COMOROS	14000	1214	17000
10	CONGO DEM. REPUBLIC	2000	750	1500
11	COTE DIVOIRE	500000	2300	1150000
12	EGYPT	650000	9539	6200000
13	ETHIOPIA	8350	1856	15500
14	GABON	500	2000	1000
15	GAMBIA	16000	1375	22000
16	GHANA	119392	2025	241807
17	GUINEA	525000	1714	900000
18	GUINEA_ BISSAU	65000	1372	89192
19	KENYA	13000	3846	50000
20	LIBERIA	120000	917	110000
21	MADAGASCAR	1222700	2478	3030000
22	MALAWI	42500	1177	50000
23	MALI	451000	1592	718086
24	MAURITANIA	12000	4597	55166
25	MAURITIUS	0	0	0
26	MOROCCO	2300	7348	16900
27	MOZAMBIQUE	179000	1123	201000
28	NIGER	14000	2807	39300
29	NIGERIA	3704000	956	3542000
30	REUNION	40	2000	80
31	RWANDA	24156	576	13922
32	SENEGAL	81486	2476	201744
33	SIERRA LEONE	210000	1262	265000
34	SOUTH AFRICA	1400	2286	3200
35	SUDAN	4800	3281	15748
36	SWAZILAND	50	3400	170
37	TANZANIA	355000	1916	680000
38	TOGO	35000	1946	68100

Contd..

TABLE : 3.23 Countrywise Area Harvested, Yield and Production of Rice, Paddy in 2005

S. No.	Name of the Country	Area Harvested (Ha.)	Yield (Kg/Ha.)	Production (MT)
1	2	3	4	5
39	UGANDA	93000	1505	140000
40	Congo, Dem Republic of	417854	755	315480
41	ZAMBIA	10000	1200	12000
42	ZIMBABWE	250	2400	600
TOTAL		9130990	2033	18565960
N.C. AMERICA				
43	BELIZE	3136	3406	10680
44	COSTA RICA	53118	4182	222142
45	CUBA	186000	3495	650000
46	DOMINICAN REPUBLIC	117000	4838	566000
47	EL-SALVADOR	3992	6643	26519
48	GUATEMALA	14500	2409	34926
49	HAITI	53000	1925	102000
50	HONDURAS	5633	2432	13700
51	JAMAICA	15	1000	15
52	MEXICO	46000	4164	191540
53	NICARAGUA	84716	3170	268531
54	PANAMA	140000	2357	330000
55	PUERTO RICO	0	0	0
56	St VINCENT	0	0	0
57	TRINIDAD & TOBAGO	1020	2941	3000
58	USA	1352880	7401	10012190
TOTAL		2061010	6032	12431243
SOUTH AMERICA				
59	ARGENTINA	162000	6340	1027000
60	BOLIVIA	140460	2168	304530
61	BRAZIL	3936150	3339	13140900
62	CHILE	25030	4668	116832
63	COLOMBIA	494315	5265	2602300
64	ECUADOR	333357	4126	1375502
65	FRENCH GUIANA	6000	3917	23500
66	GUYANA	130000	3858	501500
67	PARAGUAY	33500	3045	102000
68	PERU	350000	6714	2350000
69	SURINAME	51315	3800	195000
70	URUGUAY	186465	6771	1262600
71	VENEZUELA	190000	5000	950000
TOTAL		6038592	3966	23951664

Contd..

TABLE : 3.23 Countrywise Area Harvested, Yield and Production of Rice, Paddy in 2005

S. No.	Name of the Country	Area Harvested (Ha.)	Yield (Kg/Ha.)	Production (MT)
1	2	3	4	5
ASIA				
72	AZERBAIJAN	2313	5267	12183
73	BANGLA DESH	11000000	3641	40054000
74	BHUTAN	20000	2250	45000
75	BRUNEI DARSM	500	1240	620
76	CAMBODIA	2150000	1954	4200000
77	CHINA	29300000	6289	184254000
78	TIMOR-LESTE	20000	3272	65433
79	INDIA	43000000	3000	129000000
80	INDONESIA	11800901	4575	53984592
81	IRAN	640000	5469	3500000
82	JAPAN	1680000	6541	10989000
83	KAZAKHSTAN	75000	4133	310000
84	KOREA D. REPUBLIC	590000	4237	2500000
85	KOREA REPUBLIC	980000	6549	6418000
86	KYRGYZSTAN	6500	3077	20000
87	LAOS	740000	3176	2350000
88	MALAYSIA	677000	3295	2231000
89	MYANMAR	6000000	3667	22000000
90	NEPAL	1510000	2715	4100000
91	PAKISTAN	2500000	2940	7351000
92	PHILIPPINES	4115000	3597	14800000
92	SOUDI ARABIA	0	0	0
93	SRI LANKA	889400	3515	3126000
94	SYRIA	0	0	0
95	TAJIKISTAN	10000	3200	32000
96	THAILAND	10200000	2647	27000000
97	TURKEY	80000	6563	525000
98	TURKMENISTAN	60000	2000	120000
99	UZBEKISTAN	36500	2740	100000
100	VIETNAM	7339500	4951	36341000
TOTAL		135657614	4099	556018828
EUROPE				
101	ALBANIA	0	0	0
102	BULGARIA	4683	3203	15000
103	FRANCE	18000	5722	103000
104	GREECE	24000	7250	174000
105	HUNGARY	3000	3333	10000
106	ITALY	222000	6171	1370000

Contd..

TABLE : 3.23 Countrywise Area Harvested, Yield and Production of Rice, Paddy in 2005

S. No.	Name of the Country	Area Harvested (Ha.)	Yield (Kg/Ha.)	Production (MT)
1	2	3	4	5
107	MACEDONIA	2566	5066	13000
108	PORTUGAL	25000	4800	120000
109	ROMANIA	3000	1667	5000
110	RUSSIAN FEDERATION	125000	3920	490000
111	SPAIN	117000	7230	845900
112	UKRAIN	21000	4286	90000
TOTAL		565249	5725	3235900
OCEANIA				
113	AUSTRALIA	50000	8600	430000
114	FIJI ISLAND	6500	2308	15000
115	MICRONESIA	80	1125	90
116	PACIFIC IS	0	0	0
117	PAPUA NEW GUINEA	400	2000	800
118	SOLOMON ISLAND	1400	3929	5500
TOTAL		58300	7741	451300
WORLD		153511755	4004	614654895

SOURCE : Website of FAO : www.fao.org

MT : Metric Tonnes,

Ha : Hectare,

Kg/Ha. : Kilogram per Hectare

**TABLE : 3.24 Countrywise Area Harvested, Yield and
Production of Total Pulses in 2005**

S.No.	NAME OF COUNTRY	AREA HARVESTED (Ha.)	YIELD (Kg/Ha.)	PRODUCTION (MT)
1	2	3	4	5
AFRICA				
1	ALGERIA	78677	668	52580
2	ANGOLA	351560	308	108116
3	BENIN	148165	803	119376
4	BOTSWANA	33500	522	17500
5	BURKINA FASO	331664	569	188682
6	BURUNDI	290000	881	255518
7	CAMEROON	250600	1064	266600
8	CAPE VERDE	40000	125	5000
9	CENTRAL AFRICAN REP	30000	900	27000
10	CHAD	206000	587	121000
11	COMOROS	14440	992	14320
12	CONGO REPUBLIC	12000	775	9300
13	COTE DIVOIRE	13000	692	9000
14	DJIBOUTI	N.A.	N.A.	1500
15	EGYPT	162950	2971	484040
16	ERITREA	77817	453	35213
17	ETHIOPIA	1197000	877	1050275
18	GABON	300	667	200
19	GAMBIA	13000	246	3200
20	GHANA	180000	83	15000
21	GUINEA	70000	857	60000
22	GUNEA BISSAU	3700	622	2300
23	KENYA	1202300	385	463250
24	LESOTHO	16390	696	11400
25	LIBERIA	5500	636	3500
26	LIBYA	13790	1407	19400
27	MADAGASCAR	100760	1008	101610
28	MALAWI	513900	496	254800
29	MALI	340500	333	113300
30	MAURITANIA	102500	434	44500
31	MOROCCO	406500	644	261850
32	MOZAMBIQUE	430000	477	205000
33	NAMIBIA	8000	1125	9000
34	NIGER	3554060	161	572270
35	NIGERIA	5456000	434	2367000
36	REUNION	1450	759	1100
37	REWANDA	347815	628	218502
38	SENGAL	188781	65	12284
39	SIERRA LEONE	85400	687	58700

Contd..

**TABLE : 3.24 Countrywise Area Harvested, Yield and
Production of Total Pulses in 2005**

S.No.	NAME OF COUNTRY	AREA HARVESTED (Ha.)	YIELD (Kg/Ha.)	PRODUCTION (MT)
1	2	3	4	5
40	SOUTH AFRICA	76330	1242	94826
41	SUDAN	168600	1613	272000
42	SWAZILAND	6600	455	3000
43	TANZANIA	798000	607	484000
44	TOGO	168500	297	50000
45	TUNISIA	144095	650	93624
46	UGANDA	991300	718	711300
47	CONGO, DEM REPUBLIC	327157	568	185910
48	ZAMBIA	32000	531	17000
49	ZIMBABWE	71700	771	55250
TOTAL		19127751	499	9548096
M.C. AMERICA				
50	BAHAMAS	180	694	125
51	BARBADOS	750	1707	1280
52	BELIZE	5181	1293	6697
53	CANADA	2405400	1976	4753200
54	COSTA RICA	20267	518	10500
55	CUBA	115000	1174	135000
56	DOMINICA	190	421	80
57	DOMINICAN REPUBLIC	60890	835	50855
58	EL-SALVADOR	87100	968	84300
59	GRENADA	615	968	595
60	GUADELOUPE	30	2667	80
61	GUATEMALA	158350	834	132105
62	HAITI	99000	640	63400
63	HONDURAS	117806	734	86406
64	JAMAICA	4730	1068	5050
65	MEXICO	2122596	825	1751506
66	NICARAGUA	252545	814	205664
67	PANAMA	24100	382	9200
68	PUERTO RICO	217	2535	550
69	ST KITTIS NEV	210	1000	210
70	ST LUCIA	20	2000	40
71	ST VINCENT	350	1000	350
72	TRINIDAD & TOBAGO	1730	2121	3670
73	USA	1110270	1889	2096880
TOTAL		6587527	1427	9398593
SOUTH AMERICA				
74	ARGENTINA	171587	1256	215480
75	BOLIVIA	37550	1087	40810
76	BRAZIL	3848640	802	3087010

Contd..

**TABLE : 3.24 Countrywise Area Harvested, Yield and
Production of Total Pulses in 2005**

S.No.	NAME OF COUNTRY	AREA HARVESTED (Ha.)	YIELD (Kg/Ha.)	PRODUCTION (MT)
1	2	3	4	5
77	CHILE	54360	2076	112875
78	COLOMBIA	115573	1145	132347
79	ECUADOR	119236	500	59655
80	GUYANA	1540	844	1300
81	PARAGUAY	90080	887	79880
82	PERU	188450	1066	200850
83	SURINAME	220	727	160
84	URUGUAY	6960	971	6760
85	VENEZUELA	48700	827	40290
TOTAL		4682896	849	3977417
ASIA				
86	ARMENIA	2360	2373	5600
87	AZERBAIJAN	9169	1862	17073
88	BAHRAIN	11	1091	12
89	BANGLADESH	421629	792	334000
90	BHUTAN	2000	800	1600
91	CAMBODIA	40000	1250	50000
92	CHINA	3130600	1754	5490500
93	CYPRUS	796	1113	886
94	Timer-Leste	6000	750	4500
95	Gaza Strip	0	0	0
96	GERORGIA	10600	1425	15100
97	INDIA	23850000	612	14600000
98	INDONESIA	331000	940	311000
99	IRAN	1185000	587	695000
100	ISRAEL	8510	1754	14930
101	JAPAN	54600	2178	118900
102	JORDAN	3945	1073	4234
103	KAZAKHSTHAN	21000	2024	42500
104	KOREA D. REPUBLIC	360000	861	310000
105	KOREA REPUBLIC	16000	1125	18000
106	Kyrgyzstan	20000	2000	40000
107	LAOS	16900	976	16500
108	LEBANON	9658	1465	14150
109	MALDIVES	90	778	70
110	MONGOLIA	1300	846	1100
111	MYANMAR	2573615	951	2447158
112	NEPAL	320665	829	265655
113	PAKISTAN	1643400	756	1241600

Contd..

**TABLE : 3.24 Countrywise Area Harvested, Yield and
Production of Total Pulses in 2005**

S.No.	NAME OF COUNTRY	AREA HARVESTED (Ha.)	YIELD (Kg/Ha.)	PRODUCTION (MT)
1	2	3	4	5
114	PALESTINE, OCCUPIED TERRITORIES	6490	995	6460
115	PHILIPPINES	73500	750	55090
116	SAUDI ARABIA	4500	1822	8200
117	SRI LANKA	25900	911	23600
118	SYRIA	290989	961	279526
119	TAJIKISTAN	9500	2032	19300
120	THAILAND	349000	860	300000
121	TURKEY	1524800	1022	1558300
122	TURKMENSTAN	8000	1500	12000
123	UZBEKISTAN	13300	797	10600
124	VIETNAM	338000	754	255000
125	WEST BANK	0	0	0
126	YEMEN	49850	1220	60800
TOTAL		36965227	780	28816094
EUROPE				
127	ALBANIA	27730	896	24850
128	AUSTRIA	42220	2641	111500
129	BELGIUM-LUXEMBOURG	0	0	0
130	BELARUS	170000	2059	350000
131	BELGIUM	1405	3498	4915
132	BULGARIA	17000	1229	20900
133	BOSNIA AND HERZEGOVINA	14170	1748	24764
134	CROATIA	11490	1735	19930
135	CZECH REPUBLIC	26283	2837	74551
136	DENMARK	20000	3330	66600
137	ESTONIA	3800	947	3600
138	FINLAND	3800	2368	9000
139	FRANCE	439200	3993	1753500
140	GERMANY	147000	3592	528000
141	GREECE	24200	1696	41050
142	HUNGARY	21523	1015	21853
143	IRELAND	2700	5185	14000
144	ITALY	84190	1941	163450
145	LATVIA	3600	1389	5000
146	LITHUANIA	23100	2489	57500
147	Luxembourg	435	3103	1350
148	MACEDONIA	11825	2344	27714
149	MALTA	725	2621	1900
150	MOLDOVA REPUBLIC	56400	913	51500
151	NETHERLANDS	5400	3426	18500

Contd..

**TABLE : 3.24 Countrywise Area Harvested, Yield and
Production of Total Pulses in 2005**

S.No.	NAME OF COUNTRY	AREA HARVESTED (Ha.)	YIELD (Kg/Ha.)	PRODUCTION (MT)
1	2	3	4	5
152	NORWAY	0	0	0
153	POLAND	121594	2299	279598
154	PORTUGAL	36510	526	19210
155	ROMANIA	146000	604	88200
156	RUSSIAN FEDERATION	1023500	1894	1938000
157	SLOVAKIA	19440	2802	54469
158	SLOVENIA	660	1970	1300
159	SPAIN	570600	573	326900
160	SWEDEN	25027	2672	66880
161	SWITZERLAND	4900	3674	18000
162	UK	246000	3496	860000
163	UKRAINE	481500	1563	752800
164	SERBIA AND MONTENEGRO	61500	2293	141000
TOTAL				
		3895427	2039	7942284
OCEANIA				
165	AUSTRALIA	1924000	1043	2006000
166	FIJI ISLAND	1000	1200	1200
167	NEW CALEDONIA	30	667	20
168	NEW ZEALAND	11000	3018	33200
169	PAPUA NEW GUINEA	5500	500	2750
170	SOLOMON ISLAND	3200	1250	4000
TOTAL				
		1944730	1053	2047170
WORLD				
		73203558	843	61729654

SOURCE : Website of FAO : www.fao.org

MT : Metric Tonnes

Ha : Hectare

Kg/Ha. : Kilogram per Hectare

TABLE : 3.25 Countrywise Area Harvested, Yield and Production
of Sugarcane in 2005

S.No.	NAME OF THE COUNTRY	AREA HARVESTED (Ha.)	YIELD (Kg/Ha.)	PRODUCTION (MT)
1	2	3	4	5
A F R I C A				
1	ANGOLA	9500	37895	360000
2	BENIN	1800	38889	70000
3	BURKINA FASO	4500	100000	450000
4	BURUNDI	2500	72000	180000
5	CAMEROON	145000	10000	1450000
6	CAPE VERDE	1000	14000	14000
7	CENTRAL A. REPUBLIC	12500	7200	90000
8	CHAD	3650	100274	366000
10	CONGO REPUBLIC	12300	37398	460000
11	COTE DIVOIRE	16000	68750	1100000
12	DJIBOUTI	N.A.	N.A.	52
13	EGYPT	135000	121000	16335000
14	ETHIOPIA	23000	106522	2450000
15	GABON	4000	58750	235000
16	GHANA	5500	25455	140000
17	GUINEA	5200	53846	280000
18	GUINEA BISSAU	200	27500	5500
19	KENYA	54191	86011	4660995
20	LIBERIA	25000	10200	255000
21	MADAGASCAR	68690	35809	2459705
22	MALAWI	20000	105000	2100000
23	MALI	5000	72000	360000
24	MAURITIUS	72000	72222	5200000
25	MOROCCO	14500	68414	992000
26	MOZAMBIQUE	30000	13333	400000
27	NIGER	3800	57895	220000
28	NIGERIA	43000	18047	776000
29	REUNION	29000	68966	2000000
30	RWANDA	2300	30435	70000
31	SENEGAL	8000	106250	850000
32	SIERRA LEONE	1000	70000	70000
32	SOUTH AFRICA	312000	69632	21725100
33	SUDAN	65000	84615	5500000
34	SWAZILAND	48000	93750	4500000
35	TANZANIA	17000	117647	2000000
36	UGANDA	125000	12800	1600000

Contd..

TABLE : 3.25 Countrywise Area Harvested, Yield and Production
of Sugarcane in 2005

S.No.	NAME OF THE COUNTRY	AREA HARVESTED (Ha.)	YIELD (Kg/Ha.)	PRODUCTION (MT)
1	2	3	4	5
37	CONGO, DEM REPUBLIC	43000	41861	1800000
38	ZAMBIA	17000	105882	1800000
39	ZIMBABWE	43000	76512	3290000
TOTAL		1434331	60526	86814352
N.C.AMERICA				
40	ANTIGUA AND BARBUD	0	0	0
41	BAHAMAS	2250	24667	55500
42	BARBADOS	8000	53750	430000
43	BELIZE	23887	48121	1149475
44	COSTA RICA	49000	80510	3945000
45	CUBA	400000	31250	12500000
46	DOMINICA	220	20000	4400
47	DOMINICAN REPUBLIC	130000	38077	4950000
48	EL-SALVADOR	57112	92457	5280400
49	GRENADA	160	45000	7200
50	GUADELOUPE	11500	69565	800000
51	GUATEMALA	186340	96598	18000000
52	HAITI	18000	60000	1080000
53	HONDURAS	75853	74163	5625450
54	JAMAICA	40000	47500	1900000
55	MARTINIQUE	3000	64333	193000
56	MEXICO	639061	70614	45126500
57	NICARAGUA	45321	89078	4037091
58	PANAMA	37000	45405	1680000
59	PUERTO RICO	0	0	0
60	ST.KITTS NEV	1800	55556	100000
61	SAINT LUCIA	0	0	0
62	ST.VINCENT	800	25000	20000
63	TRINIDAD & TOBAGO	13000	51154	665000
64	USA	387250	66634	25803960
TOTAL		2129554	62620	133352976
SOUTH AMERICA				
65	US Vitgin Island	0	0	0
66	ARGENTINA	305000	63279	19300000
67	BOLIVIA	105000	45714	4800000

Contd..

TABLE : 3.25 Countrywise Area Harvested, Yield and Production
of Sugarcane in 2005

S.No.	NAME OF THE COUNTRY	AREA HARVESTED (Ha.)	YIELD (Kg/Ha.)	PRODUCTION (MT)
1	2	3	4	5
68	BRAZIL	5767180	72847	420120992
69	COLOMBIA	431781	92290	39849240
70	ECUADOR	73823	76624	5656608
71	FRENCH GUIANA	75	71333	5350
72	GUYANA	49000	61225	3000000
73	PARAGUAY	74000	51622	3820020
74	PERU	58000	122414	7100000
75	SURINAME	3000	40000	120000
76	URUGUAY	3300	55000	181500
77	VENEZUELA	130000	67692	8800000
TOTAL		7000159	73249	512753710
ASIA				
78	BANGLA DESH	164000	39634	6500000
79	BHUTAN	410	31220	12800
80	CAMBODIA	7000	19286	135000
81	CHINA	1414000	65156	92130000
82	INDIA	3750000	61952	232320000
83	INDONESIA	350000	72857	25500000
84	IRAN	70000	92857	6500000
85	JAPAN	24000	56250	1350000
86	LAOS	7500	30667	230000
87	LEBANON	0	0	0
88	MALAYSIA	16000	75000	1200000
89	MYANMAR	142000	44859	6370000
90	NEPAL	59082	40217	2376103
91	PAKISTAN	966300	48892	47244100
92	PHILIPPINES	380000	81579	31000000
93	SINGAPORE	0	0	0
94	SRI LANKA	17000	59706	1015000
95	SURIA	0	0	0
96	THAILAND	1066880	46465	49572000
97	VIETNAM	280000	53571	15000000
TOTAL		8722172	59453	518558003

Contd..

TABLE : 3.25 Countrywise Area Harvested, Yield and Production
of Sugarcane in 2005

S.No.	NAME OF THE COUNTRY	AREA HARVESTED (Ha.)	YIELD (Kg/Ha.)	PRODUCTION (MT)
1	2	3	4	5
EUROPE				
98	YEMEN	0	0	0
99	BELGIUM LUXEMBOURG	0	0	0
100	PORTUGAL	50	80000	4000
101	SPAIN	765	75771	57965
TOTAL		815	76031	61965
OCEANIA				
102	AMER SAMOA	11	909	10
103	AUSTRALIA	420000	91062	38246000
104	FIJI ISLAND	63000	47302	2980000
105	FRENCH POLYNESIA	40	75000	3000
106	PAPUA NEW GUINEA	8500	52941	450000
107	SAMOA	1	12000	12
108	WALLIS FUT I	1	20000	20
TOTAL		491553	84791	41679042
WORLD		19778584	65385	1293220050

SOURCE : Website of FAO : www.fao.org

MT : Metric Tonnes,

Ha : Hectare,

Kg/Ha. : Kilogram per Hectare

**TABLE : 3.26 Countrywise Area Harvested, Yield and
Production of Maize in 2005**

Sl. No.	Name of the Country	Area Harvested (Ha.)	Yield (Kg/Ha.)	Production (MT)
1	2	3	4	5
A F R I C A				
1	ALGERIA	300	3333	1000
2	ANGOLA	1090249	661	720275
3	BENIN	714155	1180	842626
4	BOTSWANA	84000	119	100000
5	BURKINA FASO	380124	1267	481474
6	BURUNDI	116000	1062	123199
7	CAMEROON	350000	2429	850000
8	CAPE VERDE	25963	156	4042
9	CENTRAL AFRICAN REPUBLIC	110000	1000	110000
10	CHAD	127118	845	107422
11	COMOROS	1700	2353	4000
12	CONGO REPUBLIC	8800	818	7200
13	COTE DIVOIRE	1000000	910	910000
14	DJIBOUTI	6	1500	9
15	EGIPT	840000	8095	6800000
16	ERITREA	16618	145	2472
17	ETHIOPIA	1400000	1957	2740000
18	GABON	19000	1632	31000
19	GAMBIA	24200	1207	29209
20	GHANA	732955	1579	1157621
21	GUINEA	90000	1000	90000
22	GUINEA BISSAU	15000	2125	31868
23	KENYA	1700000	1294	2200000
24	LESOTHO	180000	833	150000
25	LIBYA	1500	2400	3600
26	MADAGASCAR	195540	1788	349646
27	MALAWI	1550000	1129	1750000
28	MALI	459000	1001	459463
29	MAURITANIA	5000	882	4412
30	MAURITUS	55	3455	190
31	MOROCCO	244900	915	224130
32	MOZAMBIQUE	1300000	1115	1450000
33	NAMIBIA	23000	1435	33000
34	NIZER	9000	778	7000
35	NIGERIA	4466000	1070	4779000
36	REUNION	2500	6800	17000
37	RWANDA	109400	889	97251

Contd..

**TABLE : 3.26 Countrywise Area Harvested, Yield and
Production of Maize in 2005**

Sl. No.	Name of the Country	Area Harvested (Ha.)	Yield (Kg/Ha.)	Production (MT)
1	2	3	4	5
38	SAO TOME & PRINCIPE	1100	2455	2700
39	SENEGAL	147298	2719	400555
40	SIERRA LEONE	10000	1000	10000
41	SOUTH AFRICA	3342940	3589	11996000
42	SUDAN	80000	750	60000
43	SWAZILAND	60000	1167	70000
44	TANZANIA	2000000	1615	3230000
45	TOGO	380000	1276	485000
46	UGANDA	750000	1800	1350000
47	CONGO DEM REPUBLIC	1483004	779	1155260
48	ZAMBIA	750000	1548	1161000
49	ZIMBABWE	1350000	667	900000
TOTAL		27966425	1702	47588624
N.C.AMERICA				
50	ANTIGUA BARB	38	1579	60
51	BAHAMAS	165	2152	355
52	BARBADOS	25	10400	260
53	BELIZE	12773	2391	30538
54	CANADA	1083800	7743	8392000
55	COSTA RICA	8500	1435	12200
56	CUBA	150000	2667	400000
57	DOMINICAN	135	1333	180
58	DOMINICAN REPUBLIC	27000	1333	36000
59	EL-SALVADOR	234586	2763	648045
60	GRENDA	300	1000	300
61	GUATEMALA	603000	1778	1072310
62	HAITI	270000	667	180000
63	HONDURAS	371248	1533	568973
64	JAMAICA	860	1163	1000
65	MEXICO	8000000	2563	20500000
66	MONTSERRAT	16	1875	30
67	NICARAGUA	394645	1467	579114
68	PANAMA	69500	1164	79000
69	PUERTO RICO	260	1731	450
70	ST VINCENT	200	3250	650
71	TRINIDAD & TOBAGO	1200	2542	3050
72	USA	30081820	9316	280228384
TOTAL		41310071	7570	312732899

Contd..

**TABLE : 3.26 Countrywise Area Harvested, Yield and
Production of Maize in 2005**

Sl. No.	Name of the Country	Area Harvested (Ha.)	Yield (Kg/Ha.)	Production (MT)
1	2	3	4	5
SOUTH AMERICA				
73	ARGENTINA	2740000	7117	19500000
74	BOLIVIA	306080	2242	686110
75	BRAZIL	11468600	3040	34859600
76	CHILE	134280	11229	1507766
77	COLOMBIA	605994	2379	1441501
78	ECUADOR	421400	1782	750727
79	FR GUIANA	40	750	30
80	GUYANA	3200	1250	4000
81	PARAGUAY	400000	2075	830000
82	PERU	480000	2792	1340000
83	SURINAME	35	2000	70
84	URUGUAY	64200	3894	250000
85	VENEZUELA	600000	3417	2050000
TOTAL		17223829	3671	63219804
ASIA				
86	ARMENIA	3500	1714	6000
87	AZERBAIJAN	31270	4772	151366
88	BANGLADESH	5000	2000	10000
89	BHUTAN	45000	1556	70000
90	CAMBODIA	80000	3225	258000
91	CHINA	26221500	5001	131145000
92	CONGO LESTE	50400	1392	70175
93	GEORGIA	180000	2511	452000
94	INDIA	7400000	1960	14500000
95	INDONESIA	3504234	3428	12013707
96	IRAN	205000	7317	1500000
97	ISRAEL	5000	16000	80000
98	JAPAN	60	2500	150
99	JORDAN	578	22666	13101
100	KAZAKHSTAN	98000	5306	520000
101	KOREA D. REPUBLIC	500000	3200	1600000
102	KOREA REPUBLIC	15000	4200	63000
103	KUWAIT	40	20000	800
104	KYRGYZSTAN	63000	5079	320000
105	LAOS	70000	3000	210000
106	LEBANON	950	3579	3400
107	MALAYSIA	25000	3000	75000
108	MALDIVES	0	0	0
109	MYANMAR	285000	2281	650000

Contd..

**TABLE : 3.26 Countrywise Area Harvested, Yield and
Production of Maize in 2005**

Sl. No.	Name of the Country	Area Harvested (Ha.)	Yield (Kg/Ha.)	Production (MT)
1	2	3	4	5
110	NEPAL	849892	2019	1716042
111	PAKISTAN	981800	2849	2797000
112	PHILIPPINES	2500000	2080	5200000
113	QATAR	120	12500	1500
113	SAUDI ARABIA	10994	3975	43697
114	SRI LANKA	27000	1482	40000
115	SYRIA	50000	3600	180000
116	TAJIKISTAN	5000	7000	35000
117	THAILAND	1150000	3635	4180000
118	TURKEY	800000	4375	3500000
119	TURKMENISTAN	25000	560	14000
120	UZBEKISTAN	19000	4421	84000
121	VIETNAM	995000	3518	3500000
122	YEMEN	40243	832	33472
TOTAL		46453031	3992	185436410
EUROPE				
123	ALBANIA	42000	5238	220000
124	AUSTRIA	167226	9597	1604818
125	BELARUS	7000	5714	40000
126	BELGIUM	54454	10170	553775
127	BULGARIA	340847	2934	1000000
128	BOSNIA AND HERZEGOVINA	225000	3778	850000
129	CROATIA	410000	5122	2100000
130	CZECH REPUBLIC	79981	7190	575051
131	FRANCE	1633000	8099	13226000
132	GERMANY	443300	8597	3811000
133	GREECE	244000	9426	2300000
134	HUNGARY	1198000	7513	9000000
135	ITALY	1055502	10064	10622000
136	LUXEMBOURG	500	8000	4000
137	MACEDONIA	33761	4058	137000
138	MOLDOVA REPUBLIC	440000	2727	1200000
139	NETHERLANDS	22000	9773	215000
140	POLAND	343018	5590	1917388
141	PORTUGAL	140000	5000	700000
142	ROMANIA	2662000	4124	3650000
143	RUSSIAN FEDERATION	885000	3743	9965000
144	SLOVAKIA	152531	6182	943000
145	SLOVENIA	42268	8036	339657

Contd..

**TABLE : 3.26 Countrywise Area Harvested, Yield and
Production of Maize in 2005**

Sl. No.	Name of the Country	Area Harvested (Ha.)	Yield (Kg/Ha.)	Production (MT)
1	2	3	4	5
146	SPAIN	422100	9360	3950700
147	SWITZERLAND	20100	6280	126228
148	UKRAINE	1700000	4241	7210000
149	SERBIA AND MONTENEGRO	1205000	5228	6300000
TOTAL		13968588	5910	82560617
OCEANIA				
150	AUSTRALIA	75000	4160	312000
151	FIJI ISLAND	510	2549	1300
152	GUAM	15	2000	30
153	MICRONESIA	40	1200	48
154	NEW CALEDONIA	1000	3800	3800
155	NEW ZEALAND	16000	10750	172000
156	PAPUA NEW GUINEA	1300	4615	6000
157	VANUATU	1300	539	700
TOTAL		95125	5212	495830
WORLD		147017069	4707	692034184

SOURCE : Website of FAO : www.fao.org

MT : Metric Tonnes,

Ha : Hectare,

Kg/Ha : Kilogram per Hectare

Section - 4

FINANCIAL PERFORMANCE

This section deals with the financial aspect of water and related sectors in the country. It presents financial expenditure on irrigation development, financial performance of irrigation sector and other water related activities such as urban and rural water supply schemes, soil and water conservation schemes, area development programmes etc.,

Financial Expenditure on Irrigation

There has been a consistent increase in the annual average financial expenditure on irrigation sector over different Plan periods. But the expenditure has not matched with the growth of total Plan expenditure on all sectors as is evident from the share of expenditure on irrigation to the total which declined from 23% during 1st Plan to about 7% in IXth Plan. It is further expected to decline to 6% during Xth Plan.

([Table 4.1](#) and [chart 29](#))

At constant prices (1993 - 94 = 100), the expenditure on irrigation sector went up about four times from Rs. 6839.9 crores in 1st Plan to Rs. 42680.8 crores in the IXth Plan. It may be noted that the share of major & medium schemes has declined from as high as 85% of the total expenditure in the irrigation sector in the 1st Plan to nearly 78% in the IXth Plan. This is apparently due to progressive emphasis on Minor Irrigation and Command Area Development Programmes in the

subsequent years. Institutional assistance has also contributed quite significantly in the development of minor irrigation in the country as is evident from the increasing institutional support to minor irrigation schemes in terms of total financial expenditure over different Plans. However, the total institutional expenditure also decreased in IX th Plan as compared to that in the VIIIth Plan.

([Table 4.2](#) and [chart 30](#))

Of the total expenditure on major & medium irrigation schemes, a large share of about 93% was concentrated in States of Andhra Pradesh, Bihar, Gujarat, Haryana, Karnataka, Madhya Pradesh, Maharashtra, Orissa, Rajasthan, Tamil Nadu and Uttar Pradesh during IXth Plan while the share of these states in the actual expenditure in 2002-03 is about 90%. Of the total expenditure on minor irrigation under State Expenditure in 2002-03, about 73% was incurred by the States of Andhra Pradesh, Bihar, Gujarat, Haryana, Karnataka, Madhya Pradesh, Maharashtra, Orissa, Rajasthan, Tamil Nadu and Uttar Pradesh. Under institutional minor irrigation schemes a large share (97%) of the total expenditure during 2004-05 was contributed by the states of Andhra Pradesh, Bihar, Gujarat, Haryana, Karnataka, Madhya Pradesh, Maharashtra, Punjab, Rajasthan and Uttar Pradesh.

([Tables 4.3](#) to [4.5](#))

Command Area Development Programme

Command Area Development (CAD) programme primarily aims at the speedy utilisation of irrigation

potential created. It is a centrally sponsored scheme started during 1974-75. Central Government offers assistance to the State Governments for implementation of various activities like land leveling, field channel, warabandi etc.. Beginning with the CAD share of 3.6% in Vth Plan of the combined expenditure on major & medium, minor and CAD programmes it remained 3.5% IX Plan. However, in X Plan approved outlay, the CAD share has been fixed for about 4.7% of the combined expenditure.

From a level of central financial assistance to the tune of 31.3% of the total expenditure on various CAD programmes during VIIIth Plan, the same has increased to a level of 36.7% in the IX Plan. But the total expenditure on CAD has decreased from Rs.1750 crores in VIIIth Plan to Rs. 1518 crores in IXth Plan at constant prices. Andhra Pradesh, Haryana, Kerala, Gujarat, Karnataka, Maharashtra, Orissa, Punjab, Rajasthan, Tamil Nadu and Uttar Pradesh are the major States accounting for about 93 % of releases during IXth Plan under Central assistance to CAD programme.

As regards, expenditure under State sector of CAD programmes Haryana, Maharashtra, Punjab, Rajasthan and Uttar Pradesh Constituted about 64% of the total State sector expenditure during IXth Plan.

([Tables 4.6](#) and [4.7](#) and [chart 31](#))

Financial Performance of Water Resources Development in the Country

Details of Capital Outlay during and at the end of year, Gross Receipts, Working Expenses, interest on the Capital Outlay at the end of the year, Revenue Earned (Gross Receipts – Working Expenses plus Interest) for Irrigation and Multi-purpose river valley projects are also presented in the publication. The extent of recovery of Working Expenses through Gross Receipts reflects an irregular trend primarily because of uneven realisation of revenue receipts over time and remissions/deferment of payment of water rates on account of various natural calamities like flood and drought.

From 19.6% in 1980-81, the percentage of recovery of Working Expenses through Gross Receipts including interest on capital outlay has declined to 4.7% in 2001-02. This virtually means that the Gross Receipt collected failed to meet the Working Expenses.

([Table 4.8](#) and [chart 32](#))

While at current prices, both the annual gross receipts and annual working expenses are showing a rise, the trend in the case of former is relatively subdued compared to latter, which explains the growing gap between the two resulting into mounting losses over the years. The annual working expenses have increased considerably 1980-81 to about Rs.8250 crores in 2001-02. At constant prices (1993-94 =100), the working expenses have increased from Rs.894 crores in 1980-81 to Rs. 5114 crores in 2001-02. The annual Gross Receipts on the other hand increased from about Rs.103 crores in 1980-81 to Rs.652 crores in 2001-02 at current prices and exhibited a

fluctuating trend from Rs. 409 crores in 1980-81 to Rs. 404 crores in 2001-02 at constant prices (1993-94 = 100).

([Tables 4.8 & 4.9](#) and [chart 33](#))

The publication also provides details of year-wise and State-wise Working Expenses and Gross Receipts of irrigation and multi-purpose river valley projects for the years 1997-98 to 2001-02. However, data on break-up of Gross Receipts and Working Expenses into various components are not readily available.

([Table 4.10](#))

The range of water rates prevalent in the States reveal that there is wide inter-state variation for both lift and flow irrigation. This is particularly significant in the States like Gujarat, Andhra Pradesh, Karnataka, Jammu & Kashmir, Maharashtra, Uttar Pradesh and West Bengal.

([Table 4.12](#))

Financial performance of Minor Irrigation may be analysed from the data on Financial Aspects of Minor Irrigation Schemes, Soil and Water Conservation Schemes and Area Development Programmes presented in the publication. Although, break-up of Gross Receipts from these schemes is not available but the Working Expenses have been given separately which tend to restrict a more meaningful analysis.

The Working Expenses for Minor Irrigation at Rs. 2098 crores is higher compared to Soil & Water Conservation schemes (Rs.1,072 crores) and Area Development Programmes(Rs.271.6 crores) during

2001-02. Within minor irrigation schemes the expenses are more or less equally incurred by tubewells, investigation of ground water resources and lift irrigation schemes followed by construction and deepening of wells and tanks. Expenses on soil conservation schemes is the highest under soil and water conservation Programmes. Similarly expenses on Ayacut Development is the highest under Area Development Programme

([Tables 4.13](#) and [4.15](#))

The main States where tubewells account for major portion of total expenses on minor irrigation schemes are Bihar, Gujarat and Punjab. The expenses on deepening of Wells and Tanks are taking away major portion of total expenses in the States like Andhra Pradesh, Karnataka and Tamil Nadu. Lift irrigation and other minor irrigation schemes contribute towards major share of total expenses in the States of Assam, Himachal Pradesh, Orissa and West Bengal.

([Table 4.16](#))

As regards the receipts from Minor Irrigation Schemes, Tubewell once again is the major source followed by lift irrigation schemes and Deepening of wells/tanks during 2001-02

([Table 4.19](#))

Financial performance of rural and urban water supply schemes.

The financial performance of Rural and Urban water supply

schemes is fairly similar to the other different categories of schemes in irrigation sector. The capital outlay for Rural Water Supply Schemes has increased from about Rs.93 crores in 1980-81 to Rs. 1,804 crores in 2001-02. While the realisation of Gross Receipts has shown improvement during this period, the over-riding impact of simultaneous increase in Working Expenses leads to steep losses. From a level of Rs.166 crores, the losses have increased to Rs.2,694 crores in the corresponding period.

[\(Table 4.23\)](#)

During 2001-02 about 63% of the total capital outlay for Rural Water Supply Schemes in the country was earmarked for Andhra Pradesh, Rajasthan Tamil Nadu and Gujarat. The other States where the capital outlay during the year remained comparatively higher are Haryana, Himachal Pradesh and Jammu & Kashmir. In the year 2001-02 Rajasthan and Goa have the credit of realising the maximum receipts among all the States, which were Rs. 23.4 crores and Rs.12.05 crores respectively followed by Punjab at Rs.11.22 crores.

In so far as the Working Expenses are concerned in 2001-02, the States like Maharashtra, Madhya Pradesh, Andhra Pradesh, Uttar Pradesh, Uttaranchal, Rajasthan, Himachal Pradesh and West Bengal have fairly high expenditure whereas the recovery of Working Expenses by way of gross receipts is very inadequate not only for these States but nearly in all other States except Goa.

The Receipts in Punjab and Rajasthan covered about 12% and 10% respectively of their respective Working Expenses on rural water supply schemes

[\(Table 4.25\)](#)

The position of different financial parameters of Urban Water Supply Schemes is, however, greatly at variance from those of Rural Water Supply Schemes. This may be due to several factors including (i) system of realisation of receipts in the urban areas (ii) size of schemes and (iii) subsidies etc.,. Nevertheless, the losses seemed unavoidable though the intensity of such losses was less severe in comparison to corresponding losses being incurred by Rural Water Supply Schemes. From a level of Rs. 458 crores in 1995-96, the losses from Urban Water Supply Schemes in the country increased to Rs. 954 crores in 2001-02.

[\(Tables 4.24 and 4.26\)](#)

The states where the percentage recovery of working expenses during 2001-02 is relatively higher are Goa(40%) ,Haryana(20%), Manipur(40%), Nagaland(26%), Orissa(26%) and Pondicherry(47%). However, the recovery rate of working expenses at all-India level was 0.97% only.

[\(Table 4.26\)](#)

Chart 29 Expenditure on Irrigation at Current Prices

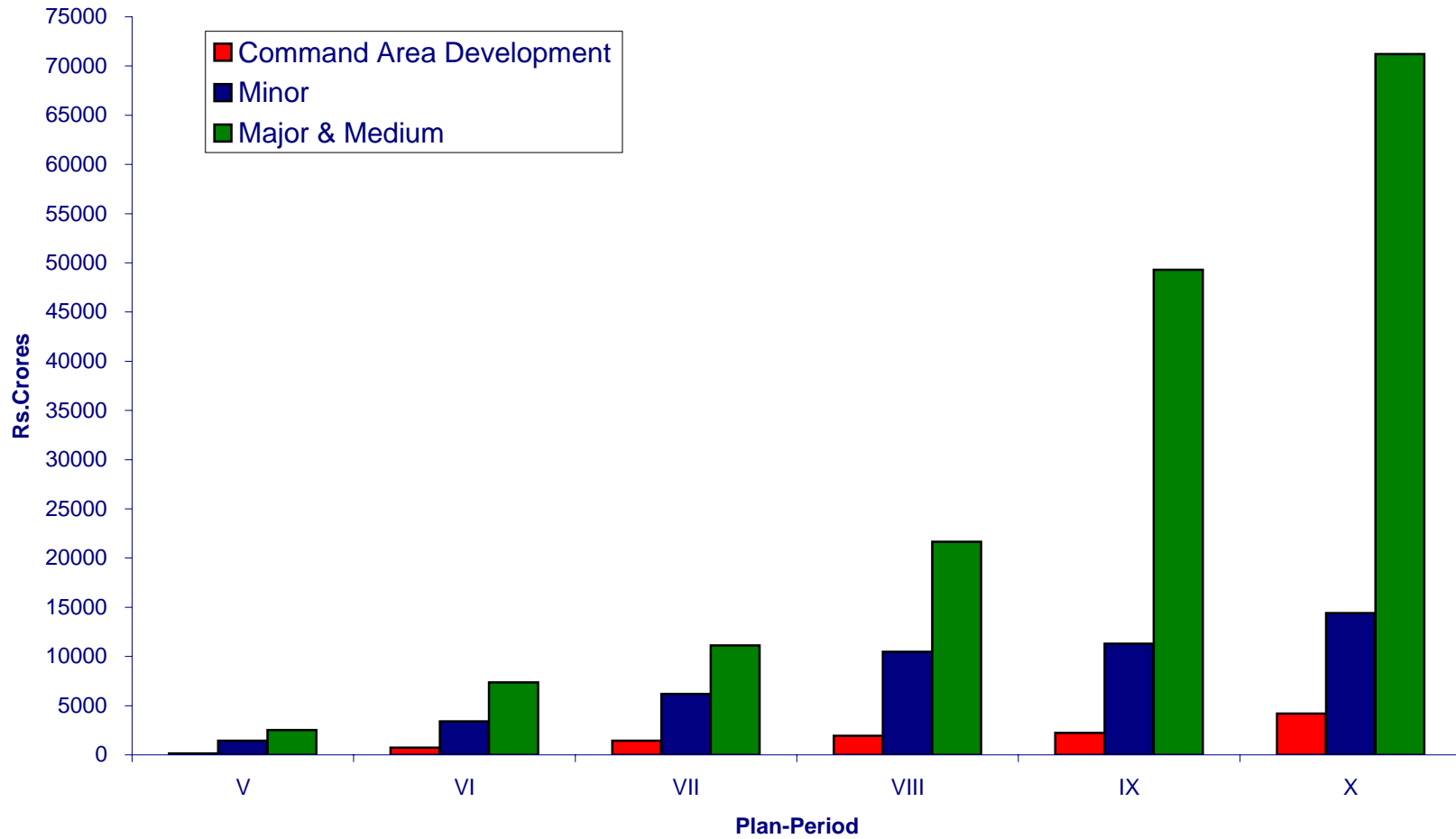


Table 4.1 Planwise Financial Expenditure on Irrigation in India

(Rs.Crores)

Sl. No.	Period	Major & Medium	Minor			Command Area Development	Major, Medium, Minor and CAD			Total Plan Expenditure in All Sectors	Percentage of Expend. on Irrigation to Total
			State	Insti-tutional	Total		Total	Cumul-ative	Average per year		
1	2	3	4	5	6	7	8	9	10	11	12
1.	First Plan(1951-56)	376.2	65.6	NEG.	65.6	-	441.8	441.8	88.4	1960	23
2.	Second Plan(1956-61)	380.0	142.2	19.4	161.6	-	541.6	983.4	108.3	4672	12
3.	Third Plan(1961-66)	576.0	326.1	115.4	441.5	-	1017.5	2000.9	203.5	8577	12
4.	Annual Plans(1966-69)	429.8	321.3	234.7	556.0	-	985.9	2986.7	328.6	6625	15
5.	Fourth Plan(1969-74)	1242.3	506.2	661.1	1167.3	-	2409.6	5396.3	481.9	15779	15
6.	Fifth Plan(1974-78)	2516.2	627.5	798.8	1426.3	147.6	4090.1	9486.4	1022.5	28653	14
7.	Annual Plans(1978-80)	2078.6	496.2	480.4	976.6	215.3	3270.5	12756.9	1635.3	22950	14
8.	Sixth Plan(1980-85)	7368.8	1979.3	1437.6	3416.8	743.1	11528.7	24285.6	2305.8	109292	11
9.	Seventh Plan(1985-90)	11107.3	3131.9	3061.0	6192.9	1447.5	18747.7	43033.2	3749.5	218730	9
10.	Annual Plan(1990-91)	2634.8	812.2	675.6	1487.8	285.6	4408.2	47441.5	4408.2	58369	8
11.	Annual Plan(1991-92)	2824.0	844.1	674.0	1518.1	333.8	4675.9	52117.4	4675.9	64751	7
12.	Eighth Plan (1992-97)	21669.2	6230.6	4241.8	10472.4	1937.9	34079.5	86196.9	6815.9	485457	7
13	Ninth Plan (1997-2002)	49289.6	8635.0	2661.7	11296.7	2222.8	62809.1	149006.0	12561.8	844031	7
14	Tenth Plan (2002 - 2007) Approved outlay	71213.2	14406.7	N.A.	14406.7	4196.7	89816.5	238822.5	17963.3	1525639	6
15	Annual Plan (2002-2003) Actual Expenditure	9655.7	1638.9	N.A.	1638.9	442.6	11737.2	160743.2	11737.2	210203	6
16	Revised Approved Outlay (2003-04)	12334.8	2634.6	N.A.	2634.6	280.5	15249.9	175993.2	15249.9	243550	6
17	Approved Outlay (2004-05)	16518.6	3044.7	NA	3044.7	838.9	20402.2	196395.4	20402.2	162947	13

Source: Central Water Commission (P&P Directorate), Ministry of Water Resources (Minor Irrigation Division), Annual Plan Document 2004-05 of Planning Commission.
Totals may not tally due to rounding off.

Table 4.2 Planwise Financial Expenditure on Irrigation in India (at 1993-94 prices)

(Rs.Crores)

Sl. No.	Period	Major & Medium	Minor			Command Area Development	Major, Medium, Minor and CAD			Total Plan Expenditure in All Sectors	Percentage of Expend. on Irrigation to Total
			State	Institutional	Total		Total	Cumulative	Average per year		
			4	5	6						
1	2	3	4	5	6	7	8	9	10	11	12
1.	First Plan(1951-56)	5824.1	1015.8	NEG.	1015.8	-	6839.9	6839.9	1368.0	30341	23
2.	Second Plan(1956-61)	5277.8	1975.4	268.8	2244.2	-	7521.9	14361.9	1504.4	64889	12
3.	Third Plan(1961-66)	6560.4	3714.1	1314.0	5028.1	-	11588.5	25950.4	2317.7	97688	12
4.	Annual Plans(1966-69)	3375.5	2523.3	1843.5	4366.8	-	7742.3	33692.7	2580.8	52029	15
5.	Fourth Plan(1969-74)	7783.8	3171.7	4142.0	7313.7	-	15097.5	48790.2	3019.5	98866	15
6.	Fifth Plan(1974-78)	9886.8	2465.6	3138.7	5604.3	580.0	16071.1	64861.3	4017.8	112585	14
7.	Annual Plans(1978-80)	7192.3	1717.0	1662.3	3379.2	745.1	11316.6	76177.9	5658.3	79412	14
8.	Sixth Plan(1980-85)	17330.3	4654.9	3380.9	8035.8	1747.5	27113.6	103291.5	5422.7	257037	11
9.	Seventh Plan(1985-90)	18980.3	5351.8	5230.6	10582.5	2473.5	32036.3	135327.8	6407.3	373770	9
10.	Annual Plan(1990-91)	3575.1	1102.0	916.7	2018.7	387.5	5981.3	141309.1	5981.3	79198	8
11.	Annual Plan(1991-92)	3365.9	1006.1	803.3	1809.5	397.9	5573.2	146882.4	5573.2	77176	7
12.	Eighth Plan (1992-97)	19567.6	5626.3	3830.4	9456.7	1750.0	30774.3	177656.7	6154.9	438376	7
13	Ninth Plan (1997-2002)	33493.9	5867.8	1808.7	7676.5	1510.5	42680.8	220337.5	8536.2	573546	7
14	Annual Plan (2002-2003) Actual Expenditure	5788.8	982.6	N.A.	982.6	265.3	7036.7	227374.2	7036.7	126021	6
15	Revised Approved Outlay (2003-04)	7012.4	1497.8	N.A.	1497.8	159.5	8669.7	236043.9	8669.7	138459	6
16	Approved Outlay (2004-05)	8819.3	1625.6	NA	1625.6	447.9	10892.8	246936.7	10892.8	86998	13

Source: 1. Central Water Commission (P&P Directorate), Ministry of Water Resources (Minor Irrigation Division),

2. Annual Plan Document 2004-05 of Planning Commission.

3. Central Water Commission (ISO)

Totals may not tally due to rounding off.

Table : 4.3 Statewise and Planwise Financial Expenditure on Major and Medium Irrigation

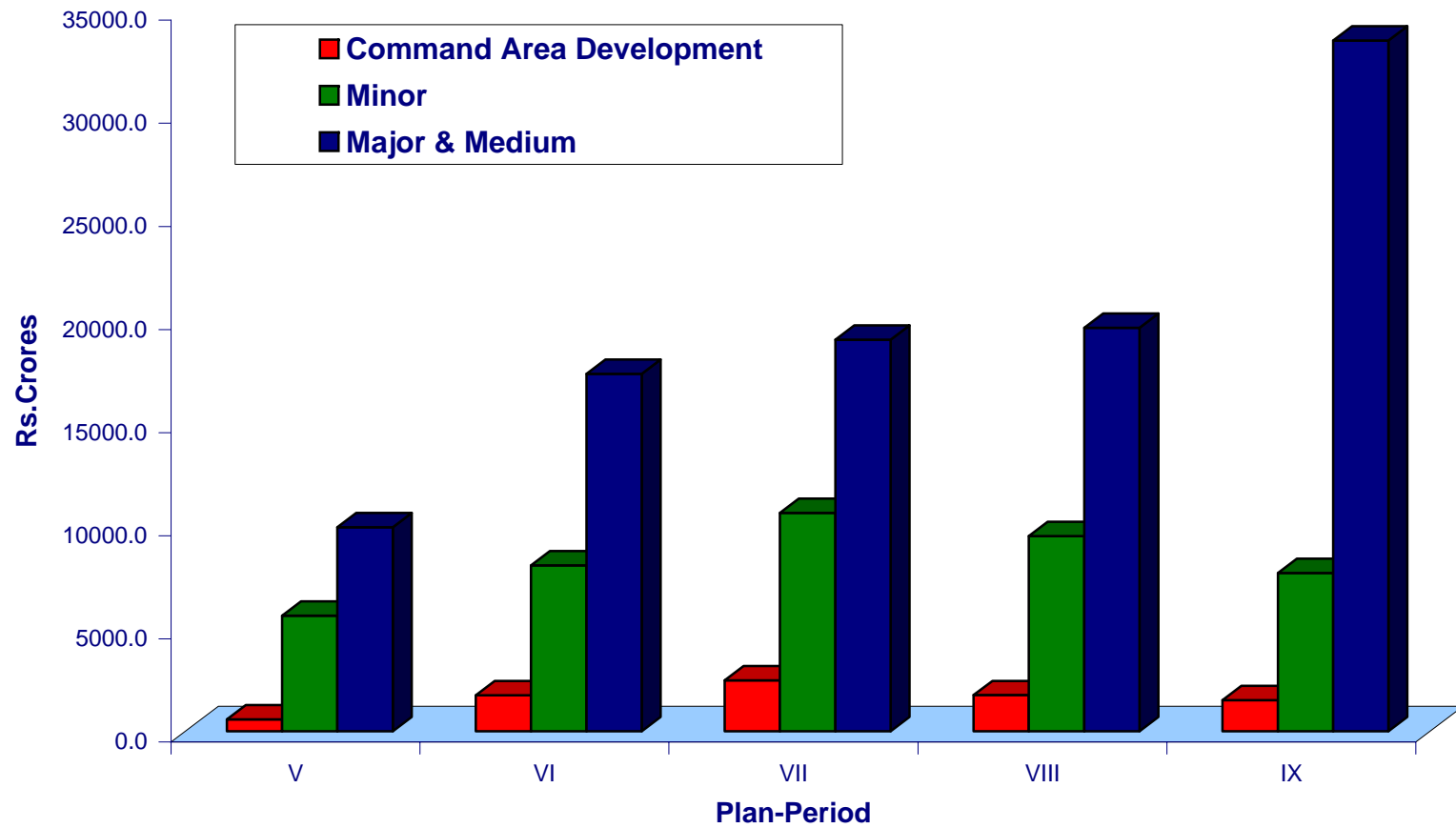
(Rs.Crores)

Sl. No.	Name of the State/Uts.	Ninth Plan (1997-2002)	Tenth Plan (2002-07) Outlay	Actual Expenditure (2002-03)	Revised Approved Outlay 2003-04	Approved Outlay 2004-05
1	2	3	4	5	6	7
1	Andhra Pradesh	4045.8	9153.8	1246.3	1497.9	3370.9
2	Arunachal Pradesh	1.7	1.7	0.4	0.4	0.4
3	Assam	213.0	273.6	19.1	41.8	21.7
4	Bihar	1621.9	3273.2	248.6	289.3	374.1
5	Goa	224.2	175.4	274.7	223.3	422.6
6	Chhatisgarh	160.6	1721.4	14.7	12.7	28.0
7	Gujarat	5298.4	7660.9	1348.0	1103.5	2042.5
8	Haryana	1154.4	1129.6	166.9	170.0	175.0
9	Himachal Pradesh	65.1	55.0	11.9	16.0	13.5
10	Jammu & Kashmir	128.5	237.4	33.6	71.0	75.8
11	Jharkhad	167.0	1720.9	167.0	290.0	356.4
12	Karnataka	8700.5	13277.3	2761.7	2647.6	2844.0
13	Kerala	703.3	600.0	104.6	99.0	113.9
14	Madhya Pradesh	2203.7	3819.0	794.8	925.9	1387.2
15	Maharashtra	14807.3	12150.1	429.4	2265.6	2850.0
16	Manipur	171.7	221.6	26.8	51.0	38.0
17	Meghalaya	10.7	24.8	1.1	1.2	1.9
18	Mizoram	0.1	0.1	0.0	0.1	0.0
19	Nagaland	0.9	0.5	0.0	0.0	0.0
20	Orissa	2331.2	2329.0	489.9	330.2	295.2
21	Punjab	334.9	1592.5	125.6	73.6	85.3
22	Rajasthan	1725.1	2269.6	280.1	828.6	611.4
23	Sikkim	2.2	0.0	0.0	0.0	0.0
24	Tamil Nadu	1218.5	1700.0	287.1	309.6	324.0
25	Tripura	32.4	44.2	2.3	2.9	5.6
26	Uttar Pradesh	3014.7	6424.6	666.0	909.9	877.5
27	Uttaranchal	61.0	103.3	23.3	39.0	26.7
28	West Bengal	667.8	895.9	81.7	62.5	91.3
Total for States		49066.7	70855.3	9605.3	12262.6	16432.7
Total for U.Ts.		4.2	6.5	1.9	2.0	0.1
Total States & U.Ts.		49070.9	70861.8	9607.2	12264.6	16432.7
Central Sector		218.7	351.4	48.5	70.2	85.9
GRAND TOTAL		49289.6	71213.2	9655.7	12334.8	16518.6

Source: Central Water Commission (P&P Directorate) and Planning Commission
Annual Plan Document 2004-05

Remarks : Totals may not tally due to rounding of

Chart 30 Expenditure on Irrigation at 1993-94 Prices



**Table : 4.4 Statewise and Planwise Financial Expenditure on Minor Irrigation
(Staate Expenditure)**

(Rs.Crores)

Sl. No.	State/U.ts.	Ninth Plan (1997-02)	Tenth Plan (2002-07) Outlay	Actual Expenditure 2002-03	Revised Approved Outlay 2003-04	Approved Outlay 2004-05
1	2	3	4	5	6	7
1.	Andhra Pradesh	976.3	1607.2	193.7	294.4	549.3
2.	Arunachal Pradesh	94.6	160.7	11.7	38.5	32.8
3.	Assam	382.2	305.1	50.7	52.4	30.6
4.	Bihar	231.6	681.8	61.7	246.0	249.2
5.	Chattisgarh	71.5	776.6	120.9	204.0	254.0
6.	Goa	26.7	27.0	10.7	30.3	33.9
7.	Gujarat	933.3	1098.5	123.2	295.6	293.6
8.	Haryana	200.9	154.3	0.0	0.0	0.0
9.	Himachal Pradesh	232.7	333.0	69.1	57.0	67.9
10.	Jammu & Kashmir	142.9	325.8	43.0	66.5	62.8
11.	Jharkhand	39.3	333.1	39.3	60.0	75.0
12.	Karnataka	459.0	719.4	113.9	219.0	167.9
13.	Kerala	225.8	205.0	27.7	11.5	13.1
14.	Madhya Pradesh	746.3	1047.5	194.8	174.7	222.7
15.	Maharashtra	1348.6	2043.2	102.5	302.8	171.8
16.	Manipur	30.1	101.2	8.4	16.0	6.5
17.	Meghalaya	34.2	60.0	6.5	5.5	8.5
18.	Mizoram	26.3	26.8	6.3	14.5	14.2
19.	Nagaland	25.3	35.6	4.4	2.9	12.5
20.	Orissa	435.7	1604.4	84.8	97.2	57.8
21.	Punjab	189.0	275.1	31.3	23.5	24.4
22.	Rajasthan	259.5	285.4	56.6	53.8	190.6
23.	Sikkim	19.4	15.0	3.7	4.0	4.0
24.	Tamil Nadu	287.7	500.0	64.1	98.5	176.3
25.	Tripura	75.3	219.3	29.8	24.2	26.8
26.	Uttar Pradesh	362.0	535.2	34.4	81.3	104.3
27.	Urraranchal	19.6	59.9	26.4	25.3	29.0
28.	West Bengal	346.1	238.5	20.7	27.5	35.4
Total States		8221.7	13774.5	1540.2	2526.8	2914.5
Total U.Ts		55.3	98.4	15.8	14.0	25.0
Total States & U.Ts		8277.0	13872.9	1556.0	2540.7	2939.5
Central Sector		358.0	533.8	82.9	93.9	105.2
Grand Total		8635.0	14406.7	1638.9	2634.6	3044.7

Source : Ministry of Water Resources(Minor Irrigation Division), Annual Plan Document 2004-05 of Planning Commission

Note : Totals may not tally due to rounding off.

**Table : 4.5 Statewise and Planwise Financial Expenditure
on Minor Irrigation (Institutional**

(Rs. Crores)

Sl. No.	State/ U.T.	Ninth Plan (1997-02)	TENTH PLAN		
			(2002-03)	(2003-04)	(2004-05)
1	2	3	4	5	6
1.	Andhra Pradesh	364.7	31.4	31.8	87.0
2.	Arunachal Pradesh	0.0	0.0	0.0	0.0
3.	Assam	0.0	0.0	.0.0	0.4
4.	Bihar	12.9	0.0	48.6	113.7
5	Chhatisgarh	Included in Madhya Pradesh	5.2	7.1	0.0
6	Goa	0.9	0.1	0.0	0.0
7	Gujarat	40.5	6.3	15.9	26.1
8	Haryana	183.9	32.5	26.5	46.3
9	Himachal Pradesh	113.1	5.8	0.0	0.0
10	Jammu & Kashmir	0.5	0.1	0.0	0.0
11	Jharkhand	Included in Bihar	0.0	0.0	0.0
12	Karnataka	127.4	18.6	43.2	43.1
13	Kerala	92.6	11.7	0.0	9.1
14	Madhya Pradesh	146.3	55.0	50.9	99.1
15	Maharashtra	102.2	0.0	95.8	61.5
16	Manipur	0.0	0.0	0.2	0.1
17	Meghalya	0.0	0.0	0.0	0.0
18	Mizoram	0.1	0.0	0.0	0.2
19	Nagaland	0.0	0.0	0.0	0.0
20	Orissa	1.2	2.1	7.5	4.3
21	Punjab	197.8	35.0	61.9	68.5
22	Rajasthan	363.7	81.9	43.7	34.9
23	Sikkim	0.0	0.0	0.0	0.0
24	Tamil Nadu	15.7	25.6	4.6	2.2
25	Tripura	0.1	0.0	0.0	0.0
26	Uttaranchal	Included in Uttar Pradesh	0.0	0.0	0.0
27	Uttar Pradesh	884.1	379.5	195.4	28.6
28	West Bengal	11.9	1.6	2.7	1.8
Total States		2659.6	672.4	635.8	626.9
Total U.Ts.		2.0	0.2	0.0	0.1
GRAND TOTAL		2661.7	672.6	635.8	626.9

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

Note :- No expenditure during first plan Total may not tally due to rounding off.

Chart 31 Planwise Expenditure under CAD Programme

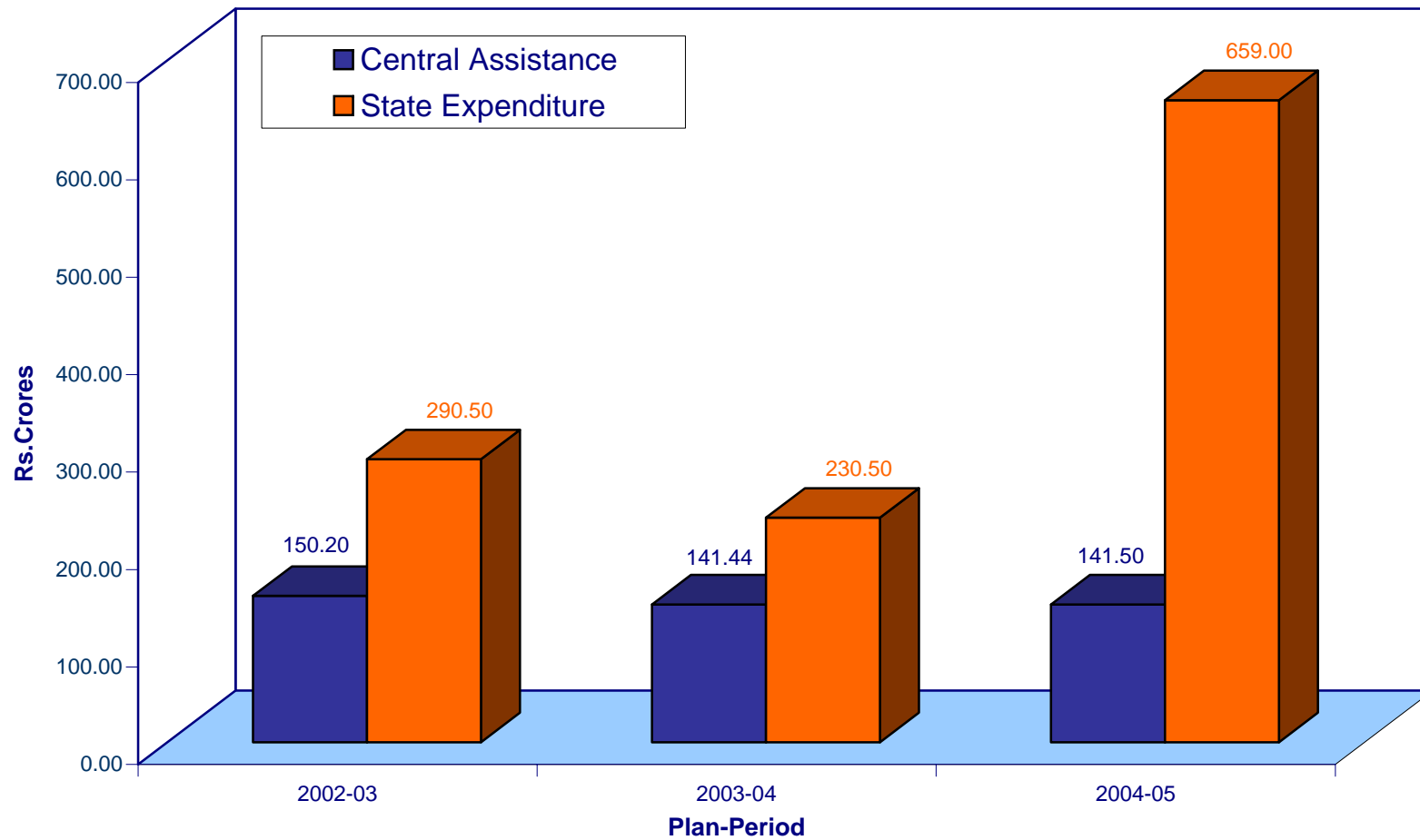


Table : 4.6 Statewise Expenditure (State Sector) Under CAD Programme

(Rs. in crore)

Sl. No.	Name of the State/UTs.	EXPENDITURE			
		Total VIII Plan	Total IX Plan	Upto date X Plan	Cumulative Upto date Total
1	2	3	4	5	6
1	Andhra Pradesh	80.14	49.18	29.68	265.89
2	Arunachal Pradesh	1.61	4.99	8.58	15.18
3	Assam	13.34	31.14	45.04	106.10
4	Bihar	31.53	62.66	48.22	212.97
5	Chhattisgarh	0.00	1.57	50.41	51.98
6	Goa	5.19	9.70	12.07	36.08
7	Gujarat	43.75	61.34	15.86	197.21
8	Haryana	29.92	143.03	127.76	397.51
9	Himachal Pradesh	2.86	4.38	8.79	18.73
10	Jammu & Kashmir	8.95	20.58	36.04	82.27
11	Jharkhand	0.00	0.00	3.50	3.50
12	Karnataka	77.29	97.90	100.92	411.85
13	Kerala	41.86	41.80	32.31	150.48
14	Madhya Pradesh	37.72	17.43	15.08	340.19
15	Maharashtra	291.03	219.47	97.37	1081.03
16	Manipur	4.94	6.63	21.59	38.06
17	Meghalaya	1.28	0.87	0.83	4.43
18	Mizoram	0.00	0.47	0.55	1.02
19	Nagaland	0.16	0.53	2.86	3.55
20	Orissa	14.83	26.53	16.38	92.95
21	Punjab	0.00	189.34	106.29	329.60
22	Rajasthan	258.84	253.35	185.85	1020.89
23	Sikkim	0.00	0.11	4.69	4.80
24	Tamil Nadu	41.30	65.88	66.01	260.34
25	Tripura	0.25	0.04	0.65	1.28
26	Uttar Pradesh	83.99	155.31	182.77	727.55
27	Uttaranchal	0.00	0.00	6.18	6.18
28	West Bengal	6.58	26.53	25.57	76.15
29	D & N Haveli	0.00	0.77	0.87	4.31
30	Daman & Diu	0.00	0.10	0.05	0.48
Total States & Uts		1077.36	1491.63	1252.77	5942.56

Source : Ministry of Water Resources (CAD Wing).

Note : Totals may not tally due to rounding off.

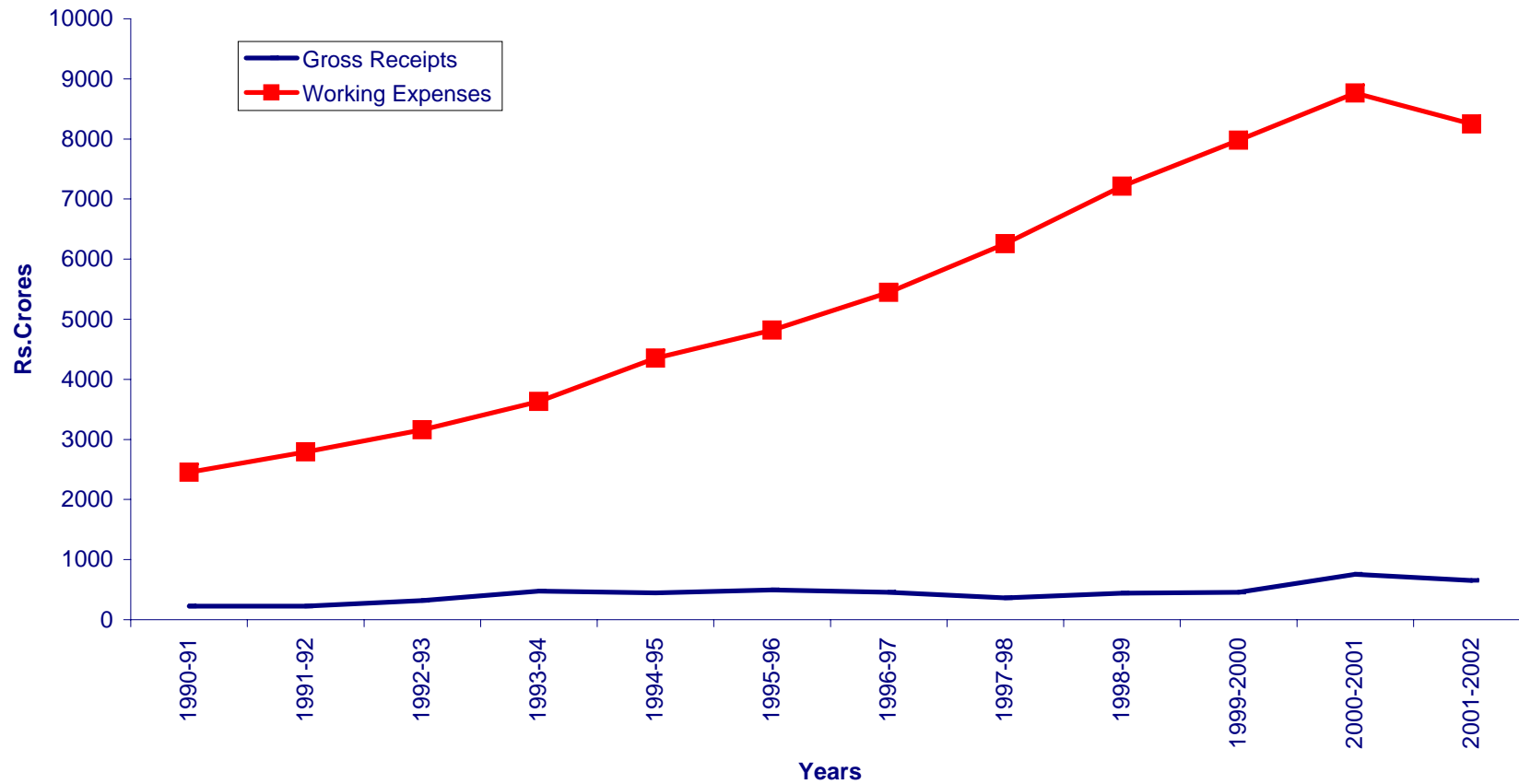
**Table : 4.7 Statewise Release of Central Assistance to States
Under CAD Programme**

Sl. No.	Name of the States/ U.Ts.	Total VIII Plan	Total IX Plan	Upto date X Plan	Cumulative Upto date Total
1	2	3	4	5	6
1	Andhra Pradesh	7.28	38.40	0.00	92.98
2	Arunachal Pradesh	0.0	0.49	3.37	3.86
3	Assam	6.10	1.92	0.00	20.66
4	Bihar	25.18	3.00	6.30	118.49
5	Chhattisgarh	0.00	0.46	6.37	6.83
6	Goa	2.65	0.20	0.00	9.18
7	Gujarat	19.63	10.90	41.10	150.39
8	Haryana	48.73	60.78	60.60	205.11
9	Himachal Pradesh	1.85	3.66	4.04	11.85
10	Jammu & Kashmir	10.48	10.09	12.57	41.47
11	Jharkhand	0.00	0.00	0.00	0.00
12	Karnataka	30.08	72.79	101.11	284.21
13	Kerala	36.18	30.48	4.67	99.90
14	Madhya Pradesh	9.77	5.59	12.56	100.75
15	Maharashtra	66.38	38.84	5.46	258.74
16	Manipur	4.13	4.60	5.85	18.58
17	Meghalaya	0.36	0.18	0.44	1.18
18	Mizoram	0.00	0.12	0.46	0.58
19	Nagaland	0.10	1.55	1.60	3.24
20	Orissa	17.17	29.12	13.66	89.60
21	Punjab	0.00	59.86	52.09	111.95
22	Rajasthan	141.55	130.08	115.99	547.16
23	Sikkim	0.00	0.06	0.01	0.07
24	Tamilnadu	58.95	84.10	74.48	253.62
25	Tripura	0.02	0.00	0.08	0.20
26	Uttar Pradesh	106.99	153.44	124.83	617.71
27	Uttaranchal	0.00	0.00	2.30	2.30
28	West Bengal	6.60	10.97	4.85	36.59
Released to States		600.17	751.66	654.78	3087.18
Released under head 2705		6.72	10.94	8.84	27.15
TOTAL Released		606.89	762.60	663.63	3114.33

Source : Ministry of Water Resources (CAD Wing)

Note : Totals may not tally due to rounding off.

Chart 32 Financial Results of Irrigation & Multipurpose River Valley Projects at Current Prices



**Table 4.8 Financial Results of Irrigation & Multipurpose River Valley Projects
(All India)**

(Rs. Crores)

Sl. No.	Year	Capital Outlay		Gross Receipts (G.R.)	Working Expenses (W.E.)	Interest (I) On Capital Outlay at end of the Year (I)	Profit {GR - (WE+I)}	Percentage Recovery of WE through GR	
		During the year	At the end of the year Cumulative					Excluding Int. on Capital Outlay (GR/WEx100)	Including Int. on Capital Outlay GR/(WE+I)x100
1	2	3	4	5	6	7	8	9	10
1	1980-81	1256.7	9346.7	103.4	225.7	301.5	-423.9	45.8	19.6
2	1985-86	2042.1	17971.2	223.8	486.9	681.7	-944.8	46.0	19.2
3	1990-91	2846.4	30556.90	224.2	2452.2	1213.3	-3441.3	9.1	6.1
4	1991-92	3131.9	33688.8	227.4	2790.2	1775.5	-4338.3	8.1	5.0
5	1992-93	3416.3	37105.1	320.3	3162.1	1942.2	-4784.0	10.1	6.3
6	1993-94	3975.3	41080.4	477.6	3629.8	2401.8	-5554.0	13.2	7.9
7	1994-95	4806.1	45885.6	444.5	4352.4	2618.4	-6526.3	10.2	6.4
8	1995-96	5458.6	51346.9	495.4	4818.5	3095.9	-7419.0	10.3	6.3
9	1996-97	5494.4	56840.7	458.4	5445.6	3590.1	-8577.3	8.4	5.1
10	1997-98	7137.9	63984.2	363.3	6257.9	4100.8	-9995.4	5.8	3.5
11	1998-99	7093.7	71077.9	441.8	7215.4	4177.6	-10951.2	6.1	3.9
12	1999-00	7874.7	78952.8	456.9	7980.2	3988.2	-11511.5	5.7	3.8
13	2000-01	7295.8	86248.7	753.5	8762.4	4462.0	-12470.9	8.6	5.7
14	2001-02	7649.4	93898.2	652.2	8249.7	5605.0	-13202.5	7.9	4.7

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

Remarks: (i) The figures in cols. (3) and (4) in some cases are incompatible due to accounting adjustments in States
(II) Working Expenses for the year 1987-88 and onward are inclusive of interest on the capital at the end of the year.

N.A. : Not Available.

Chart 33 Financial Results of Irrigation & Multipurpose River Valley Projects at 1993-94 Prices

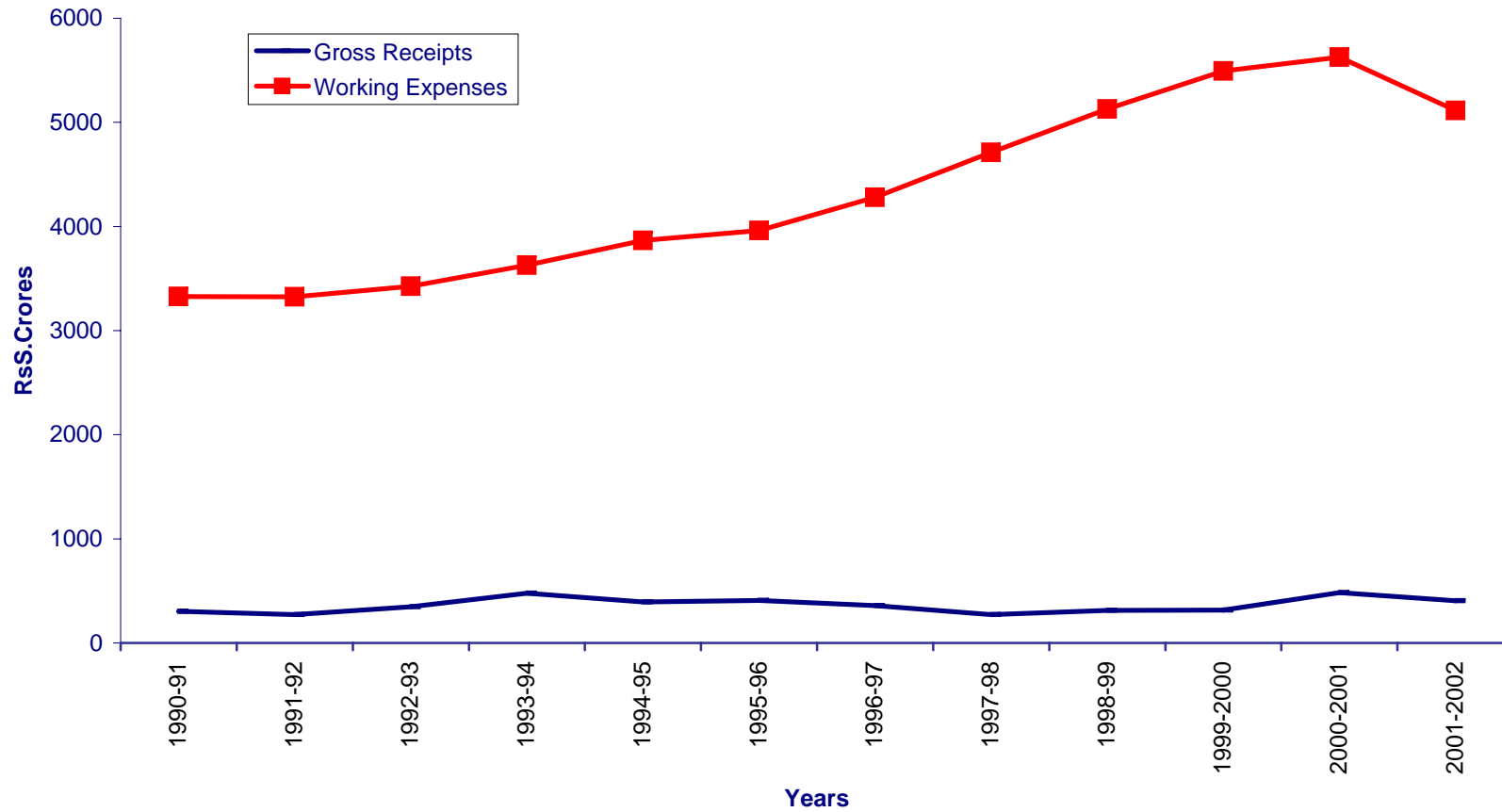


Table 4.9 Financial Results of Irrigation and Multipurpose River Valley Projects (All India) at 1993-94 Prices

(Rs. Crores)

Sl. No.	Year	Capital Outlay		Gross Receipts (G.R.)	Working Expenses (W.E.)	Interest (I) On Capital Outlay at end of the Year (I)	Profit {GR - (WE+I)}	Percentage Recovery of WE through GR	
		During the year	upto the end of the year Cumulative					Excluding Int. on Capital Outlay (GR/WE \times 100)	Including Int. on Capital Outlay GR/(WE+I) \times 100
1	2	3	4	5	6	7	8	9	10
1	1980-81	4979.0	46752.6	409.5	894.4	1194.7	-1679.6	45.8	19.6
2	1985-86	4440.6	70290.1	486.7	1058.8	1482.5	-2054.6	46.0	19.2
3	1990-91	3862.1	41461.2	304.2	3327.3	1646.3	-4669.3	9.1	6.1
4	1991-92	3732.9	40153.5	271.0	3325.6	2116.2	-5170.8	8.1	5.0
5	1992-93	3701.3	40200.5	347.0	3425.9	2104.2	-5183.1	10.1	6.3
6	1993-94	3975.3	41080.4	477.6	3629.8	2401.8	-5554.0	13.2	7.9
7	1994-95	4268.3	40751.0	394.8	3865.4	2325.4	-5796.0	10.2	6.4
8	1995-96	4489.0	42226.1	407.4	3962.6	2546.0	-6101.2	10.3	6.3
9	1996-97	4319.5	44686.1	360.4	4281.1	2822.4	-6743.2	8.4	5.1
10	1997-98	5374.9	48180.9	273.6	4712.3	3088.0	-7526.7	5.8	3.5
11	1998-99	5041.7	50517.3	314.0	5128.2	2969.2	-7783.4	6.1	3.9
12	1999-00	5419.6	54337.8	314.5	5492.2	2744.8	-7922.6	5.7	3.8
13	2000-01	4685.8	55394.2	483.9	5627.7	2865.8	-8009.6	8.6	5.7
14	2001-02	4742.3	58213.4	404.3	5114.5	3474.9	-8185.1	7.9	4.7

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

Remarks: (i) The figures in cols. (3) and (4) in some cases are incompatible due to accounting adjustments in States
(II) Working Expenses for the year 1987-88 and onward are inclusive of interest on the capital at the end of the year.

N.A. : Not Available

**Table 4.10 Statewise Financial Results of Irrigation and Multipurpose
River Valley Projects**

(Rs.Crores)

Sl. No.	Name of the State	Year	Capital Outlay		Gross Receipts (GR)	Working Expenses Including Interest (WE)	Profit (GR-WE)	Percentage Recovery of WE through GR (GR/WE X100)
			During The Year	Upto The End Of The Year (Cumulative)				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	Andhra Pradesh	1997-98	626.1	6641.3	6.3	944.4	-938.1	0.67
		1998-99	632.1	7273.4	5.1	1111.9	-1106.8	0.46
		1999-00	909.3	8182.7	4.1	1053.2	-1049.1	0.39
		2000-01	915.6	9098.3	11.4	1295.4	-1284.0	0.88
		2001-02	939.9	10038.2	10.3	1342.1	-1331.8	0.77
2	Bihar	1997-98	245.2	4554.4	35.3	123.9	-88.6	28.49
		1998-99	323.9	4878.3	42.1	167.4	-125.3	25.15
		1999-00	512.8	5391.1	41.4	203.1	-161.7	20.38
		2000-01	3375.7	5728.7	33.9	179.7	-145.8	18.86
		2001-02	201.5	5930.1	15.6	145.9	-130.3	10.69
3	Gujarat	1997-98	1174.2	7154.0	91.3	981.5	-890.2	9.30
		1998-99	1249.2	8403.2	132.1	1310.1	-1178.0	10.08
		1999-00	1298.0	9701.2	110.7	1526.2	-1415.5	7.25
		2000-01	970.1	1671.4	136.6	172.9	-36.3	79.01
		2001-02	437.5	1118.9	132.1	169.4	-37.3	77.98
4	Haryana	1997-98	242.2	1683.6	27.4	253.3	-225.9	10.82
		1998-99	267.5	1951.1	61.1	260.8	-199.7	23.43
		1999-00	271.3	2222.4	38.3	277.9	-239.6	13.78
		2000-01	256.5	2478.8	54.3	279.6	-225.3	19.42
		2001-02	280.7	2759.5	68.5	344.8	-276.3	19.87
5	Jammu & Kashmir	1997-98	15.1	273.1	0.4	8.1	-7.7	4.94
		1998-99	19.0	292.1	0.3	11.7	-11.4	2.56
		1999-00	8.7	300.8	0.3	16.2	-15.9	1.85
		2000-01	17.9	318.7	0.4	21.7	-21.3	1.84
		2001-02	23.5	342.2	0.6	19.4	-18.8	3.09
6	Karnataka	1997-98	791.3	6873.2	16.4	476.5	-460.1	3.44
		1998-99	910.3	7783.5	18.5	488.9	-470.4	3.78
		1999-00	997.4	8780.9	15.8	593.7	-577.9	2.66
		2000-01	1099.6	9880.6	18.5	650.6	-632.1	2.84
		2001-02	1426.6	11307.2	20.6	68.6	-48.0	30.03
7	Kerala	1997-98	148.5	1607.4	5.5	38.8	-33.3	14.18
		1998-99	142.6	1750.0	6.7	42.3	-35.6	15.84
		1999-00	139.4	1889.4	3.4	46.2	-42.8	7.36
		2000-01	129.8	2019.2	3.8	53.9	-50.1	7.05
		2001-02	114.8	2134.0	3.0	44.1	-41.1	6.80
8	Madhya Pradesh	1997-98	329.3	4992.5	29.8	203.1	-173.3	14.67
		1998-98	324.3	5316.8	37.3	261.8	-224.5	14.25
		1999-00	267.0	5583.8	49.7	276.2	-226.5	17.99
		2000-01	164.0	3285.3	39.5	271.2	-231.7	14.56
		2001-02	546.8	3832.1	27.1	216.5	-189.4	12.52
9	Maharashtra	1997-98	1475.2	10911.1	52.1	1406.8	-1354.7	3.70
		1998-99	950.2	11861.3	33.7	1491.4	-1457.7	2.26
		1999-00	1259.7	13121.0	61.6	1590.9	-1529.3	3.87
		2000-01	873.6	1399.5	62.5	1601.1	-1538.6	3.90
		2001-02	1121.1	15115.9	86.0	1635.6	-1549.6	5.26

Contd..

**Table 4.10 Statewise Financial Results of Irrigation and Multipurpose
River Valley Projects (Rs.Crores)**

Sl. No.	Name of the State	Year	Capital Outlay		Gross Receipts (GR)	Working Expenses Including Interest (WE)	Profit (GR-WE)	Percentage Recovery of WE through GR (GR/WE X100)
			During The Year	Upto The End Of The Year (Cumulative)				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
10	Orissa	1997-98	535.8	3566.8	6.5	53.7	-47.2	12.10
		1998-99	561.7	4128.5	11.2	58.4	-47.2	19.18
		1999-00	465.0	4593.5	7.8	67.1	-59.3	11.62
		2000-01	418.3	5011.7	18.7	70.1	-51.4	26.68
		2001-02	401.5	5413.2	16.5	71.9	-55.4	22.95
11	Punjab	1997-98	491.3	2875.2	10.7	167.7	-157.0	6.38
		1998-99	482.9	3358.1	16.3	185.9	-169.6	8.77
		1999-00	265.9	3624.0	17.7	190.3	-172.6	9.30
		2000-01	258.4	3882.2	11.7	220.7	-209.0	5.30
		2001-02	320.9	4203.1	16.3	222.1	-205.8	7.34
12	Rajasthan	1997-98	391.9	3728.9	24.6	405.9	-381.3	6.06
		1998-99	441.4	4170.3	23.4	532.0	-508.6	4.40
		1999-00	357.6	4527.9	40.9	556.6	-515.7	7.35
		2000-01	249.3	4777.3	36.5	586.7	-550.2	6.22
		2001-02	260.4	5037.7	18.4	622.4	-604.0	2.96
13	Tamilnadu	1997-98	49.7	1091.9	7.3	240.1	-232.8	3.04
		1998-99	188.0	1279.9	8.2	291.6	-283.4	2.81
		1999-00	331.5	1611.0	9.9	306.5	-296.6	3.23
		2000-01	270.4	1881.2	9.3	347.7	-338.4	2.67
		2001-02	286.0	2167.2	10.5	346.0	-335.5	3.03
14	Uttar Pradesh	1997-98	418.4	5492.9	40.9	718.3	-677.4	5.69
		1998-99	395.2	5888.1	49.1	703.7	-654.6	6.98
		1999-00	568.5	6456.6	40.2	943.5	-903.3	4.26
		2000-01	511.1	511.1	282.1	1054.7	-772.6	26.75
		2001-02	728.6	1239.7	115.8	980.7	-864.9	11.81
15	West Bengal	1997-98	94.1	1134.2	2.4	111.3	-108.9	2.16
		1998-99	97.2	1231.3	2.9	140.8	-137.9	2.06
		1999-00	92.4	1323.7	3.0	171.9	-168.9	1.75
		2000-01	111.6	1435.4	4.0	190.9	-186.9	2.10
		2001-02	114.5	1549.9	3.7	161.4	-157.7	2.29

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

**TABLE : 4.11 Statewise and Yearwise Percentage Recovery of Working Expenses through
Gross Receipts in Irrigation and Multipurpose River Valley Projects**

(Unit: Percentage)

Sl. No.	Name of the States	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Andhra Pradesh	14	4	15	15	17	13	8	1	1	Neg.	1	1
2	Bihar	11	23	28	26	22	37	35	28	25	20	19	11
3	Gujarat	6	6	6	6	7	5	4	9	10	7	79	78
4	Haryana	16	11	11	12	4	9	11	11	23	14	19	20
5	Jammu & Kashmir	3	3	5	3	5	14	6	5	3	2	2	3
6	Karnataka	10	15	7	5	4	5	4	3	4	3	3	30
7	Kerala	9	8	6	8	5	15	6	14	16	7	7	7
8	Madhya Pradesh	20	22	24	7	29	21	25	15	14	18	15	13
9	Maharashtra	4	4	7	10	8	7	5	4	2	4	4	5
10	Orissa	27	21	43	16	12	25	13	12	19	12	27	23
11	Punjab	16	16	15	15	32	22	18	6	9	9	5	7
12	Rajasthan	11	12	9	7	7	6	7	6	4	7	6	3
13	Tamil Nadu	3	3	2	3	3	2	2	3	3	3	3	3
14	Uttar Pradesh	9	8	9	31	12	17	16	6	7	4	27	12
15	West Bengal	3	3	4	3	4	3	3	2	2	2	2	2

Source (i) Combined Finance and Revenue Accounts of Union and State Governments in India.

(ii) Central Water Commission ISO (Financial Performance Unit)

Remarks: Working expenses for the year 1987-88 and onward are inclusive of interest on capital at the end of year.

* Due to more credits in Irrigation Projects - (Non-Commercial) which resulted in negative working expenses, as such figures not given.

Table : 4.12 Range of Water Rates for Lift and Flow Irrigation

(Unit: Rs. per Hactare)

Sl. No.	States	Rates For Irrigation Purposes				
		Flow Irrigation		Lift Irrigation		
		Rate (Rs/Ha)	Date Since Applicable	Rate (Rs/Ha)	Date Since Applicable	Status As On
1	2	3	4	5	6	7
1	Andhra Pradesh	Rs.148.20 to Rs.1235.00	01/07/96	#	-	23.04.03
2	Arunachal Pradesh	No Water Rates specifiedfor irrigation		No Water Rates specifiedfor irrigation	-	27.10.2005
3	Assam	Rs150.00 to751.00	30.3.2000	Rs150.00 to751.00	30.3.2000	20.4.2006
4	Bihar	Rs.74.10 to Rs.370.50	Nov/95/2001	#	-	28.02.03
5	Chhattisgarh	Rs123.50 to 741.00	15.6.1999	#	-	25.8.2005
6	Delhi	Rs22.23 to 711.36	1951/1979	Rs33.35 to 1067.04	1951/1979	Nov.03
7	Goa	Rs60.00 to 300.00	1.2.1988	Rs120.00 to 600.00	1.2.1988	24.3.2006
8	Gujarat	Rs.70.00 to Rs.2750.00*	16/02/01	Rs23.33 to 1375.00*	16.02.01	07.07.01
9	Haryana	Rs.86.45 to Rs.197.60	27/07/00	Rs43.23 to 98.80	27.7.2000	13.02.03
10	Himachal Pradesh	Rs19.30 \$	1.6.2005	Rs38.50\$	1.6.2005\$	1.10.2005
11	Jammu & Kashmir	Rs.19.76 to Rs.49.40	01/04/00	Rs49.40 to 716.30	1.4.2000	28.07.01
12	Jharkhand	Rs74.10 to 370.50	26.11.2001	#	-	25.11.2003
13	Karnataka	Rs.37.05 to RS.988.45	13/07/00	#	-	24.10.2005
14	Kerala	Rs.37.00 to Rs.99.00 \$\$	18/09/74	Rs37.00 to 99.00 \$\$	18.09.74	18.03.2006
15	Madhya Pradesh	Rs50.00 to 960.00 @	01.11.2005	Rs50.00 to 960.00@	1.11.2005	28.02.2006
16	Maharashtra	Rs.238.00 to 6297.00**	01.07.2003	Rs20.00 to 610.00	1.7.2003	25.10.2005
17	Manipur	Rs22.50 to 75.00	1977-78	Rs22.50 to 75.00	1977-78	26.3.2002
18	Meghalaya	No Water rates (Rs.100-Proposed to be Fixed)	-	No Water rates (Rs.100-Proposed to be Fixed)	-	28.2.2006
19	Mizoram	No Water rates	-	No Water rates	-	04.8.2003
20	Nagaland	No Water rates	-	No Water rates	-	12.4.2006

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Table : 4.12 Range of Water Rates for Lift and Flow Irrigation

(Unit: Rs. per Hactare)

Sl. No.	States	Rates For Irrigation Purposes				
		Flow Irrigation		Lift Irrigation		
		Rate (Rs/Ha)	Date Since Applicable	Rate (Rs/Ha)	Date Since Applicable	Status As On
1	2	3	4	5	6	7
21	Orissa	Rs.28.00 to Rs.930.00	05/04/02	Rs129.21 to 4990.63	july.1997	27.04.98
22	Punjab	Abolished	14/02/97	Abolished	14.02.97	22.08.02
23	Rajasthan	Rs.29.64 to Rs.607.62	24/05/99	Rs74.10 to 1215.24	24.05.99	24.10.2005
24	Sikkim	Rs10.00 to 250.00 @@	2002	Rs10.00 to 250.00 @@	2002	10.3.2006
25	Tamil Nadu	Rs.2.77 to Rs.61.78	01/07/62	#	-	04.03.02
26	Tripura	Rs312.5	N.A.	Rs312.5	yet to start	26.10.2005
27	Uttaranchal	Rs49.00 to 143.00	18.9.1995	Rs99.00 to 287.00	18.9.1995	Apr.02
28	Uttar Pradesh	Rs.30.00 to Rs.474.00	18/09/95	Rs.15.00 to Rs.237.00	18.09.95	April,02
29	West Bengal	Rs.37.05 to Rs.123.50	06.04.1997	#	-	16.05.03
30	A & N Island	No Water rates	-	No Water rates	-	06.2.2004
31	Chandigarh	No Water rates	-	No Water rates	-	12.6.2001
32	Dadra & Nagar Haveli	Rs110.00 to 830.00	29.1.1996	Rs75.00 to 275.00	***	31.8.2005
33	Daman & Diu	Rs200	1980	Rs200	1980	03.1.2002
34	Lakshadweep	No Water rates	-	No Water rates	-	8.3.2006
35	Pondicherry	Rs12.50 to 37.50	31.3.1979	Rs10.00 to 30.00	31.3.1979	02.8.1979

Source : 1. Combined Finance and Revenue Accounts of Union and State Governments in India.

2. State finance Accounts 3. Central Water Commission, ISO (Financial Performance Unit).

Note : * : Subject to increase @ 15% to 25% P.A.. ** : Subject to increase @ 15% P.A.

: No separate rate for lift irrigation reported. \$ These rates shall escalate by 10% on the first of April every year. \$\$ Proposed to be revised as Rs 250-550/ha.

@ : The forous rates were Rs 12350 to741.00 w.e.f. 15.6.99.

@@ : The rates are as per the Sikkim irrigation water Tax Act 2002 which is still in the process of enforcement. There were no water rates prior to this Act.

Table: 4.13 Financial Aspects of Minor Irrigation Schemes, Soil & Water Conservation Schemes and Area Development Programmes - All India

(Unit: Rs.Crores)

Sl. No.	Year	Capital Outlay		Gross Receipts	Working Expenses			Total
		During The year	Upto The End of The year (Cumulative)		Minor Irrigation Schemes	Soil & Water Conservation Schemes	Area Development Programme	
1	2	3	4	5	6	7	8	9
1	1980-81	244.8	1764.1	26.5	258.8	83.6	138.4	480.9
2	1981-82	248.9	2013.0	40.5	267.1	87.0	136.3	490.4
3	1982-83	257.6	2267.6	31.8	332.9	103.6	160.3	596.8
4	1983-84	308.3	2575.9	38.3	403.5	126.4	205.2	735.1
5	1984-85	353.4	2929.7	38.6	406.7	136.6	239.8	783.1
6	1985-86	406.1	3335.8	56.1	471.8	163.1	248.3	883.3
7	1986-87	448.6	3784.4	46.7	666.1	187.4	306.9	1160.4
8	1987-88	503.9	4452.9	48.4	1013.6	250.3	173.9	1437.8
9	1988-89	534.5	4659.2	48.0	919.3	266.9	202.6	1388.8
10	1989-90	642.5	5695.0	38.5	915.2	297.4	180.5	1393.1
11	1990-91	603.1	6312.6	40.0	974.8	364.9	205.0	1544.7
12	1991-92	612.9	6817.8	57.4	1004.2	390.1	215.4	1609.7
13	1992-93	790.9	7716.8	94.5	950.4	485.2	218.7	1653.3
14	1993-94	832.6	8550.4	67.9	1459.5	509.4	256.1	2225.0
15	1994-95	963.5	10233.6	85.8	1617.5	577.6	291.6	2486.7
16	1995-96	1329.6	10353.9	102.8	1755.8	697.7	311.2	2764.7
17	1996-97	1104.7	10475.1	95.3	1913.6	769.4	301.5	2984.5
18	1997-98	1154.3	11589.0	117.2	1906.9	750.5	346.2	3003.6
19	1998-99	1331.2	13804.0	83.7	2663.4	932.2	341.7	3937.3
20	1999-00	1423.1	15736.2	104.2	1736.8	1230.8	353.6	3321.2
21	2000-01	1248.6	16976.8	101.1	2004.3	1117.6	398.4	3520.3
22	2001-02	1298.9	18275.7	94.9	2098.9	1071.7	271.6	3442.2

Source: 1. Combined Finance and Revenue Accounts of the Union and State Governments in India.

2. State Finance Accounts. 3. Central Water Commission, ISO (Financial Performance Unit

Note: Figures in col.3 and col.4 may not be compatible for some years due to accounting adjustments

Table : 4.14 Statewise Financial Aspects of Minor Irrigation Schemes, Soil & Water Conservation Schemes and Area Development Programmes.

(Rs.Crores)

Sl. No.	Name of the State/Uts.	Year	Capital Outlay		Gross Receipts	Working Expenses			
			During the Year	Upto The end of the Year		Minor Irrigation Schemes	Soil & Water Conservation Schemes	Area Development Programme	Total (C01.) 7+8+9
			(Cumulative)		(Cumulative)				
1	2	3	4	5	6	7	8	9	10
1.	Union Government	1997-98	8.4	34.1	22.1	71.9	31.2	3.5	106.6
		1998-99	4.3	38.4	1.4	84.4	39.7	2.0	118.1
		1999-00	4.8	43.2	4.2	94.0	37.0	3.0	134.0
		2000-01	2.1	45.2	1.8	104.6	38.0	2.8	145.4
		2001-02	3.1	48.4	1.8	148.9	15.4	1.4	165.7
2.	Arunachal Pradesh	1997-98	2.6	24.4	0.0	19.0	9.2	1.0	29.1
		1998-99	2.3	26.7	Neg.	16.0	Neg.	0.8	16.8
		1999-00	2.2	28.9	Neg.	3.1	9.4	1.0	13.5
		2000-01	2.6	31.4	0.0	27.4	9.9	0.9	38.2
		2001-02	2.2	33.6	0.0	30.7	9.9	2.1	42.7
3.	Goa, Daman & Diu	1997-98	3.8	63.7	0.2	4.0	0.6	1.7	6.3
		1998-99	5.4	69.1	0.2	5.7	0.8	2.2	8.7
		1999-00	7.5	76.6	0.2	6.6	0.8	2.1	9.5
		2000-01	4.0	80.6	0.4	9.6	1.0	1.9	12.5
		2001-02	3.7	84.4	0.2	6.9	1.0	1.8	9.7
4.	Mizoram	1997-98	2.0	7.7	0.0	1.4	5.2	0.0	6.7
		1998-99	3.5	10.2	0.1	1.9	4.8	0.0	6.7
		1999-00	6.6	24.4	0.1	3.8	6.2	0.1	10.1
		2000-01	2.6	19.4	0.1	2.8	6.3	0.0	9.1
		2001-02	5.0	24.4	0.1	2.7	6.9	0.4	10.0
5.	Pondicherry	1997-98	-	0.2	0.1	5.9	1.0	-	6.9
		1998-99	-	0.2	0.1	7.7	1.0	-	8.7
		1999-00	0.3	0.5	0.3	9.1	1.1	-	10.2
		2000-01	0.0	0.5	0.2	9.9	1.2	0.0	11.1
		2001-02	3.0	3.5	0.1	10.3	2.2	0.0	12.5
6.	Andhra Pradesh	1997-98	93.5	928.1	0.6	77.7	20.4	5.7	103.8
		1998-99	134.2	1062.3	0.7	56.1	20.7	5.3	82.1
		1999-00	129.5	1191.8	2.6	74.0	24.5	6.3	104.8
		2000-01	120.2	1312.0	2.8	120.0	22.2	6.6	148.8
		2001-02	142.9	1454.9	1.6	166.9	22.7	4.0	193.6
7.	Assam	1997-98	88.3	793.6	0.1	16.3	10.4	-	26.7
		1998-99	71.9	865.5	0.1	27.1	13.1	-	40.2
		1999-00	84.0	949.5	0.5	26.5	12.9	-	39.4
		2000-01	74.2	1023.7	0.2	55.4	13.9	0.0	69.3
		2001-02	82.5	1106.2	0.2	33.8	14.4	0.0	48.2
8.	Bihar	1997-98	15.4	334.9	0.9	140.3	9.9	13.3	163.5
		1998-99	18.8	353.6	0.1	131.3	9.4	12.1	152.8
		1999-00	27.3	380.9	0.8	160.5	12.4	15.0	187.9
		2000-01	17.8	398.6	0.7	129.2	7.9	28.5	165.6
		2001-02	11.6	410.2	0.8	124.6	2.7	6.1	133.4
9.	Chhattisgarh	2000-01	20.4	109.6	1.7	5.5	21.4	0.5	27.4
		2001-02	89.2	198.7	5.7	10.2	25.7	0.7	36.6

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Table : 4.14 Statewise Financial Aspects of Minor Irrigation Schemes, Soil & Water Conservation Schemes and Area Development Programmes.

(Rs.Crores)

Sl. No.	Name of the State/Uts.	Year	Capital Outlay		Gross Receipts	Working Expenses			
			During the Year	Upto The end of the Year		Minor Irrigation Schemes	Soil & Water Conservation Schemes	Area Development Programme	Total (Col. 7+8+9)
			(Cumulative)		(Cumulative)				
1	2	3	4	5	6	7	8	9	10
10	Gujarat	1997-98	83.8	381.0	2.9	134.3	46.5	21.3	202.1
		1998-99	114.3	495.3	2.7	170.3	61.2	27.2	258.7
		1999-00	112.1	607.4	2.7	212.8	79.6	23.4	315.8
		2000-01	175.5	782.9	2.3	195.9	88.0	16.6	300.5
		2001-02	81.3	864.1	2.8	102.0	58.0	6.5	166.5
11.	Haryana	1997-98	21.9	334.4	0.5	9.9	26.2	26.5	62.6
		1998-99	35.7	370.1	0.8	4.5	26.3	33.5	64.3
		1999-00	42.0	412.1	0.1	8.3	26.5	22.2	57.0
		2000-01	66.0	478.1	0.3	7.7	32.6	38.1	78.4
		2001-02	74.0	552.1	1.2	20.0	41.1	60.0	121.1
12.	Himachal Pradesh	1997-98	30.2	205.4	0.1	33.5	20.4	0.1	54.0
		1998-99	29.0	234.4	0.2	41.3	24.7	0.2	66.2
		1999-00	28.0	262.4	0.1	43.2	24.7	0.1	68.0
		2000-01	27.7	290.1	0.2	48.9	23.3	0.3	72.5
		2001-02	34.8	324.8	0.5	47.5	23.2	3.0	73.7
13.	Jammu & Kashmir	1997-98	14.9	229.5	0.3	55.6	26.1	8.8	90.5
		1998-99	15.5	245.0	0.4	69.4	34.1	2.7	106.2
		1999-00	6.3	251.3	0.5	82.5	38.1	10.2	130.8
		2000-01	8.6	260.2	0.6	85.0	53.4	10.5	148.9
		2001-02	16.6	276.8	0.8	85.7	60.7	11.2	157.6
14.	Jharkhand	2000-01	3.3	3.3	0.1	8.3	2.2	0.0	10.5
		2001-02	32.9	36.2	0.1	29.6	7.6	0.0	37.2
15.	Karnataka	1997-98	51.0	632.6	2.9	63.7	60.5	25.9	150.1
		1998-99	76.5	709.1	2.4	64.2	78.7	22.5	165.4
		1999-00	95.0	804.1	2.3	76.4	69.8	28.6	174.8
		2000-01	112.2	916.3	3.4	84.8	72.5	29.1	186.4
		2001-02	91.4	1007.7	3.3	86.0	73.2	35.7	194.9
16	Kerala	1997-98	22.5	172.4	0.9	39.7	14.3	21.1	75.1
		1998-99	18.8	191.3	0.5	62.6	13.7	21.1	97.4
		1999-00	22.5	213.8	0.6	59.9	23.9	16.2	100.0
		2000-01	17.6	231.3	0.7	56.3	15.5	20.1	91.9
		2001-02	15.0	246.4	0.9	40.9	13.8	1.0	55.7
17.	Madhya Pradesh	1997-98	105.1	1964.6	6.3	48.8	44.8	18.1	111.7
		1998-99	113.9	2078.5	5.3	38.7	57.1	23.4	119.2
		1999-00	113.3	2191.8	17.2	39.5	60.6	31.6	131.7
		2000-01	117.9	359.6	7.6	42.8	37.0	22.0	101.8
		2001-02	151.8	511.5	12.0	36.0	32.1	8.6	76.7
18	Maharashtra	1997-98	419.6	3097.0	5.9	242.2	102.9	-	345.1
		1998-99	350.0	3447.0	20.0	252.1	123.9	28.6	404.6
		1999-00	432.3	3879.3	5.5	163.1	186.9	19.0	369.0
		2000-01	164.8	4044.1	5.9	240.0	137.6	8.8	386.4
		2001-02	100.3	4144.4	6.0	226.0	106.9	6.6	339.5

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Table : 4.14 Statewise Financial Aspects of Minor Irrigation Schemes, Soil & Water Conservation Schemes and Area Development Programmes.

(Rs.Crores)

Sl. No.	Name of the State/Uts.	Year	Capital Outlay		Gross Receipts	Working Expenses			
			During the Year	Upto The end of the Year		Minor Irrigation Schemes	Soil & Water Conservation Schemes	Area Development Programme	Total (Col. 7+8+9)
			(Cumulative)		(Cumulative)				
1	2	3	4	5	6	7	8	9	10
19.	Manipur	1997-98	4.5	58.5	0.1	2.1	10.5	3.1	15.7
		1998-99	3.2	61.7	0.1	2.8	5.5	3.1	11.4
		1999-00	4.6	66.3	0.1	5.1	7.7	3.1	15.9
		2000-01	1.6	67.8	0.1	3.1	3.6	1.4	8.1
		2001-02	1.6	69.4	0.0	6.3	4.4	3.0	13.7
20.	Meghalaya	1997-98	3.6	29.9	0.1	7.4	17.6	-	25.0
		1998-99	4.0	33.9	0.1	7.6	17.4	-	25.0
		1999-00	4.0	37.9	0.2	7.2	17.2	-	24.4
		2000-01	4.1	42.0	0.2	9.0	20.0	0.0	29.0
		2001-02	6.7	48.7	0.2	8.4	21.5	0.0	29.9
21.	Nagaland	1997-98	-	2.2	0.0	10.1	10.2	-	20.3
		1998-99	0.2	2.4	-	5.9	12.5	-	18.4
		1999-00	-	2.4	-	10.9	10.5	-	21.4
		2000-01	0.0	2.4	0.0	12.3	12.4	0.0	24.7
		2001-02	0.2	2.5	0.0	13.5	11.7	0.0	25.2
22.	Orissa	1997-98	36.4	483.2	3.0	64.3	41.3	9.1	114.7
		1998-99	33.0	516.2	3.6	79.2	45.0	13.7	137.9
		1999-00	57.0	573.2	3.5	70.6	38.2	11.0	119.8
		2000-01	46.2	619.4	2.1	76.0	32.7	11.8	120.5
		2001-02	46.6	666.1	2.4	79.1	32.1	19.5	130.7
23.	Punjab	1997-98	11.4	125.4	10.7	21.8	25.6	-	47.4
		1998-99	34.1	159.5	0.1	28.3	29.8	-	58.1
		1999-00	32.7	192.2	0.1	38.4	25.4	-	63.8
		2000-01	81.9	274.1	0.5	50.0	26.8	0.0	76.8
		2001-02	80.5	354.6	0.4	56.3	29.7	0.0	86.0
24.	Rajasthan	1997-98	152.5	1264.2	16.1	55.7	47.0	53.8	156.5
		1998-99	149.0	1413.2	18.5	67.6	65.0	82.3	214.9
		1999-00	122.4	1535.6	11.5	65.6	61.3	88.4	215.3
		2000-01	108.3	1643.9	27.9	78.6	62.6	85.6	226.8
		2001-02	148.2	1792.2	25.0	68.2	58.1	86.6	212.9
25.	Tamil Nadu	1997-98	14.8	116.7	2.3	51.0	34.2	33.5	118.7
		1998-99	23.4	140.1	2.4	67.5	52.6	33.9	154.0
		1999-00	22.6	162.7	2.8	56.7	54.4	30.1	141.2
		2000-01	16.0	178.7	2.9	50.4	54.1	28.8	133.3
		2001-02	11.5	190.2	3.0	29.1	77.0	38.8	144.9
26.	Sikkim	1997-98	0.0	0.1	0.0	2.3	3.8	-	6.1
		1998-99	0.0	0.1	-	2.3	4.3	0.0	6.6
		1999-00	0.0	0.1	Neg.	2.6	4.0	Neg.	6.6
		2000-01	3.1	3.2	0.2	5.0	3.3	0.0	8.3
		2001-02	5.2	8.3	0.1	6.7	3.4	0.0	10.1
27.	Tripura	1997-98	-	25.7	0.0	16.3	5.9	-	22.2
		1998-99	-	25.7	-	-	-	-	-
		1999-00	14.2	39.9	0.1	6.8	11.6	-	18.4
		2000-01	16.7	56.7	0.0	12.7	9.7	0.0	22.4
		2001-02	27.1	83.8	0.0	15.4	6.2	0.0	21.6

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Table : 4.14 Statewise Financial Aspects of Minor Irrigation Schemes, Soil & Water Conservation Schemes and Area Development Programmes.

(Rs.Crores)

Sl. No.	Name of the State/Uts.	Year	Capital Outlay		Gross Receipts	Working Expenses			Total (C01.) 7+8+9
			During the Year	Upto The end of the Year		Minor Irrigation Schemes	Soil & Water Conservation Schemes	Area Development Programme	
			(Cumulative)		(Cumulative)				
1	2	3	4	5	6	7	8	9	10
28.	Uttaranchal	2000-01	0.0	-4.4	0.1	2.4	4.8	0.2	7.4
		2001-02	-0.2	-4.5	0.2	37.1	14.2	0.1	51.4
29.	Uttar Pradesh	1997-98	(-)0.3	1310.7	34.1	567.9	137.5	64.5	769.9
		1998-99	8.1	1318.8	35.1	621.7	172.9	45.4	840.0
		1999-00	4.2	1323.0	41.1	129.4	368.7	63.9	562.0
		2000-01	2.2	-2.1	28.0	130.9	268.1	75.9	474.9
		2001-02	10.3	8.1	17.7	276.2	28.1	57.9	362.2
30.	West Bengal	1997-98	12.0	383.2	5.5	159.7	8.4	2.2	170.3
		1998-99	32.9	416.1	6.6	207.5	15.5	3.4	226.4
		1999-00	47.2	463.3	6.7	258.6	16.9	3.5	279.0
		2000-01	25.4	488.7	6.5	33.3	21.0	3.8	58.1
		2001-02	16.4	505.1	7.5	288.0	11.8	3.8	303.6
31.	Delhi	1997-98	0.8	18.8	1.3	4.7	-	-	4.7
		1998-99	0.6	19.4	1.8	6.0	0.2	-	6.2
		1999-00	1.0	20.4	0.1	5.6	0.4	-	6.0
		2000-01	1.2	21.5	0.1	6.4	0.2	0.0	6.6
		2001-02	0.6	22.1	0.1	6.0	0.4	0.0	6.4

Source: 1. Combined Finance and Revenue Accounts of the Union and State Governments in India.

2. State Finance Accounts.3. Central Water Commission, ISO (Financial Performance Unit).

Remarks : UP & MP 's Unapportioned amount indicated against their heads

Table : 4.15 Details of Working Expenses on Minor Irrigation Schemes, Soil and Water Conservation Schemes and Area Development Programmes - All India

(Rs.Crores)

Sl. No.	Name of the Scheme/ Major Component	1990-91	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02
1	2	3	4	5	6	7	8	9	10
1	Minor Irrigation Schemes:								
	(i) Investigation and Development of Ground Water Resources	79.1	151.3	134.2	191.5	726.3	232.1	232.0	260.9
	(ii) Construction and Deepening of Wells and Tanks	74.4	95.8	77.6	177.7	112.4	104.1	138.3	177.1
	(iii) Tubewells	260.9	617.8	601.9	621.5	372.3	292.1	339.0	266.4
	(iv) Lift Irrigation Schemes/Works	88.2	190.4	206.8	190.9	251.6	167.3	261.8	234.9
	(v) Other Minor Irrigation Works	73.6	157.0	110.5	146.4	187.8	185.8	180.9	244.3
	(vi) Others	398.6	543.5	782.6	578.9	1013.0	755.4	852.3	915.3
	(vii) Sub Total	974.8	1755.8	1913.6	1906.9	2663.4	1736.8	2004.3	2098.9
2	Soil and Water Conservation Programmes								
	(i) Direction and Administration	29.3	50.7	50.1	56.7	58.8	86.9	75.7	102.0
	(ii) Soil Survey and Testing	24.2	46.4	29.2	39.4	41.9	124.7	122.3	129.5
	(iii) Soil Conservation Schemes	255.1	448.0	476.8	465.3	524.3	661.4	630.4	463.6
	(iv) Tribal Areas Sub-Plans	22.2	47.0	41.0	46.4	48.3	55.2	33.6	21.4
	(v) Others	34.1	105.6	172.3	142.7	259.0	302.6	255.6	355.2
	(vi) Sub Total	364.9	697.7	769.4	750.5	932.2	1230.8	1117.6	1071.7
3	Area Development Programmes								
	(i) Ayacut Development	130.2	168.1	166.0	190.1	198.3	188.6	176.7	133.7
	(ii) Dry Land Development	0.5	-	-	-	-	-	-	-
	(iii) Development of Hill Areas	-	-	-	-	-	-	-	-
	(iv) Others	74.3	143.1	135.5	156.1	143.4	165.0	217.0	137.9
	(v) Sub Total	205.0	311.2	301.5	346.2	341.7	353.6	398.4	271.6
	GRAND TOTAL (1+2+3)	1544.7	2764.7	2984.5	3003.6	3937.3	3321.2	3520.3	3442.2

Source : 1. Combined Finance and Revenue Accounts of the Union and State Govts. in India, 2. State Finance Accounts, 3. Central water Commission, ISO (Financial Performance Unit).

Table : 4.16 Statewise Details of Working Expenses on Minor Irrigation Schemes

(Rs.Crores)

Sl. No.	Name of the State/UT	Major *Component/ Total	Working Expenses During							
			1990-91	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02
1	2	3	4	5	6	7	8	9	10	11
1.	Union Government	(i) Investigation and Development of Ground Water Resources	23.3	44.5	49.0	63.2	77.8	86.1	94.5	129.6
		(ii) Other Minor Irrigation Works	-	-	-	-	-	0.9	1.4	1.8
		(iii) Total	37.1	53.6	68.0	71.9	84.4	94.0	104.6	149.0
2.	Arunachal Pradesh	(i) Direction and Administration	-	-	4.2	5.3	7.7	2.0	9.4	10.6
		(ii) Other Minor Irrigation Works	6.1	-	13.1	10.8	7.1	1.1	3.9	5.6
		(iii) Total	8.6	15.8	18.3	19.0	16.0	3.1	27.4	30.7
3	Delhi	(i) Direction and Administration	-	-	-	-	-	1.0	1.0	1.0
		(ii) Other Minor Irrigation Works	-	3.0	2.8	-	5.2	4.6	5.4	5.0
		(iii) Total	-	3.5	3.4	-	6.0	5.6	6.4	6.0
4.	Goa,Daman & Diu	(i) Lift Irrigation Schemes/Works	0.5	1.1	1.6	1.7	2.9	3.4	5.2	3.0
		(ii) Other Minor Irrigation Works	-	-	0.4	0.3	0.3	-	3.7	3.0
		(iii) Total	1.2	2.7	4.0	4.0	5.7	6.6	9.6	6.9
5.	Mizoram	(i) Other Minor Irrigation Works	-	-	-	-	-	3.5	0.0	0.0
		(ii) Total	2.8	2.5	2.3	1.4	1.9	3.8	2.8	2.7
6.	Pondicherry	(i) Other Minor Irrigation Works	-	-	-	-	-	0.1	8.8	0.8
		(ii) Other Expenditure	2.4	4.9	3.8	5.8	7.6	9.0	1.1	9.5
		(iii) Total	2.5	5.0	4.9	5.9	7.7	9.1	9.9	10.3
7.	Andhra Pradesh	(i) Investigation and Development of Ground Water Resources	3.5	6.0	6.5	9.8	10.0	10.5	14.3	13.7
		(ii) Construction and Deepening of Wells and Tanks	27.5	20.5	10.9	34.6	19.7	32.2	73.0	122.4
		(iii) Other Minor Irrigation Works	-	-	12.9	15.8	13.1	2.3	3.1	10.7
		(iv) Lift Irrigation Schemes/Works	1.7	1.9	1.5	2.2	1.3	2.0	2.1	2.8
		(v) Tubewells	7.5	16.5	9.2	15.0	11.5	12.0	12.0	0.0
		(vi) Total	48.8	59.7	41.1	77.7	56.1	74.0	120.0	166.9
8.	Assam	(i) Lift Irrigation Schemes/Works	7.4	5.7	7.3	8.9	13.5	11.2	4.4	15.8
		(ii) Other Minor Irrigation Works	-	-	3.4	2.1	4.3	4.1	14.9	15.0
		(iii) Total	13.8	11.2	15.1	16.3	27.1	26.5	55.4	33.8
9.	Bihar	(i) Construction and Deepening of Wells and Tanks	-	-	-	-	-	-	0.0	0.0
		(ii) Tubewells	61.6	70.5	78.6	75.6	69.4	84.1	74.5	90.1
		(iii) Total	95.7	102.3	122.5	140.3	131.3	160.5	129.2	124.6

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Table : 4.16 Statewise Details of Working Expenses on Minor Irrigation Schemes

(Rs.Crores)

Sl. No.	Name of the State/UT	Major *Component/ Total	Working Expenses During							
			1990-91	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02
1	2	3	4	5	6	7	8	9	10	11
10.	Gujarat	(i) Direction and Administration	-	-	-	-	-	-	22.6	18.7
		(ii) Construction and Deepening of Wells and Tanks	7.1	22.2	15.8	24.4	25.9	15.2	14.3	6.3
		(iii) Tubewells	24.1	50.5	40.1	33.0	40.4	43.6	58.3	41.8
		(iv) Total	49.4	123.5	105.6	134.3	170.3	212.8	195.9	102.0
11.	Haryana	(i) Investigation and Development of Ground Water Resources	0.9	1.5	5.2	9.9	4.1	2.7	2.70	2.80
		(ii) Other Minor Irrigation Works	-	-	1.6	-	-	0.8	7.6	17.3
		(iii) Total	25.4	8.9	6.8	9.9	4.1	8.3	7.7	20.0
12.	Himachal Pradesh	(i) Lift Irrigation Schemes/Works	6.8	8.8	8.8	11.7	14.5	15.5	22.2	18.2
		(ii) Other Minor Irrigation Works	-	-	-	-	-	21.3	26.8	29.4
		(iii) Total	14.5	25.3	27.0	33.5	41.3	43.2	48.9	47.5
13.	Jammu & Kashmir	(i) Lift Irrigation Schemes/Works	1.3	0.8	Neg.	0.8	0.8	0.5	0.6	0.6
		(ii) Other Minor Irrigation Works	-	-	-	-	-	79.0	80.1	77.0
		(iii) Total	19.7	41.9	49.4	55.6	69.4	82.5	85.0	85.7
14.	Karnataka	(i) Direction and Administration	-	-	6.5	12.8	12.5	15.3	10.2	17.5
		(ii) Construction and Deepening of Wells and Tanks	5.6	10.5	14.8	17.4	15.4	17.3	15.5	22.4
		(iii) Total	39.2	45.5	55.3	63.7	64.2	76.4	54.8	86.0
15.	Kerala	(i) Lift Irrigation Schemes/Works	2.3	7.3	2.5	2.5	2.5	2.7	2.5	2.6
		(ii) Other Minor Irrigation Works	-	-	25.8	15.6	39.0	21.8	33.7	27.3
		(iii) Total	21.2	51.5	44.6	39.7	62.6	59.8	56.3	48.7
16.	Madhya Pradesh	(i) Construction and Deepening of Wells and Tanks	19.1	17.0	14.5	15.2	9.2	9.1	9.8	7.8
		(ii) Other Minor Irrigation Works	-	-	23.6	27.2	28.8	29.1	0.7	0.3
		(iii) Total	36.4	41.3	42.7	48.8	38.7	39.5	42.8	36.0
17.	Maharashtra	(i) Investigation and Development of Ground Water Resources	2.8	6.6	7.3	7.9	8.5	13.6	11.2	9.4
		(ii) Lift Irrigation Schemes/Works	3.6	1.4	0.8	0.5	0.5	0.7	0.2	0.4
		(iii) Other Minor Irrigation Works	-	-	28.5	27.6	21.6	132.7	228.6	204.2
		(iv) Total	94.8	237.7	243.7	242.2	252.1	163.1	240.0	226.0
18.	Manipur	(i) Other Minor Irrigation Works	0.1	-	-	-	-	1.2	0.0	6.2
		(ii) Total	0.9	0.6	1.9	2.1	2.8	5.1	3.1	6.3

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Table : 4.16 Statewise Details of Working Expenses on Minor Irrigation Schemes

(Rs.Crores)

Sl. No.	Name of the State/UT	Major *Component/ Total	Working Expenses During							
			1990-91	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02
1	2	3	4	5	6	7	8	9	10	11
19.	Meghalaya	(i) Lift Irrigation Schemes/Works	0.1	Neg.	0.1	0.2	0.2	0.2	0.2	0.1
		(ii) Other Minor Irrigation Works	-	-	-	-	-	6.0	8.2	7.1
		(iii) Total	4.0	4.5	5.4	7.4	7.6	7.2	9.0	8.4
20	Nagaland	(i) Other Minor Irrigation Works	-	-	-	-	-	1.9	2.0	3.2
		(ii) Total	4.5	6.7	8.2	10.1	5.9	10.9	12.3	13.5
21	Orissa	(i) Lift Irrigation Schemes/Works	17.5	46.8	79.0	44.4	51.4	43.0	43.1	38.3
		(ii) Other Minor Irrigation Works	-	-	10.0	7.9	9.6	13.7	18.7	26.1
		(iii) Total	29.3	61.8	103.2	64.3	79.2	70.6	76.0	79.1
22.	Punjab	(i) Tubewells	13.8	17.2	23.5	18.0	23.1	32.8	10.1	14.2
		(ii) Total	14.5	22.6	24.4	21.8	28.3	38.4	50.0	56.3
23.	Rajasthan	(i) Investigation and Development of Ground Water Resources	2.3	3.6	4.2	4.4	6.2	6.2	6.5	6.2
		(ii) Construction and Deepening of Wells and Tanks	-	-	24.4	25.2	27.2	26.4	0.0	0.0
		(iii) Total	43.6	53.4	55.2	55.7	67.6	65.6	78.6	68.2
24.	Tamil Nadu	(i) Investigation and Development of Ground Water Resources	6.2	1.9	1.9	2.0	2.2	2.2	2.4	2.3
		(ii) Construction and Deepening of Wells and Tanks	13.5	23.6	29.2	34.0	48.8	26.0	20.1	2.1
		(iii) Total	32.7	46.1	41.8	51.0	67.5	56.7	50.4	29.1
25.	Sikkim	(i) Other Minor Irrigation Works	-	-	-	-	-	2.6	4.9	6.6
		(ii) Total	1.9	2.9	3.1	2.3	2.3	2.6	5.0	6.7
26.	Tripura	(i) Lift Irrigation Schemes/Works	4.9	4.5	6.6	5.2	N.A.	3.6	6.3	4.1
		(ii) Total	10.5	6.6	9.6	16.3	N.A.	6.8	12.7	15.4
27.	Uttar Pradesh	(i) Tubewells	115.1	410.3	390.4	407.3	138.5	16.6	97.6	26.2
		(ii) Lift Irrigation Schemes/Works	2.7	50.5	46.2	47.9	74.0	3.0	8.3	15.1
		(iii) Total	237.4	609.7	723.3	567.9	621.7	129.4	130.9	276.2
28	West Bengal	(i) Tubewells	23.4	34.2	39.3	45.4	62.3	64.9	65.2	64.5
		(ii) Lift Irrigation Schemes/Works	30.5	50.9	47.3	52.3	70.0	70.7	76.0	75.6
		(iii) Total	78.6	112.2	130.2	159.7	207.5	258.6	333.4	288.0

Source: 1. Combined Finance and Revenue Accounts of Union and State Govts. of India, 2. State Finance Accounts.
3. Central Water Commission, ISO (Financial Performance Unit).

Remarks * : Only major components of total expenditure on minor irrigation schemes are separately presented along with the total expenditure.

Table : 4.17 Statewise Details of Working Expenses on Soil and Water Conservation Programme

(Rs.Crores)

Sl. No.	Name of the State/UT	Major * Component/ Total	Working Expenses (including Interest) during							
			1990-91	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02
1	2	3	4	5	6	7	8	9	10	11
1	Union Government	(i) Soil Survey and Testing	2.7	3.8	3.9	5.2	6.0	6.4	7.4	7.3
		(ii) Soil Conservation Schemes	1.0	2.3	2.2	2.3	2.8	3.0	3.1	3.5
		(iii) Assistance to Indian Council of Agricultural Research	-	-	-	-	-	-	0.2	-
		(iv) Total	6.9	21.0	21.7	31.2	39.7	37.0	38.0	15.4
2	Arunachal Pradesh	(i) Direction and Administration	1.2	2.6	3.3	4.7	6.1	6.0	6.6	6.7
		(ii) Soil Conservation Schemes	0.1	-	2.1	2.1	1.2	-	-	-
		(iii) Total	6.1	10.3	8.3	9.2	9.4	9.4	9.9	9.9
3	Delhi	(i) Soil Conservation Schemes	-	0.2	0.2	-	0.2	0.4	0.2	0.4
		(ii) Total	-	0.2	0.2	-	0.2	0.4	0.2	0.4
4	Goa,Daman & Diu	(i) Direction and Administration	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.3
		(ii) Soil Conservation Schemes	0.1	0.3	0.4	0.4	0.5	0.5	0.7	0.7
		(iii) Total	0.3	0.5	0.6	0.6	0.8	0.8	1.0	1.0
5	Mizoram	(i) Direction and Administration	2.6	3.2	3.4	3.4	3.6	4.8	4.9	5.0
		(ii) Soil Conservation Schemes	0.5	0.4	2.1	1.4	0.8	0.5	0.5	0.8
		(iii) Total	4.7	5.2	6.1	5.2	4.8	6.2	6.3	6.9
6	Pondicherry	(i) Soil Survey and Testing	0.1	0.1	0.1	-	-	0.1	0.1	-
		(ii) Soil Conservation Schemes	0.2	0.6	0.4	0.5	0.5	0.5	0.6	0.6
		(iii) Total	0.3	0.9	0.8	1.0	1.0	1.1	1.2	2.2
7	Andhra Pradesh	(i) Soil Survey and Testing	1.6	2.8	3.0	3.5	3.3	3.8	3.9	3.7
		(ii) Soil Conservation Schemes	7.3	12.3	15.2	16.5	17.0	20.3	18.0	18.6
		(iii) Tribal Areas Sub-Plans	-	0.6	0.6	0.2	0.1	0.2	0.2	0.3
		(iv) Total	10.8	16.0	18.8	20.4	20.7	24.5	22.2	22.7
8	Assam	(i) Direction and Administration	3.1	6.2	6.7	7.7	10.1	10.7	11.6	12.3
		(ii) Soil Conservation Schemes	2.1	1.2	2.3	2.1	2.5	0.9	0.8	0.9
		(iii) Total	7.8	9.1	9.6	10.4	13.1	12.9	13.9	14.4

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Table : 4.17 Statewise Details of Working Expenses on Soil and Water Conservation Programme

(Rs.Crores)

Sl. No.	Name of the State/UT	Major * Component/ Total	Working Expenses (including Interest) during							
			1990-91	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02
1	2	3	4	9	10	11	12	13	14	15
9	Bihar	(i) Soil Conservation Schemes	5.9	6.8	5.1	6.6	7.0	9.6	5.8	1.6
		(ii) Tribal Areas Sub-Plans	3.9	2.7	0.6	1.5	0.3	-	-	-
		(iii) Total	10.8	10.9	7.2	9.9	9.4	12.4	7.9	2.7
10	Chhattisgarh	(i) Soil Survey & Testing	-	-	-	-	-	-	0.2	0.7
		(ii) Soil Conservation Schemes	-	-	-	-	-	-	20.7	23.9
		(iii) Tribal Areas Sub-Plans	-	-	-	-	-	-	0.5	1.0
		(iv) Total	-	-	-	-	-	-	21.4	25.7
11	Gujarat	(i) Soil Conservation Schemes	18.5	24.6	29.5	28.7	40.4	53.8	67.2	43.0
		(ii) Tribal Areas Sub-Plans	7.9	8.0	11.9	16.7	19.5	24.4	15.4	10.8
		(iii) Total	27.0	36.1	42.2	46.5	61.2	79.6	88.0	58.0
12	Haryana	(i) Direction and Administration	1.1	1.9	2.0	2.3	3.8	3.1	3.4	4.1
		(ii) Soil Conservation Schemes	7.7	10.8	10.0	9.8	13.7	14.6	12.6	11.6
		(iii) Total	11.1	23.4	26.2	26.2	26.3	26.5	32.6	41.1
13	Himachal Pradesh	(i) Soil Conservation Schemes	7.9	17.7	16.3	18.1	22.0	21.5	19.7	20.2
		(ii) Tribal Areas Sub-Plans	0.5	1.2	1.8	1.9	2.2	2.7	3.0	2.3
		(iii) Total	8.5	19.2	18.4	20.4	24.7	24.7	23.3	23.2
14	Jharkhand	(i) Soil Survey and Testing	-	-	-	-	-	-	0.4	1.6
		(ii) Soil Conservation Schemes	-	-	-	-	-	-	1.7	5.6
		(iii) Total	-	-	-	-	-	-	2.2	7.6
15	Jammu & Kashmir	(i) Direction and Administration	2.0	-	-	-	-	-	-	-
		(ii) Soil Conservation Schemes	4.3	20.1	17.2	3.3	4.3	34.8	51.6	6.3
		(iii) Total	6.7	20.6	17.8	26.1	34.1	38.1	53.4	60.7
16	Karnataka	(i) Soil Conservation Schemes	7.0	34.3	38.5	41.7	53.6	50.1	41.0	47.9
		(ii) Soil survey & Testing	-	0.5	0.5	0.6	0.6	0.8	0.8	0.8
		(iii) Total	30.0	56.5	57.1	60.5	78.7	69.8	72.5	73.2
17	Kerala	(i) Direction and Administration	0.6	1.3	1.3	1.5	1.5	1.7	1.5	1.3
		(ii) Soil Survey and Testing	0.7	1.4	1.6	1.6	1.7	2.3	2.2	1.9
		(iii) Soil Conservation Schemes	3.8	8.7	11.5	10.8	10.2	19.6	11.5	10.2
		(iv) Total	5.3	13.0	16.9	14.3	13.7	23.9	15.5	13.8

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Table : 4.17 Statewise Details of Working Expenses on Soil and Water Conservation Programme

(Rs.Crores)

Sl. No.	Name of the State/UT	Major * Component/ Total	Working Expenses (including Interest) during							
			1990-91	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02
1	2	3	4	5	6	7	8	9	10	11
18	Madhya Pradesh	(i) Soil Survey and Testing	1.2	2.2	2.5	3.0	3.6	3.4	1.6	2.7
		(ii) Soil Conservation Schemes	16.2	21.0	26.8	28.7	38.0	41.3	12.5	27.3
		(iii) Tribal Areas Sub-Plans	4.8	8.8	11.0	12.9	15.1	15.6	3.4	1.8
		(iv) Total	22.4	32.1	40.5	44.8	57.1	60.6	15.6	32.1
19	Maharashtra	(i) Soil Survey and Testing	2.7	5.2	5.6	6.1	6.0	7.9	8.0	5.4
		(ii) Soil Conservation Schemes	37.4	56.6	78.4	84.9	106.5	168.6	131.3	69.2
		(iii) Total	43.2	71.2	94.9	102.9	123.9	186.9	136.7	106.9
20	Manipur	(i) Direction and Administration	2.3	0.6	2.2	3.7	2.6	4.1	2.0	2.5
		(ii) Soil Survey and Testiang	0.3	0.3	0.6	0.4	0.6	0.8	0.5	0.4
		(iii) Soil Conservation Schemes	1.2	0.6	7.2	6.4	2.4	2.8	1.1	1.5
		(iv) Total	3.8	1.6	10.1	10.5	5.5	7.7	3.6	4.4
21	Meghalaya	(i) Direction and Administration	3.1	5.8	6.8	8.2	9.0	9.6	10.0	11.0
		(ii) Soil Conservation Schemes	2.9	4.4	3.3	4.2	3.6	2.3	1.7	0.8
		(iii) Total	10.9	16.3	15.4	17.6	17.4	17.2	19.9	21.5
22	Nagaland	(i) Direction and Administration	1.5	3.2	3.9	2.1	2.4	2.9	3.4	3.4
		(ii) Soil Survey and Testing	0.3	0.4	0.5	0.4	0.6	0.5	0.6	0.8
		(iii) Soil Conservation Schemes	9.3	4.7	8.6	6.4	9.4	6.8	8.2	7.2
		(iv) Total	11.2	9.6	14.3	10.2	12.5	10.5	12.4	11.7
23	Orissa	(i) Direction and Administration	2.3	8.8	13.0	15.2	15.0	9.6	7.9	7.2
		(ii) Soil Conservation Schemes	4.3	19.7	17.4	11.3	16.8	16.5	12.0	12.3
		(iii) Tribal Areas Sub-Plans	2.8	21.8	15.1	13.1	10.7	10.0	9.9	3.5
		(iv) Total	10.1	51.9	46.6	41.3	45.0	38.2	32.7	32.1

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Table : 4.17 Statewise Details of Working Expenses on Soil and Water Conservation Programme

(Rs.Crores)

Sl. No.	Name of the State/UT	Major * Component/ Total	Working Expenses (including Interest) during							
			1990-91	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02
1	2	3	4	5	6	7	8	9	10	11
24	Punjab	(i) Soil Survey and Testing	0.5	0.9	1.0	1.2	1.4	1.4	1.4	-
		(ii) Soil Conservation Schemes	8.5	18.1	20.7	23.5	27.3	23.3	24.8	1.6
		(iii) Total	9.3	19.9	22.4	25.6	29.8	25.4	26.8	29.7
25	Rajasthan	(i) Soil Survey and Testing	0.4	0.6	0.6	0.7	1.0	1.0	1.1	1.0
		(ii) Soil Conservation Schemes	17.5	77.3	53.5	44.7	62.0	58.1	59.3	54.9
		(iii) Total	18.6	79.0	55.4	47.0	65.0	61.3	62.6	58.1
26	Tamil Nadu	(i) Soil Survey and Testing	2.9	6.0	4.4	6.0	8.4	9.2	9.1	9.1
		(ii) Soil Conservation Schemes	7.9	24.0	26.3	26.8	42.6	42.6	38.8	43.0
		(iii) Total	12.6	30.6	31.5	34.2	52.6	54.4	54.1	77.0
27	Sikkim	(i) Direction and Administration	0.7	1.1	1.3	1.6	3.1	2.7	2.6	2.7
		(ii) Soil Conservation Schemes	2.5	2.0	3.3	1.9	1.2	1.3	0.6	0.7
		(iii) Total	3.5	3.3	4.9	3.8	4.3	4.0	3.3	3.4
28	Uttaranchal	(i) Soil Survey and Testing	-						3.3	14.0
		(ii) Soil Conservation Schemes							1.5	-
		(iii) Total							4.8	14.2
29	Tripura	(i) Direction and Administration	2.5	4.0	4.9	4.6	N.A.	9.9	8.0	4.2
		(ii) Soil Conservation Schemes	1.9	1.1	0.9	1.3	N.A.	1.7	1.6	2.0
		(iii) Total	5.8	5.0	5.9	5.9	N.A.	11.6	9.7	6.2
30	Uttar Pradesh	(i) Direction and Administration	0.6	0.9	1.0	1.4	1.5	1.7	1.9	2.0
		(ii) Soil Survey and Testing	3.6	6.5	6.9	8.9	7.7	70.1	46.8	47.5
		(iii) Soil Conservation Schemes	63.1	67.1	76.8	67.7	87.3	52.1	43.0	6.9
		(iv) Total	70.2	121.3	177.4	137.5	173.0	368.7	268.1	280.7
31	West Bengal	(i) Soil Survey and Testing	0.6	0.9	1.1	1.8	1.1	1.8	1.9	1.8
		(ii) Soil Conservation Schemes	6.6	11.3	16.4	13.2	6.7	13.9	18.1	9.0
		(iii) Tribal Areas Sub-Plans	0.4	0.5	0.2	0.1	0.3	0.1	0.1	0.1
		(iv) Total	7.9	12.8	18.0	15.5	8.4	16.9	21.0	11.8

Source: 1. Combined Finance and Revenue Accounts of the Union and State Govts. In India.

2. Finance Accounts. 3. Central Water Commission, ISO (F

Remarks : * Only major components of total expenditure on soil & water conservation programmes are separately presented with the total expenditure. Excludes Rs.3.5 crore spend from the contingency fund during the period 9.11.2002 to 31.3.2003

Table : 4.18 Statewise Details of Working Expenses on Area Development Programmes

(Rs.Crores)

Sl. No.	Name of the State/UT	Major * Component/Total	Working Expenses (including Interest) during							
			1990-91	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02
1	2	3	4	5	6	7	8	9	10	11
1.	Union Government	(i) Dry Land Development	-	-	-	-	-	-	-	-
		(ii) Development of Hill Areas	-	-	-	-	-	-	-	-
		(iii) Total	0.1	1.9	2.4	3.5	2.0	3.0	2.8	1.4
2.	Arunachal Pradesh	(i) Total	0.1	0.5	0.9	1.0	0.8	1.0	0.9	2.1
3.	Goa, Daman & Diu	(i) Development of Hill Areas	-	-	-	-	-	-	-	-
		(ii) Total	1.1	1.2	1.6	1.6	2.2	2.1	1.9	1.8
4.	Mizoram	(i) Total	-	Neg	0.1	0.0	0.0	Neg.	-	0.4
5.	Pondicherry	(i) Total	-	-	-	-	-	-	-	-
6.	Andhra Pradesh	(i) Ayacut Development	-	4.6	-	-	-	4.2	-	-
		(ii) Dry Land Development	-	-	-	-	-	-	-	-
		(iii) Total	2.8	5.0	5.1	5.7	5.3	6.3	6.6	4.0
7.	Assam	(ii) Total	-	-	-	-	-	-	-	-
8.	Bihar	(i) Ayacut Development	16.8	20.2	14.1	13.0	11.8	14.7	-	6.1
		(ii) Total	17.0	20.5	14.4	13.3	12.1	15.0	28.3	6.2
9	Chhattisgarh	(i) Ayacut Development	-	-	-	-	-	-	-	-
		(ii) Total	-	-	-	-	-	-	0.5	0.7
10	Gujarat	(i) Ayacut Development	-	17.6	17.0	16.2	21.4	16.6	-	-
		(ii) Total	14.9	21.5	21.0	21.3	27.3	23.4	16.6	6.5
11	Haryana	(i) Ayacut Development	10.2	36.6	25.0	22.4	7.1	22.2	-	-
		(ii) Dry Land Development	-	-	-	-	-	-	-	-
		(iii) Total	12.0	36.6	46.5	26.5	33.5	22.2	38.1	60.0
12	Himachal Pradesh	(i) Total	0.0	0.3	0.2	0.1	0.2	0.1	0.3	0.3
13	Jammu & Kashmir	(i) Dry Land Development	-	-	-	-	-	-	-	-
		(ii) Total	3.9	6.5	8.8	8.8	2.7	10.2	10.5	11.2
14	Jharkhand	(i) Dry Land Development	-	-	-	-	-	-	-	-
		(ii) Total	-	-	-	-	-	-	-	-
15	Karnataka	(i) Ayacut Development	-	22.4	-	-	-	28.4	-	-
		(ii) Development of Hill Areas	-	-	-	-	-	-	-	-
		(iii) Total	25.2	27.3	0.3	25.9	22.5	28.6	29.1	35.7

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Table : 4.18 Statewise Details of Working Expenses on Area Development Programmes

(Rs.Crores)

Sl. No.	Name of the State/UT	Major * Component/Total	Working Expenses (including Interest) during							
			1990-91	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02
1	2	3	4	5	6	7	8	9	10	11
16	Kerala	(i) Total	16.1	20.8	10.6	21.1	21.1	16.2	20.1	0.1
17	Madhya Pradesh	(i) Ayacut Development	8.0	2.3	-	-	-	14.3	-	-
		(ii) Dry Land Development	-	-	-	-	-	-	-	-
		(iii) Total	13.7	41.3	42.7	18.1	23.4	31.6	22.1	8.6
18	Maharashtra	(i) Ayacut Development	-	34.1	-	-	-	17.9	-	-
		(ii) Development of Hill Areas	-	-	-	-	-	-	-	-
		(iii) Total	35.4	35.0	28.6	31.8	28.5	19.0	8.8	6.6
19	Manipur	(i) Dry Land Development	0.5	-	-	-	-	-	-	-
		(ii) Total	1.0	2.5	3.1	3.1	3.1	3.1	1.4	3.0
20	Meghalaya	(i) Total	-	-	-	-	-	-	-	-
21	Nagaland	(i) Total	-	-	-	-	-	-	-	-
22	Orissa	(i) Ayacut Development	-	7.9	-	-	-	11.0	-	-
		(ii) Total	4.4	8.3	-	-	-	11.0	11.8	19.5
23	Punjab	(i) Total	-	-	-	-	-	-	NIL	-
24	Rajasthan	(i) Ayacut Development	23.6	76.6	50.5	53.8	82.3	88.4	-	-
		(ii) Development of Desert Areas	-	-	-	-	-	-	-	-
		(iii) Total	23.8	76.6	50.5	53.8	82.3	88.4	85.6	86.6
25	Tamil Nadu	(i) Dry Land Development	-	-	-	-	-	-	-	-
		(ii) Development of Hill Areas	-	-	-	-	-	-	-	-
		(iii) Total	7.8	15.3	18.7	33.5	33.9	30.1	28.8	38.8
26	Sikkim	(i) Dry Land Development	-	-	-	-	0.0	-	-	-
		(ii) Total	-	Neg.	-	-	0.0	Neg.	-	-
27	Tripura	(i) Total	-	-	-	-	-	-	-	-
28	Uttar Pradesh	(i) Ayacut Development	36.2	-	-	-	-	63.9	-	-
		(ii) Total	36.4	49.8	48.1	64.5	45.5	63.9	76.0	57.9
29	Uttaranchal	(i) Dry Land Development	-	-	-	-	-	-	-	-
		(ii) Development of Hill Areas	-	-	-	-	-	-	-	-
		(iii) Total	-	-	-	-	-	-	0.2	0.1
30	West Bengal	(i) Ayacut Development	-	-	-	-	-	-	-	-
		(ii) Development of Hill Areas	-	-	-	-	-	-	-	-
		(iii) Total	1.3	1.7	2.0	2.2	3.4	3.5	3.8	3.8
31	Delhi	(i) Total	-	-	-	-	-	-	-	-

Source: 1. Combined Finance and Revenue Accounts of the union and State Governments in India

2. State Finance Accounts. 3. Central Water Commission, ISO (Financial Performance Unit)

* Only major components of total expenditure on Area Development Programmes are presented alongwith the total expenditure.

Table : 4.19 Receipts from Minor Irrigation, Soil and Water Conservation and Area Development Schemes - All India

(Rs.Crores)

Sl. No.	Name of Scheme/ Major Component	1990-91	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02
1	2	3	4	5	6	7	8	9	10
1.	Tubewells	3.6	10.8	8.0	3.6	2.6	16.1	32.3	21.7
2.	Deepening of Wells and Tanks	6.2	23.4	23.4	16.3	17.8	3.3	1.5	2.7
3.	Lift Irrigation Schemes	5.1	24.5	32.1	4.9	14.6	6.0	5.7	5.7
4.	Soil Conservation Schemes	-	-	8.2	7.8	8.3	9.1	11.3	0.0
5.	Area Development Programmes	1.0	0.5	0.0	0.1	0.0	-	0.0	0.0
Total		40.0	102.8	103.9	105.2	101.4	94.3	98.0	120.7

Sources : 1. Combined Finance and Revenue Accounts of Union and State Govts. of India.

2. State Finance Accounts.

3. Central Water Commission, ISO (Financial Performance Unit)

Note : Only major components of gross receipts from these schemes along with total are given in the statement.

Table : 4.20 Statewise Details of Gross Receipts From Minor Irrigation Schemes, Soil & Water Conservation Schemes and Area Development Programmes

(Rs Crores)

Sl. No.	Name of the State/UT	Name of the Scheme	Gross Receipt During							
			1990-91	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02
1	2	3	4	5	6	7	8	9	10	11
1	Union Government	(i) Minor Irrigation Schemes	0.68	0.51	0.80	22.08	1.34	4.2	175.62	0.17
		(ii) Soil Conservation Schemes	-	-	-	-	-	-	-	-
		(iii) Area Development Programmes	-	-	-	-	-	-	-	-
2	Arunachal Pradesh	(i) Minor Irrigation Schemes	0.26	0.27	0.04	0.02	Neg.	-	2.34	1.8
		(ii) Soil Conservation Schemes	-	-	-	-	-	-	-	-
		(iii) Area Development Programmes	-	-	-	-	-	-	-	-
3	Goa, Daman & Diu	(i) Minor Irrigation Schemes	0.07	0.16	0.13	0.20	0.16	0.10	35.45	19.6
		(ii) Soil Conservation Schemes	-	-	0.05	0.02	0.05	Neg.	2.43	16.6
		(iii) Area Development Programmes	-	-	0.02	0.06	0.02	0.03	-	-
4	Mizoram	(i) Minor Irrigation Schemes	0.04	0.02	0.03	0.04	Neg.	Neg.	6.51	4.06
		(ii) Soil Conservation Schemes	-	-	-	-	-	0.11	-	2.14
		(iii) Area Development Programmes	-	-	-	-	-	-	-	-
5	Pondicherry	(i) Minor Irrigation Schemes	0.06	0.10	0.12	0.10	0.10	0.03	22.44	12.87
		(ii) Soil Conservation Schemes	-	-	-	-	-	-	-	-
		(iii) Area Development Programmes	-	-	-	-	-	-	-	-
6	Andhra Pradesh	(i) Minor Irrigation Schemes	1.02	2.10	6.96	2.70	2.55	2.50	279.22	162.76
		(ii) Soil Conservation Schemes	-	-	0.02	0.02	0.01	0.01	2.34	0.96
		(iii) Area Development Programmes	0.15	-	-	-	-	-	-	-

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Table : 4.20 Statewise Details of Gross Receipts From Minor Irrigation Schemes, Soil & Water Conservation Schemes and Area Development Programmes

(Rs Crores)

Sl. No.	Name of the State/UT	Name of the Scheme	Gross Receipt During							
			1990-91	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02
1	2	3	4	5	6	7	8	9	10	11
7	Assam	(i) Minor Irrigation Schemes	-	0.12	0.09	0.10	0.07	0.05	13.69	1.02
		(ii) Soil Conservation Schemes	-	-	-	-	-	-	2.81	0.35
		(iii) Area Development Programmes	-	-	-	-	-	-	-	-
8	Bihar	(i) Minor Irrigation Schemes	1.86	0.41	0.92	0.59	0.53	0.83	72.42	80.43
		(ii) Soil Conservation Schemes	-	-	-	0.34	0.03	-	51.28	0
		(iii) Area Development Programmes	-	-	-	-	-	-	-	-
9	Chhattisgarh	(i) Minor Irrigation Schemes	-	-	-	-	-	-	151.65	518.22
		(ii) Soil Conservation Schemes	-	-	-	-	-	-	16.27	55.5
		(iii) Area Development Programmes	-	-	-	-	-	-	-	-
10	Gujarat	(i) Minor Irrigation Schemes	0.10	0.57	3.30	2.90	2.70	2.74	232.24	144.28
		(ii) Soil Conservation Schemes	-	-	-	-	-	-	-	-
		(iii) Area Development Programmes	0.14	Neg.	-	-	-	-	-	-
11	Haryana	(i) Minor Irrigation Schemes	-	0.06	3.06	0.07	0.08	0.10	9.92	10.79
		(ii) Soil Conservation Schemes	-	-	1.25	1.55	-	-	17.46	110
		(iii) Area Development Programmes	-	-	-	-	-	-	-	-
12	Himachal Pradesh	(i) Minor Irrigation Schemes	0.05	0.12	0.08	0.12	0.15	0.10	20.39	45.57
		(ii) Soil Conservation Schemes	-	-	-	0.02	0.07	0.04	1.22	3.66
		(iii) Area Development Programmes	-	-	-	-	-	-	-	-
13	Jammu & Kashmir	(i) Minor Irrigation Schemes	0.15	0.16	0.28	0.29	0.47	-	60.02	84.91
		(ii) Soil Conservation Schemes	-	-	-	-	-	-	-	-
		(iii) Area Development Programmes	-	-	-	-	-	-	-	-
14	Jharkhand	(i) Minor Irrigation Schemes	-	-	-	-	-	-	0.14	14.93
		(ii) Soil Conservation Schemes	-	-	-	-	-	-	-	-
		(iii) Area Development Programmes	-	-	-	-	-	-	-	-
15	Karnataka	(i) Minor Irrigation Schemes	0.69	1.22	1.56	2.95	2.39	2.02	332.04	317.69
		(ii) Soil Conservation Schemes	-	-	0.12	0.13	0.23	0.23	6.17	14.85
		(iii) Area Development Programmes	-	-	-	-	-	-	-	-

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Table : 4.20 Statewise Details of Gross Receipts From Minor Irrigation Schemes, Soil & Water Conservation Schemes and Area Development Programmes

(Rs Crores)

Sl. No.	Name of the State/UT	Name of the Scheme	Gross Receipt During							
			1990-91	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02
1	2	3	4	5	6	7	8	9	10	11
16	Kerala	(i) Minor Irrigation Schemes	0.96	0.45	1.00	0.92	0.48	0.55	69.15	82.26
		(ii) Soil Conservation Schemes	-	-	0.02	0.01	-	-	0.14	4.14
		(iii) Area Development Programmes	-	-	-	-	-	-	-	-
17	Madhya Pradesh	(i) Minor Irrigation Schemes	4.03	7.74	7.10	6.27	5.28	17.20	761.6	1202.18
		(ii) Soil Conservation Schemes	-	-	-	-	-	0.02	-	-
		(iii) Area Development Programmes	-	-	-	-	-	-	-	-
18	Maharashtra	(i) Minor Irrigation Schemes	6.11	14.59	9.52	5.91	19.85	5.24	569.14	555.21
		(ii) Soil Conservation Schemes	-	-	0.25	0.30	0.19	0.21	18.89	48.8
		(iii) Area Development Programmes	-	-	-	-	-	-	-	-
19	Manipur	(i) Minor Irrigation Schemes	-	0.01	-	0.03	0.04	-	6.95	0.23
		(ii) Soil Conservation Schemes	-	-	-	-	-	-	0.9	-
		(iii) Area Development Programmes	-	-	-	-	-	-	-	-
20	Meghalaya	(i) Minor Irrigation Schemes	0.02	0.02	0.04	0.03	0.06	0.05	3.34	7.3
		(ii) Soil Conservation Schemes	-	-	0.40	0.08	0.25	0.28	13.88	9.6
		(iii) Area Development Programmes	-	-	-	-	-	-	-	-
21	Nagaland	(i) Minor Irrigation Schemes	0.04	0.01	0.01	0.02	0.08	-	0.35	0.87
		(ii) Soil Conservation Schemes	-	-	0.06	0.05	-	-	0.26	0.1
		(iii) Area Development Programmes	-	-	-	-	-	-	-	-
22	Orissa	(i) Minor Irrigation Schemes	0.80	1.92	2.00	1.89	2.44	2.60	127.3	170.33
		(ii) Soil Conservation Schemes	-	-	1.52	1.08	1.12	0.91	85.97	66.11
		(iii) Area Development Programmes	-	-	-	-	-	-	-	-

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Table : 4.20 Statewise Details of Gross Receipts From Minor Irrigation Schemes, Soil & Water Conservation Schemes and Area Development Programmes

(Rs Crores)

Sl. No.	Name of the State/UT	Name of the Scheme	Gross Receipt During							
			1990-91	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02
1	2	3	4	5	6	7	8	9	10	11
23	Punjab	(i) Minor Irrigation Schemes	0.01	0.11	0.07	0.11	0.11	0.10	41.18	11.69
		(ii) Soil Conservation Schemes	-	-	0.70	0.59	0.55	0.45	8.21	24.12
		(iii) Area Development Programmes	-	-	-	-	-	-	-	-
24	Rajasthan	(i) Minor Irrigation Schemes	7.02	23.21	21.32	16.09	18.47	9.20	2157.5	1796.15
		(ii) Soil Conservation Schemes	-	-	3.90	3.46	5.87	2.32	627.91	585.86
		(iii) Area Development Programmes	-	-	-	-	-	-	-	-
25	Sikkim	(i) Minor Irrigation Schemes	0.01	Neg.	0.08	0.01	-	0.02	22.6	8.24
		(ii) Soil Conservation Schemes	-	-	-	-	-	-	-	-
		(iii) Area Development Programmes	-	-	-	-	-	-	-	-
26	Tamil Nadu	(i) Minor Irrigation Schemes	2.38	3.23	2.70	2.28	2.43	2.84	286.99	296.66
		(ii) Soil Conservation Schemes	-	-	-	0.09	-	-	0.23	-
		(iii) Area Development Programmes	-	-	-	-	-	-	-	-
27	Tripura	(i) Minor Irrigation Schemes	-	-	0.02	0.02	-	0.05	3.08	3.85
		(ii) Soil Conservation Schemes	-	-	-	-	-	-	-	-
		(iii) Area Development Programmes	-	-	-	-	-	-	-	-
28	Uttar Pradesh	(i) Minor Irrigation Schemes	6.60	40.58	36.75	34.10	35.08	36.60	1895.94	1773.12
		(ii) Soil Conservation Schemes	-	-	-	-	-	4.45	908.93	-
		(iii) Area Development Programmes	0.73	-	-	-	-	-	-	-
29	Uttaranchal	(i) Minor Irrigation Schemes	-	-	-	-	-	-	9.09	12.17
		(ii) Soil Conservation Schemes	-	-	-	-	-	-	1.82	12.38
		(iii) Area Development Programmes	-	-	-	-	-	-	-	-
30	West Bengal	(i) Minor Irrigation Schemes	3.25	5.06	5.78	5.37	6.51	6.70	623.46	737.39
		(ii) Soil Conservation Schemes	-	-	0.15	0.13	0.11	0.06	22.99	12.39
		(iii) Area Development Programmes	-	-	-	-	-	-	-	-
31	Delhi	Minor Irrigation Schemes	-	0.02	0.02	0.01	0.02	0.10	13.15	9.92

Source : 1. Combined Finance and Revenue Accounts of the Union and State Governments in India.
2. State Finance Accounts. 3. Central Water Commission, ISO (Financial Performance Unit)

Table : 4.21 Yearwise Details of Capital Outlay and Working Expenses on Drainage Projects (All India)

(Rs. In Lakhs)

Year	Capital Outlay		Working Expenses				Total
	During the year	Upto the end of year	\$ Direction and Admn.	Machinery & Equipment	Drainage Projects	Other Expenditure	
1	2	3	4	5	6	7	8
1980-81	3023	25104	63	15	1323	169	1570
1985-86	3266	40068	209	51	1986	4	2250
1990-91	4577	63623	1413	484	2091	3454	7442
1991-92	7626	71249	1569	424	1274	2696	5963
1992-93	14889	86138	1244	528	2257	2916	6945
1993-94	16720	102856	1818	678	2855	3721	9072
1994-95	9699	112555#	1450	966	7272	2699	12387
1995-96	9420	118128+	1685	1107	8390	3656	14838
1996-97	11392	129520	2195	1060	9177	3927	16359
1997-98	10245	139765	2470	1374	10656	3024	17524
1998-99	16879	156644	3106	1740	10729	2031	17606
1999-00	15056	171700	3688	1935	10500	3806	19929
2000-01	17332	189344	3220	2367	-	13045	16330
2001-02	19988	207455	551	2306	-	13304	16160

Source: (i) Combined Finance and Revenue Accounts of Union and State Govts. in India

(ii) State Finance Accounts (iii) Central Water Commission, ISO (Financial Performance Unit)

Remark : * Includes Rs.52.74 lakhs for Data collection, Research, Survey & Investigation and Other expenditure incurred in the Flood Control and Drainage Projects in West Bengal.

@ Includes Rs. 273 lakhs spent on ' Civil Works' and Rs. 17 lakhs for Survey And Investigation.

Includes an amount of Rs.14108 Lakhs adopted from CAG's office.

+ An amount of Rs.3847 is less at the end of 1995-96 due to more receipt over expenditure

\$ Does not include expenses on salary and wages of workcharge/daily wages which are not separately available and are included in the project expenditure under other expenditure category.

Note: Figures in col 2 & 3 for some years may not be compatible due to accounting adjustment.

Table 4.22 Yearwise Details of Capital Outlay and Working Expenses on Flood Control and Anti Sea Erosion Projects (All India)

(Rs.In Lakhs)

Year	Capital Outlay		WORKING EXPENSES (WE)						Total
	During the year	Upto the end of the year (Cumulative)	Direction and Admn.	Machinery & Equipment	Anti-Sea Erosion Works	Flood Control Projects	Other Expenditure	Tribal Areas Sub-Plan	
1	2	3	4	5	6	7	8	9	10
1980-81	11447	83219	211	32	560	2012	781	27	3623
1985-86	10341	138541	864	80	33	866	1063	3	2908
1990-91	15999	215796	3957	352	222	2623	6182	-	13336
1991-92	16716	232512	4616	189	292	2762	4895	-	12754
1992-93	12880	245392	5942	228	740	3438	6590	-	16938
1993-94	15188	260580	6665	469	3006	1010	7173	-	18323
1994-95	15676	276256	5604	504	4144	1602	8806	-	20660
1995-96	19131	293694 @	7135	642	4504	886	9712	-	22879
1996-97	29442	323136	7872	450	4447	1681	12841	-	27291
1997-98	25247	348383	9080	737	3514	741	15120	-	29192
1998-99	26727	375110	14706	793	5055	1201	13362	-	35117
1999-00	33559	408669	13629	539	9086	1896	15037	-	40187
2000-01	31975	565411	11816	3040	-	-	25710	-	40565
2001-02	36266	427745	16241	1329	-	-	24633	-	42204

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

Remarks: * Include Rs.2043 lakhs spent on 'Civil Works'

\$ Does not include expenses on salary and wages of workcharge/daily wages which are not seperately available and are included in the project expenditure under other expenditure

Note : Figures of Cols 2 & 3 may not be compatible with each other in some year due to accounting adjustments.

@ : An amount of Rs. 1693 lakhs 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.

Table : 4.23 Financial Results of Rural Water Supply Schemes - All India

(Rs.Crores)

Sl. No.	Year	Capital Outlay		Gross Receipts (GR)	Working Expenses (WE)	Percentage Recovery of WE through G R (5)/(6)X100
		During the year	Upto the end of the year (Cumulative)			
1	2	3	4	5	6	7
1	1980-81	93.2	350.8	2.6	169.0	1.5
2	1985-86	90.4	720.5	5.4	479.6	1.1
3	1990-91	247.8	2541.4	14.1	839.8	1.7
4	1991-92	345.0	2901.2	14.4	847.6	1.7
5	1992-93	387.6	3296.7	16.6	991.4	1.7
6	1993-94	423.9	3701.8	19.3	1069.3	1.8
7	1994-95	593.99	4295.8	23.5	1078.3	2.2
8	1995-96	587.55	4980.8	21.5	1502.8	1.4
9	1996-97	680.65	5677.0	23.6	1862.8	1.3
10	1997-98	808.68	6507.1	22.7	2258.5	1.0
11	1998-99	1164.6	7670.9	55.5	2665.2	2.1
12	1999-00	1271.02	9045.31#	67.1	2540.4	2.6
13	2000-01	2130.95	11037.4	39.61	2696.0	3.3
14	2001-02	1808.04	12845.14	62.4	2756.6	2.3

Sources : 1. Combined Finance and Revenue Accounts of the Union and State Governments in India.
2. State Finance Accounts 3. Central Water Commission, ISO (Financial Performance Unit).

Note : Figures under Col.4 may not be compatible for some of the year with those under col.3 due to accounting adjustments.
Included an amount of Rs.103.36 Crores for the new schemes included during 1999-2000 in respect of State of Meghalaya.

**Table : 4.24 Financial Results of Urban Water
Supply Schemes - All India**

(Rs.Crores)

Sl. No.	Year	Capital Outlay		Gross Receipts (GR)	Working Expenses (WE)	Percentage Recovery of WE through GR (5)/(6)X100
		During the year	Upto the end of the year (Cumulative)			
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	1980-81	62.4	434.2	21.9	63.3	34.5
2	1985-86	99.7	845.9	33.5	198.6	16.9
3	1990-91	88.2	1068.7	57.1	340.0	16.8
4	1991-92	120.1	1159.5	56.2	295.1	19.1
5	1992-93	148.3	1342.1	54.6	385.2	14.2
6	1993-94	182.9	1534.1	69.5	573.1	12.1
7	1994-95	256.3	1840.8	73.7	609.7	12.1
8	1995-96	253.1	2093.4	85.3	542.8	15.7
9	1996-97	217.1	2311.9	96.1	563.3	17.1
10	1997-98	239.7	2550.1	120.6	333.9	36.1
11	1998-99	363.7	2914.6	143.0	930.1	15.4
12	1999-00	334.5	3145.7 #	134.0	835.2	16.0
13	2000-01	457.6	3577.3	63.3	829.2	7.6
14	2001-02	431.98	4009.2	190.0	1144.2	16.6

Sources : 1. Combined Finance and Revenue Accounts of the Union and
2. State Finance Accounts 3. Central Water Commission, ISO
(Financial Performance Unit)

Note : Figures under Col.4 may not be compatible for some
of the year with those under col.3 due to accounting adjustments.
An amount of Rs. 103.36 Crores has been transferred from Urban Water
Supply to Rural water supply during 1999-2000 in respect of Meghalaya State

Table : 4.25 Statewise Financial Results of Rural Water Supply Schemes

(Rs.Crores)

Sl. No.	Name of the State/UT	Year	Capital Outlay		Gross Receipts (GR)	Working Expenses (WE)	Percentage Recovery of WE through G R (6)/(7)X100
			During The Year	Upto The End of the Year			
1	2	3	4	5	6	7	8
1.	Andhra Pradesh	1997-98	-	1.60	0.03	377.00	0.01
		1998-99	-	1.60	0.00	490.40	0.00
		1999-00	1.32	2.92	-	319.83	0.00
		2000-01	166.99	169.91	0.03	173.66	0.02
		2001-02	301.68	471.59	4.44	100.62	4.41
2.	Arunachal Pradesh	1997-98	-	1.89	0.04	45.57	0.09
		1998-99	-	1.89	-	37.85	0.00
		1999-00	-	1.89	Neg.	50.02	0.00
		2000-01	0.00	1.89	0.06	41.74	0.14
		2001-02	0.00	1.89	0.03	26.33	0.11
3.	Assam	1997-98	-	-	-	38.58	0.00
		1998-99	-	-	-	65.54	0.00
		1999-00	-	-	-	83.80	0.00
		2000-01	0.00	0.00	0.00	99.95	0.00
		2001-02	0.00	0.00	0.02	81.56	0.02
4.	Bihar	1997-98	61.21	882.43	-	78.56	0.00
		1998-99	102.42	984.85	-	97.13	0.00
		1999-00	37.58	1022.43	-	152.15	0.00
		2000-01	14.47	836.35	0.00	125.61	0.00
		2001-02	13.65	850.00	0.15	82.11	0.18
5	Chhattisgarh	2000-01	0.00	0.00	0.00	31.70	0.00
		2001-02	0.07	0.08	0.00	90.57	0.00
6	Delhi	2000-01	0.00	0.00	0.00	0.00	0.00
		2001-02	0.00	0.00	0.00	0.00	0.00
7	Goa	1997-98	5.32	56.62	1.90	4.39	43.28
		1998-99	10.65	67.26	22.43	5.84	384.08
		1999-00	7.60	74.86	30.31	6.30	481.11
		2000-01	23.57	98.82	17.75	6.72	264.14
		2001-02	12.28	111.10	12.05	6.92	174.13
8	Gujarat	1997-98	110.27	874.09	-	9.00	0.00
		1998-99	253.69	1127.78	-	24.00	0.00
		1999-00	426.28	1554.06	-	29.50	0.00
		2000-01	869.81	2423.87	0.00	27.33	0.00
		2001-02	180.03	2603.90	0.00	6.38	0.00
9	Haryana	1997-98	59.20	205.10	0.50	41.50	1.20
		1998-99	61.30	266.40	0.20	31.60	0.63
		1999-00	83.72	350.12	2.60	69.38	3.75
		2000-01	65.34	415.47	2.79	44.85	6.22
		2001-02	103.98	519.45	3.00	69.11	4.34

Contd.

Table : 4.25 Statewise Financial Results of Rural Water Supply Schemes

(Rs.Crores)

Sl. No.	Name of the State/UT	Year	Capital Outlay		Gross Receipts (GR)	Working Expenses (WE)	Percentage Recovery of WE through G R (6)/(7)X100
			During The Year	Upto The End of the Year			
1	2	3	4	5	6	7	8
10	Himachal Pradesh	1997-98	50.30	498.20	1.40	79.10	1.77
		1998-99	53.90	552.20	1.50	121.70	1.23
		1999-00	74.62	626.86	1.67	120.85	1.38
		2000-01	82.61	709.47	1.98	132.30	1.50
		2001-02	108.86	818.33	1.68	147.59	1.14
11.	Jammu & Kashmir	1997-98	110.26	1048.85	0.09	7.95	1.13
		1998-99	85.24	1134.09	0.74	8.23	8.99
		1999-00	71.60	1202.86	1.75	14.01	12.49
		2000-01	125.58	1323.93	2.26	8.50	26.59
		2001-02	119.63	1443.56	2.89	45.20	6.39
12.	Jharkhand	2000-01	0.06	0.06	0.21	9.14	2.30
		2001-02	58.87	58.93	2.26	33.25	6.80
13.	Karnataka	1997-98	-	6.50	-	40.00	0.00
		1998-99	147.90	154.40	-	22.70	0.00
		1999-00	172.69	328.70	2.03	26.50	7.66
		2000-01	43.32	441.49	0.00	25.95	0.00
		2001-02	52.69	494.18	0.00	44.04	0.00
14	Kerala	1997-98	-	112.60	-	-	0.00
		1998-99	-	112.60	-	-	0.00
		1999-00	1.53	114.13	-	-	0.00
		2000-01	0.00	114.17	0.00	0.00	0.00
		2001-02	0.00	114.17	0.00	0.00	0.00
15.	Madhya Pradesh	1997-98	-	6.10	-	188.90	0.00
		1998-99	-	6.10	-	209.00	0.00
		1999-00	-	6.10	-	228.94	0.00
		2000-01	0.00	0.00	0.00	284.55	0.00
		2001-02	24.69	24.69	0.00	227.90	0.00
16.	Maharashtra	1997-98	-	-	0.70	415.20	0.17
		1998-99	-	-	4.04	361.00	1.12
		1999-00	-	-	0.36	183.00	0.20
		2000-01	0.00	0.00	0.38	268.89	0.14
		2001-02	0.00	0.00	0.26	214.65	0.12
17.	Manipur	1997-98	18.34	180.98	0.01	3.13	0.32
		1998-99	9.64	190.62	0.01	2.67	0.37
		1999-00	16.42	207.05	0.03	3.31	0.91
		2000-01	8.67	215.72	0.06	1.76	3.41
		2001-02	19.39	235.11	0.03	1.75	1.71

Contd..

Table : 4.25 Statewise Financial Results of Rural Water Supply Schemes

(Rs.Crores)

Sl. No.	Name of the State/UT	Year	Capital Outlay		Gross Receipts (GR)	Working Expenses (WE)	Percentage Recovery of WE through G R (6)/(7)X100
			During The Year	Upto The End of the Year			
1	2	3	4	5	6	7	8
18.	Meghalaya	1997-98	9.79	116.83	-	-	0.00
		1998-99	16.15	132.14	-	-	0.00
		1999-00	12.27	247.77#	-	-	0.00
		2000-01	36.98	285.96	0.00	0.00	0.00
		2001-02	37.31	323.28	0.00	0.00	0.00
19.	Mizoram	1997-98	3.70	33.81	-	8.59	0.00
		1998-99	4.30	38.11	2.33	17.67	13.19
		1999-00	5.12	43.23	-	8.01	0.00
		2000-01	7.83	51.06	0.00	14.39	0.00
		2001-02	9.63	60.69	0.00	17.97	0.00
20.	Nagaland	1997-98	3.77	61.63	0.02	13.02	0.15
		1998-99	-	61.63	0.03	27.49	0.11
		1999-00	-	61.63	0.05	6.66	0.75
		2000-01	0.00	61.63	0.27	6.98	3.87
		2001-02	6.25	67.88	0.27	2.99	9.03
21.	Orissa	1997-98	21.42	91.45	0.16	45.21	0.35
		1998-99	16.52	107.97	0.15	43.53	0.34
		1999-00	10.92	118.89	0.23	52.94	0.43
		2000-01	6.25	67.88	0.27	2.99	9.03
		2001-02	51.92	202.85	0.35	48.14	0.73
22.	Punjab	1997-98	-	0.03	2.15	21.28	10.10
		1998-99	-	0.03	5.38	21.51	25.01
		1999-00	-	0.03	5.38	21.51	25.01
		2000-01	0.00	0.03	12.97	55.13	23.53
		2001-02	0.00	0.03	11.22	91.16	12.31
23.	Rajasthan	1997-98	298.05	1991.12 @	15.63	146.19	10.69
		1998-99	326.72	2317.84	21.00	190.18	11.04
		1999-00	271.93	2589.77	21.40	205.50	10.41
		2000-01	307.71	2896.85	0.00	224.52	0.00
		2001-02	353.97	3250.83	23.42	241.08	9.71
24.	Sikkim	1997-98	14.08	88.10	-	1.37	0.00
		1998-99	16.18	104.29	-	0.99	0.00
		1999-00	22.79	127.08	-	2.17	0.00
		2000-01	12.30	139.38	0.00	1.31	0.00
		2001-02	16.29	155.36	0.00	1.35	0.00
25.	Tamil Nadu	1997-98	-	4.20	-	90.70	0.00
		1998-99	-	4.20	-	114.50	0.00
		1999-00	-	4.20	-	153.12	0.00
		2000-01	274.00	278.20	0.00	137.00	0.00
		2001-02	274.00	552.20	0.00	12.73	0.00

Contd..

Table : 4.25 Statewise Financial Results of Rural Water Supply Schemes

(Rs.Crores)

Sl. No.	Name of the State/UT	Year	Capital Outlay		Gross Receipts (GR)	Working Expenses (WE)	Percentage Recovery of WE through G R (6)/(7)X100
			During The Year	Upto The End of the Year			
1	2	3	4	5	6	7	8
26.	Tripura	1997-98	30.83	178.16	-	0.56	0.00
		1998-99	42.61	220.77	-	-	0.00
		1999-00	37.44	258.21	-	4.03	0.00
		2000-01	38.74	293.85	0.00	0.89	0.00
		2001-02	47.45	341.30	0.00	2.26	0.00
27.	Uttaranchal	2000-01	0.00	0.00	0.00	0.00	0.00
		2001-02	0.00	0.00	0.00	116.40	0.00
28.	Uttar Pradesh	1997-98	-	0.24	-	177.00	0.00
		1998-99	-	0.24	-	153.20	0.00
		1999-00	-	0.24	0.97	132.56	0.73
		2000-01	0.00	0.24	0.00	160.31	0.00
		2001-02	0.00	0.24	0.00	253.97	0.00
29.	West Bengal	1997-98	-	-	NEG.	57.39	0.00
		1998-99	-	-	NEG.	89.05	0.00
		1999-00	0.07	0.07	-	108.54	0.00
		2000-01	0.00	0.07	0.00	146.38	0.00
		2001-02	0.03	0.10	0.00	156.23	0.00
30	Pondicherry	1997-98	-	-	NIL	3.60	0.00
		1998-99	0.30	0.30	NIL	4.00	0.00
		1999-00	0.70	0.96	0.05	3.85	1.30
		2000-01	1.57	2.53	0.09	6.35	1.42
		2001-02	0.80	3.33	0.13	7.19	1.81
31.	Union Government	1997-98	12.14	66.54	0.02	424.72	0.00
		1998-99	17.08	83.62	0.01	525.42	0.00
		1999-00	16.42	100.04	0.24	553.88	0.04
		2000-01	19.36	119.41	0.29	618.12	0.05
		2001-02	14.59	134.00	0.21	627.13	0.03

Source : 1. Combined Finance And Revenue Accounts of the Union and State Governments in India and State Finance Accounts

2. Central water Commission, ISO (Financial Performance Unit)

Neg : Negligible

Note : Figures in Col.4 and Col.5 may be incompatible due to accounting adjustments.

Includes on outlay of Rs.103.36 crores for the new Scheme included during 1999-2000 in respect of the state of Meghalaya.

@ Includes an amount of Rs. 21.51 crores as percentage charges for rural schemes transferred from 2215-01-102 water supply and sanitation.

Note : An amount of Rs. 609.58 lakhs is pending allocation between M.P. and Chhattisgarh

Table : 4.26 State-Wise Financial Results of Urban Water Supply Schemes

Sl. No.	Name of the State/UT	Year	Capital Outlay		Gross Receipts (GR)	Working Expenses (WE)	(Rs.Crores) Percentage Recovery of WE through G R (6)X100/(7)
			During The Year	Upto The End Of The Year			
1	2	3	4	5	6	7	8
1	Union Government	1997-98	4.79	76.62	0.31	34.51	0.90
		1998-99	3.68	80.30	0.26	47.59	0.55
		1999-00	4.57	84.87	0.27	72.23	0.37
		2000-01	19.36	119.41	0.29	618.12	0.05
		2001-02	2.68	87.56	0.53	7134.00	0.01
2	Andhra Pradesh	1997-98	0.50	82.70	-	31.60	0.00
		1998-99	0.90	83.60	0.20	91.00	0.22
		1999-00	0.99	84.61	-	5.74	0.00
		2000-01	166.99	169.91	0.03	173.66	0.02
		2001-02	21.16	105.76	0.36	20.85	1.73
3	Arunachal Pradesh	1997-98	-	6.43	0.08	0.80	10.00
		1998-99	-	6.43	0.26	-	0.00
		1999-00	-	6.43	0.07	-	0.00
		2000-01	0.00	1.89	0.06	41.74	0.14
		2001-02	0.00	6.43	0.13	0.00	0.00
4	Assam	1997-98	-	-	-	4.36	0.00
		1998-99	-	-	-	4.43	0.00
		1999-00	-	-	-	4.13	0.00
		2000-01	0.00	0.00	0.00	99.95	0.00
		2001-02	0.00	0.00	0.00	5.56	0.00
5	Bihar	1997-98	1.04	36.65	-	45.56	0.00
		1998-99	3.50	40.15	0.40	46.52	0.86
		1999-00	1.46	41.61	-	76.34	0.00
		2000-01	14.47	836.35	0.00	125.61	0.00
		2001-02	0.00	41.61	0.00	37.48	0.00
6	Chhattisgarh	2000-01	0.00	0.00	0.00	31.70	0.00
		2001-02	0.01	0.10	0.00	0.60	0.00
7	Delhi	2000-01	0.00	0.00	0.00	0.00	0.00
		2001-02	0.00	0.00	0.00	0.00	0.00
8	Goa	1997-98	7.10	155.92	15.90	24.60	64.63
		1998-99	10.59	166.52	16.84	35.36	47.62
		1999-00	13.31	179.83	7.88	39.22	20.09
		2000-01	23.57	98.82	17.75	6.72	264.14
		2001-02	31.98	211.90	21.50	53.92	39.87
9	Gujarat	1997-98	1.00	24.55	1.01@	7.91	12.77
		1998-99	2.00	26.55	0.6@	9.92	6.05
		1999-00	5.31	31.87	-	20.22	-
		2000-01	869.81	2423.87	0.00	27.33	0.00
		2001-02	10.49	42.36	0.00	19.13	0.00
10	Haryana	1997-98	8.35	25.12	9.16	20.13	45.50
		1998-99	10.65	35.77	11.47	19.32	59.37
		1999-00	28.26	64.03	10.16	43.84	23.18
		2000-01	65.34	415.47	2.79	44.85	6.22
		2001-02	40.80	104.84	10.29	51.01	20.17

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Table : 4.26 State-Wise Financial Results of Urban Water Supply Schemes

Sl. No.	Name of the State/UT	Year	Capital Outlay		Gross Receipts (GR)	Working Expenses (WE)	(Rs.Crores) Percentage Recovery of WE through G R (6)X100/(7)
			During The Year	Upto The End Of The Year			
1	2	3	4	5	6	7	8
11	Himachal Pradesh	1997-98	16.81	84.71	1.86	28.21	6.59
		1998-99	13.09	97.80	1.99	29.41	6.77
		1999-00	17.52	115.32	1.01	23.15	4.36
		2000-01	82.61	709.47	1.98	132.30	1.50
		2001-02	17.67	132.98	1.05	33.24	3.16
12	Jammu & Kashmir	1997-98	1.66	131.84	1.10	7.00	15.71
		1998-99	27.85	159.69	1.83	7.80	23.46
		1999-00	28.37	188.06	0.37	1.69	21.89
		2000-01	125.58	1323.93	2.26	8.50	26.59
		2001-02	0.00	0.00	1.32	9.56	13.81
13	Jharkhand	2000-01	0.06	0.06	0.21	9.14	2.30
		2001-02	0.00	0.00	1.32	9.56	13.81
14	Karnataka	1997-98	-	11.90	-	-	-
		1998-99	-	11.90	-	-	-
		1999-00	-	11.90	-	-	-
		2000-01	43.32	441.49	0.00	25.95	0.00
		2001-02	0.00	11.94	0.00	0.00	0.00
15	Kerala	1997-98	-	81.20	-	-	-
		1998-99	-	81.20	-	-	-
		1999-00	-	81.20	-	-	-
		2000-01	0.00	114.17	0.00	0.00	0.00
		2001-02	0.00	81.17	0.00	0.00	0.00
16	Madhya Pradesh	1997-98	3.30	51.10	5.30	36.40	14.56
		1998-99	-0.70	50.40	6.64	43.02	15.43
		1999-00	1.73	52.13	5.51	44.54	12.37
		2000-01	0.00	0.00	0.00	284.55	0.00
		2001-02	0.73	30.52	6.00	41.19	14.57
17	Maharashtra	1997-98	3.60	158.40	0.07	-	0.00
		1998-99	2.73	161.08	0.25	-	0.00
		1999-00	2.94	164.02	0.14	-	0.00
		2000-01	0.00	0.00	0.38	268.89	0.14
		2001-02	2.59	166.62	0.51	0.00	0.00
18	Manipur	1997-98	6.28	61.36	0.19	2.74	6.93
		1998-99	16.65	78.01	0.24	2.16	11.11
		1999-00	38.23	116.24	0.27	5.83	4.63
		2000-01	8.67	215.72	0.06	1.76	3.41
		2001-02	17.94	134.13	0.38	0.95	40.00
19	Meghalaya	1997-98	17.42	149.42	-	-	0.00
		1998-99	19.32	168.80	-	-	0.00
		1999-00	22.65	88.09@@	-	-	0.00
		2000-01	36.98	285.96	0.00	0.00	0.00
		2001-02	13.49	96.79	0.00	0.00	0.00

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Table : 4.26 State-Wise Financial Results of Urban Water Supply Schemes

Sl. No.	Name of the State/UT	Year	Capital Outlay		Gross Receipts (GR)	Working Expenses (WE)	(Rs.Crores) Percentage Recovery of WE through G R (6)X100/(7)
			During The Year	Upto The End Of The Year			
1	2	3	4	5	6	7	8
20	Mizoram	1997-98	7.18	75.26	0.36	2.39	15.06
		1998-99	9.08	84.34	1.67#	3.58	0.00
		1999-00	21.34	105.68	2.33#	7.85	29.68
		2000-01	7.83	51.06	0.00	14.39	0.00
		2001-02	11.01	116.69	0.00	4.99	0.00
21	Nagaland	1997-98	2.28	26.00	0.18	5.36	3.36
		1998-99	2.79	28.79	0.14	51.34	0.27
		1999-00	-	28.79	0.12	2.76	4.35
		2000-01	0.00	61.63	0.27	6.98	3.87
		2001-02	0.00	123.07	13.78	53.37	25.82
22	Orissa	1997-98	15.55	89.17	9.88	22.88	43.18
		1998-99	12.25	101.42	10.17	59.55	17.08
		1999-00	7.11	108.53	12.22	57.05	21.42
		2000-01	32.04	150.93	0.47	42.01	1.12
		2001-02	14.54	123.07	13.78	53.37	25.82
23	Punjab	1997-98	-	0.40	2.49	-	-
		1998-99	-	0.40	1.22	-	-
		1999-00	-	0.40	1.22	-	-
		2000-01	0.00	0.03	12.97	55.13	23.53
		2001-02	0.00	0.40	1.81	0.00	0.00
24	Rajasthan	1997-98	120.69	980.09	69.19	270.25	25.60
		1998-99	206.62	1186.71	87.39	319.54	27.35
		1999-00	73.74	1260.45	90.76	344.93	26.31
		2000-01	307.71	2896.85	0.00	224.52	0.00
		2001-02	131.10	1370.53	0.00	391.84	0.00
25	Sikkim	1997-98	1.97	16.90	0.10	2.22	4.50
		1998-99	1.98	18.88	0.12	2.88	4.17
		1999-00	2.38	21.26	0.23	3.18	7.23
		2000-01	12.30	139.38	0.00	1.31	0.00
		2001-02	4.65	25.91	0.29	3.30	8.79
26	Tamil Nadu	1997-98	13.30	173.00	-	6.20	0.00
		1998-99	11.90	184.90	-	0.70	0.00
		1999-00	55.39	240.29	-	0.80	0.00
		2000-01	274.00	278.20	0.00	137.00	0.00
		2001-02	82.87	323.12	0.12	0.92	13.04
27	Tripura	1997-98	2.66	15.50	-	0.91	-
		1998-99	2.57	18.07	-	-	-
		1999-00	2.71	20.78	-	1.76	-
		2000-01	38.74	293.85	0.00	0.89	0.00
		2001-02	12.35	33.12	0.00	3.36	0.00
28	Uttanchal	2000-01	0.00	0.00	0.00	0.00	0.00
		2001-02	0.00	0.00	0.00	0.00	0.00

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Table : 4.26 State-Wise Financial Results of Urban Water Supply Schemes

Sl. No.	Name of the State/UT	Year	Capital Outlay		Gross Receipts (GR)	Working Expenses (WE)	(Rs.Crores) Percentage Recovery of WE through G R (6)X100/(7)
			During The Year	Upto The End Of The Year			
1	2	3	4	5	6	7	8
29	Uttar Pradesh	1997-98	-	7.76	1.99\$	81.50	2.44
		1998-99	-	7.76	0.15\$	144.20	0.10
		1999-00	-	7.76	-	64.70	-
		2000-01	0.00	0.24	0.00	160.31	0.00
		2001-02	0.00	0.00	0.00	0.00	0.00
30	W.Bengal	1997-98	-	-	-	6.93	0.00
		1998-99	-	-	-	10.18	0.00
		1999-00	-	-	-	8.73	0.00
		2000-01	0.00	0.07	0.00	146.38	0.00
		2001-02	0.00	0.00	2.49	16.11	15.46
31	Pondicherry	1997-98	3.80	28.90	1.40	1.50	93.33
		1998-99	6.20	35.10	1.20	1.60	75.00
		1999-00	6.50	41.60	1.42	1.52	93.42
		2000-01	1.57	2.53	0.09	6.35	1.42
		2001-02	7.50	49.09	1.54	3.26	47.24
	All India	1997-98	239.72	2550.09	120.57	333.89	36.11
		1998-99	363.65	2914.57	143.04	930.10	15.38
		1999-00	334.51	3145.72*	133.98	835.21	16.04
		2000-01	2130.95	11031.29	39.61	2696.04	1.47
		2001-02	423.56	3419.71	77.20	7947.57	0.97

Source : 1. Combined Finance And Revenue Accounts of the Union and State Governments in India and State Finance Accounts

2. Central Water Commission, ISO (Financial Performance Unit)

Note : Figures in Col.4 and Col.5 may be incompatible due to accounting adjustments.

@ Combined receipt for Urban and Rural water supply.

@@ Schemes amounting to Rs.103.36 crores have been transferred from urban supply rural supply in respect of the state of Meghalaya.

Includes Rural Water Supply also.

\$ An amount of Rs. 21.02 crores not specified in the Fin. Account Books of Rajasthan state has been included

* An amount of Rs. 103.36 crores has been transferred from urban water supply to rural water supply during 1999-2000 in respect of Meghalaya state.

Section – 5

SOCIAL AND ENVIRONMENTAL PERFORMANCE

This section presents information regarding social and environmental aspects of water resources development activities. It includes data on degraded land and their distribution according to various problems, financial and physical achievements of irrigation development in tribal areas, flood damages, financial expenditure on flood protection works and physical benefit there from, performance of flood forecasting net work, financial and physical progress of drinking water supply schemes in rural and urban areas, ground water potential of Tribal and Drought Prone districts and districts covered under Desert Development Programme and its exploitation, water quality parameters of peninsular rivers at Central Water Commission(CWC) sites. Important information given under this section is highlighted below.

Land Resources and its Degradation

As per the data available from the Ministry of Agriculture, a total of 146.82 M.Ha. of land was estimated to be degraded in the country. Out of this, Madhya Pradesh and Chattisgarh together accounted for 26.21 M.Ha. while Uttar Pradesh and Uttaranchal together accounted for 15.32 M.Ha of degraded land. The extent of degraded land in Andhra Pradesh, Maharashtra, Rajasthan and Gujarat was 14.99 M.Ha. ,13.06 M.Ha., 11.37 M.Ha. and

8.13 M.Ha respectively. These seven States together accounted for 61% of the total degraded land in the country. Cause-wise, water erosion accounted for the major part (63.7%) of the total degraded land in the country, followed by soil acidity (10.9%) and water logging (9.7%). Thus, at all-India level the Water Erosion is the predominant cause for land degradation in the country. At State level also, except for Haryana, Kerala and Rajasthan, water erosion is the predominant cause for land degradation. Wind erosion is the main cause behind land degradation in Haryana whereas water logging and wind erosion respectively are the predominant factors in Kerala and Rajasthan.

([Table 5.1](#))

Land degradation affects availability of land for agricultural use and fertility of soil and has ultimate bearing on productivity and consequently on production. Land affected by special problems, erosion and other problems, therefore, needs immediate treatment in the light of rapid population growth and increasing demand for food grain production which is important for food security. In view of importance and gravity of the problem, the Ministries of Agriculture, Rural Development and Environment & Forests have taken up a number of programmes for treatment of degraded lands through various Watershed Development Programmes. A total of 150.67 lakh ha. of land is reported to have been treated up to March 2005 in the country involving an expenditure of Rs.6182.98 crores through the schemes under M/o Agriculture while 118.81 lakh ha. of area in the country is

reported to have been treated up to March 2000 with an investment of Rs 3912.14 Crore through the schemes under Ministries of Rural Development and Environment & Forests.

[\(Table 5.2\)](#)

Drought Prone Area Programme

As per the data available from the Ministry of Rural Development the list of districts covered under Drought Prone Area Programme along with the no of blocks and their area is presented statewise. It is observed that the maximum drought prone area falls under the state of Maharashtra followed by Andhra Pradesh and Madhya Pradesh.

[\(Table 5.3\)](#)

Irrigation Development Under Tribal Sub-Plan

The Tribal Sub-Plan (TSP) came into operation during V Plan. As per the latest available data, a total of 684 (161 major, 481 medium and 42 ERM) irrigation projects are lying under TSP. These projects are confined to the States of Andhra Pradesh, Assam, Jharkhand, Gujarat, Kerala, Karnataka, Madhya Pradesh, Maharashtra, Manipur, Orissa, Rajasthan, Tamil Nadu, West Bengal and Chattisgarh. The total ultimate potential from these projects is 17.5 M.ha., out of which 1.8 M.ha. is in Tribal areas. A total of 155 irrigation projects benefiting TSP area were completed before the start of Tribal Sub-Plan. The ultimate irrigation potential of these projects was about 2392 Thousand Hectares(Th.ha.) of which only 29 Th.ha. was under the Tribal areas. A total of 49 projects were completed during IXth Plan. The ultimate potential from these projects is 1594 Th. ha. of which about 290 Th.ha.

was under the Tribal areas. There are 230 ongoing projects under TSP having ultimate irrigation potential of 10.16 M.. ha. out of which 1.19 M.ha. is under Tribal area. During Xth Plan there were 51 new projects with an outlay of Rs. 1367 crore for 2002-07. These new projects having Ultimate Irrigation Potential of 981 Th Ha. are spread over 8 states namely Andhra Pradesh, Assam, Chattisgarh, Jharkhand, Gujarat, Madhya Pradesh, Orissa and West Bengal.

Among the States, Maharashtra has the maximum number of on-going projects (68) under Major, Medium and ERM irrigation projects benefiting TSP followed by Gujarat (27) and Jharkhand (22). The ultimate potential is highest for the State of Gujarat followed by Maharashtra and Andhra Pradesh. It is lowest in case of Manipur. Amongst the available figures, the Irrigation potential in TSP area is highest in Orissa. The estimated cost of on-going projects is maximum for the State of Gujarat followed by Maharashtra and Madhya Pradesh.

[\(Tables 5.4 to 5.10\)](#)

Flood

Flood is one of the most devastating natural calamities, which has been causing extensive damage to life and property besides perpetrating tremendous sufferings. Since flood is a natural phenomenon, it is usually difficult to predict a definite trend especially with regard to the time and place of its occurrence. As such, the effort usually is to take appropriate advance flood protection measures. The area affected by floods was 2.29 m.ha. in 1953 and 8.03 m.ha. in 2004 with a peak of 17.5 m.ha. during 1978. At current prices, the damage to crops was in the wide range of Rs. 5.87 crore

in 1965 and Rs. 4246.2 crore in 2000. The floods also caused extensive damage to property worth Rs 615 crore in 2004. In addition, there was a great loss of human lives and livestock often affecting the poor strata of the population. Taking into consideration the other factors such as serious disruption and massive health rehabilitation measures needed, the loss could indeed be tremendous. The total damage caused by floods is estimated to the tune of Rs.3337 crore during 2004. Himachal Pradesh and West Bengal are worst effected in terms of the total damage to crops, houses and public utilities. As per the information are for the States for 2005 (upto 31.10.05), there has been a considerable increase in the governmental expenditure on flood management programme over the past years. It has gone up from Rs.13 crore during 1st Plan to Rs.3081 crore during IX Plan and the approved outlay for tenth plan is Rs. 5922 crore. The central assistance in flood control work has risen sharply from Rs. 462.5 crore in the IX plan to Rs. 1308 crore (outlay) in the X Plan.

Among the states the maximum outlay for flood management during X Plan is for Bihar followed by West Bengal and Punjab. As for as the area benefited upto 2004 due to flood management programme is concerned Punjab ranks first followed by Bihar and West Bengal.

([Table 5.11](#) to [5.17](#) and [Chart 34](#))

Flood forecasting is one of the most important non-structural methods of flood control in which there has been significant contribution by CWC. Network performance for the period 01/05/2004 to 31/10/2004 (4696 accurate forecasts out of 4889 issued)

has been quite satisfactory. 96.1 % of forecasts were correct within +/-15 cms or +/- 20% cumecs. Over the years, the percentage of forecasts accuracy has been maintained at around 96% and above apparently due to improvement in methodology and acquisition of latest technology.

([Tables 5.18](#) to [5.20](#))

Drinking Water

The requirement of fresh water both for irrigation and other uses is growing continuously. From a requirement level of 541 BCM in 2000, the water requirement for irrigation is projected to be of the order of 910 BCM in 2025 and 1072 BCM in 2050. The demand for other uses (such as domestic, Industries, thermal power consumption etc.) is likely to grow from 93 BCM in 2000 to 183 BCM in 2025 and 375 BCM in 2050. Modern pace of development, population growth, industrialisation and urbanisation are responsible for higher level of water consumption now. Among various uses of fresh water, the requirement for the industries is expected to grow fastest by about 8 times to touch the level of 63 BCM in 2050 from the level of 8 BCM in 2000. The total water demand for all the uses is likely to be 1447 BCM by 2050. Though major share of this would be consumed for irrigation purposes, this in no way undermines importance of providing potable drinking water. In fact, it may be presumed that drinking water provision would have to be given an added thrust since the lack of such facility is likely to entail serious social, economic and health impact.

([Tables 5.21](#) to [5.22](#))

There are different schemes and programmes being implemented

with the objective to provide access to safe drinking water in rural areas. In terms of population, according to the data on progress achieved during 2005-06, maximum population covered was in Tamil Nadu (26.1 lakh), followed by Andhra Pradesh (16.6 lakh) and Chattisgarh (11.6 lakh) against total coverage of 125.6 lakh in the whole country. Highest coverage of Scheduled Castes population has been attained in the State of Andhra Pradesh (4.1 lakh) whereas coverage for Scheduled Tribe population is highest in Chattisgarh (4.1 lakh).

([Table 5.23](#) to [5.24](#))

Expenditure under Rural Water Supply Programme for supply of drinking water to rural areas during IX Plan was Rs.10773 crore out of which the major expenditure was by Maharashtra (Rs.2128 crore). The next highest was Tamil Nadu where the expenditure incurred was to the tune of Rs.1229 crore. Maharashtra along with Tamil Nadu accounted for about one third of total expenditure incurred by the country under this programme. The corresponding data is also available for the first four years of Xth Plan. During 2005-06 Tamil Nadu incurred the maximum expenditure under the programme followed by Uttar Pradesh and Rajasthan. As regards expenditure under Accelerated Rural Water Supply Programme, Maharashtra incurred maximum expenditure during IX Plan followed by Rajasthan and Uttar Pradesh.

([Table 5.25](#) & [5.26](#))

Under Urban Water Supply Programme, 92 % of the urban population of the country was covered upto March, 2004. However, entire urban population of Delhi, Himachal Pradesh, Madhya Pradesh, Rajasthan, Uttaranchal and UT of Chandigarh

have been covered under this programme whereas Gujarat, Jammu & Kashmir, Maharashtra, Meghalaya, Tamil Nadu, Tripura, Uttar Pradesh, and UTs of Andaman & Nicobar and Pondicherry have more than 90 % of their urban population covered under this scheme till March 2004.

([Table 5.27](#))

Ground Water Potential and its Exploitation in Special Areas

i) Tribal Areas

Maximum number of Tribal districts are in the State of Madhya Pradesh and Ground Water potential of Tribal districts is also the highest in the State. West Bengal comes second in terms of the number of tribal districts and ground water potential in so far as tribal areas are concerned. However, while the highest percentage of groundwater development had been attained in Tamil Nadu (70 %) followed by Uttar Pradesh (40 %) and Rajasthan (39 %). The development of groundwater potential is minimum in tribal districts of Bihar. The other States where the utilisation of potential is low include Assam, Tripura and Orissa.

([Table 5.28](#))

ii) Drought Prone Areas

Number of drought prone districts is maximum in Uttar Pradesh, followed by Maharashtra. Ground water potential in these two States also is substantially high as compared to the corresponding potential in drought prone districts of other States. Ground water development in drought prone areas of various States is comparatively better vis-a-vis tribal area. Haryana has over exploited its

resources to the extent of 167 %. In many States the groundwater development in drought prone areas is around 30 % with the minimum in Orissa (6 %).

[\(Table 5.29\)](#)

iii) Desert Areas

Gujarat, Haryana, Rajasthan, Jammu & Kashmir and Himachal Pradesh are the States covered by Desert Development Programme. Highest number of districts covered under this programme are obviously in Rajasthan which incidentally is having the highest level of ground water potential closely followed by Haryana though the latter is having only 4 districts as, compared to 11 in Rajasthan. Rajasthan and Haryana exploited around 54 % and 35 % respectively of potential whereas Gujarat managed to develop around 86 %.

[\(Table 5.30\)](#)

Water Quality Parameters

The publication gives range of Variation of various water quality parameters at CWC sites for the river basins of Godavari, Cauvery, Narmada, Krishna, Mahanadi, East Flowing Rivers and West Flowing Rivers. The parameters covered include pH value, specific conductance, sodium absorption ratio, total dissolved solid and maximum values of chloride, sulphate, nitrate, iron, magnesium, sodium percentage, residual sodium carbonate and total hardness.

[\(Tables 5.31 to 5.38\)](#)

Table: 5.1 Extent of Various Kinds of Land Degradation in India

Area in Thousand Hectares

S.No.	State/UT	Water Erosion	Wind Erosion	Water Logging	Salinity Alkalinity	Soil Acidity	Complex Problem	Degraded Area	Geographi Cal Area	Degraded Area(%)
1	2	3	4	5	6	7	8	9	10	11
1	Andhra Pradesh	11518	0	1896	517	905	156	14992	27505	54.5
2	Arunachal Pradesh	2372	0	176	0	1955	0	4503	8374	53.8
3	Assam	688	0	37	0	612	876	2213	7844	28.2
4	Bihar+Jharkhand	3024	0	2001	229	1029	0	6283	17387	36.1
5	Goa	60	0	76	0	2	24	162	370	43.9
6	Gujarat	5207	443	523	294	0	1666	8133	19602	41.5
7	Haryana	315	536	146	256	0	214	1467	4421	33.2
8	Himachal Pradesh	2718	0	1303	0	157	0	4178	5567	75.0
9	J & K	5460	1360	200	0	0	0	7020	22224	31.6
10	Karnataka	5810	0	941	110	58	712	7631	19179	39.8
11	Kerala	76	0	2098	0	138	296	2608	3886	67.1
12	Madhya Pradesh+ Chhatisgarh	17883	0	359	46	6796	1126	26210	44345	59.1
13	Maharashtra	11179	0	0	1056	517	303	13055	30771	42.4
14	Manipur	133	0	111	0	481	227	952	2233	42.6
15	Mizoram	137	0	0	0	1050	694	1881	2108	89.2
15	Meghalaya	137	0	7	0	1030	34	1208	2243	53.9
17	Nagaland	390	0	0	0	127	478	995	1658	60.0
18	Orissa	5028	0	681	75	263	75	6122	15571	39.3
19	Punjab	372	282	338	288	0	0	1280	5036	25.4
20	Rajasthan	3137	6650	53	1418	0	110	11368	34224	33.2
21	Sikkim	158	0	0	0	76	0	234	710	33.0
22	Tamil Nadu	4926	0	96	96	78	138	5334	13006	41.0
23	Tripura	121	0	191	0	203	113	628	1049	59.9
24	Uttar Pradesh+ Uttaranchal	11392	212	2350	1370	0	0	15324	29441	52.0
25	West Bengal	1197	0	710	170	556	119	2752	8875	31.0
26	Delhi	55	0	6	10	0	11	82	148	55.4
27	A & N Islands	187	0	0	9	0	9	205	825	24.8
28	Chandigarh	0	0	0	0	0	0	0	0	0.0
29	D & N Haveli	0	0	0	0	0	0	0	0	0.0
30	Daman & Diu	0	0	0	0	0	0	0	0	0.0
31	Lakshadweep	0	0	0	0	0	0	0	0	0.0
32	Pondicherry	0	0	0	0	0	0	0	0	0.0
Grand TOTAL		93680	9483	14299	5944	16033	7381	146820	328602	
Grand Total(Million ha)		93.68	9.48	14.30	5.94	16.03	7.38	146.82	328.60	

Source:-Natural Resources Management Division, Department of Agriculture & Co-operation, Ministry of Agriculture.
(As per National Bureau of Soil Survey and Land Use Planning - ICAR 2005).

Table 5.2 Area Developed Under Various Watershed Development Programmes

Sl. No.	Ministry/Scheme (Year of Start)	Upto IX Plan		During first year of X Plan (2002 - 2005)		Area treated since inception up to March 2005	
		Area Treated (Lakh Ha.)	Total Investment (Rs. Crores)	Area Treated (Lakh Ha.)	Total Investment (Rs. Crores)	Area Treated (Lakh Ha.)	Total Investment (Rs. Crores)
1	2	3	4	5	6	7	8
1) Ministry of Agriculture, Department of Agriculture & Co-operation							
i)	NWDPRA (1990-91)	69.89	1877.73	1.79	113.59	71.68	1991.32
ii)	Soil conservation in the catchments of RVP & FPR (since 1962)	54.87	1516.23	5.93	378.00	60.80	1894.23
iii)	WDPSCA (Since 1994-95)	2.58	166.27	0.61	60.16	3.19	226.43
iv)	EAWDP	15.00	2071.00	-	-	15.00	2071.00
Sub Total		142.34	5631.23	8.33	551.75	150.67	6182.98
Sl. No.	Ministry/Scheme (Year of Start)	Upto VIII Plan		During first 4year of IX Plan (1997-2000)		Area treated since inception up to March 2000	
		Area Treated (Lakh Ha.)	Total Investment (Rs. Crores)	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	19.35	448.29	87.95	1558.24
ii)	DDP (1977-78)	8.48	722.79	8.48	369.79	16.96	1092.58
iii)	IWDP (1988-89)	2.84	542.96	6.51	326.8	9.35	869.76
iv)	TDET (1993-94)	Neg.		0.32	41.57	0.32	41.57
v)	IPS (1994-95)	Neg.		0.01	0.59	0.01	0.59
vi)	WDTF	0.01	4.74			0.01	4.74
Sub Total		79.93	2380.44	34.67	1187.04	114.60	3567.48
3) Ministry of Environment and Forests							
i)	IAEPS (1989-90)	2.98	203.12	1.23	141.54	4.21	344.66
TOTAL (2+3)		82.91	2583.56	35.90	1328.58	118.81	3912.14

Details of abbreviations:

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

NWDPRA - National Watershed Development Project for Rainfed Areas

WDPSCA - Watershed Development Project for Shifting Cultivation Areas

DPAP - Drought Prone Area Programme

TDET - Technology Development, Extension & Training

WDTF - Wasteland Development Task Force

Source:-Natural Resources Management Division, Department of Agriculture & Co-operation, Ministry of Agriculture.

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

Table 5.3 List of Districts Covered Under Drought Prone Area Programme (DPAP) (as on April 2003)

SI No.	State/District	No. of Blocks	Area of blocks (Sq. K.M.)
1	Andhra Pradesh		
	1 Adilabad	9	11793
	2 Chittoor	8	7761
	3 Cuddapah	7	8225
	4 Khammam	2	1228
	5 Kurnool	13	17366
	6 Mahabubnagar	16	18178
	7 Modak	5	4323
	8 Nalgonda	9	8178
	9 Prakasam	14	15165
	10 Rangareddy	7	5535
	11 Srikakulam	4	1466
	Total	94	99218
2	Bihar		
	1 Kaimur (Bhabhua)	5	2237
	2 Jamul	7	3062
	3 Madhubani	4	772
	4 Nawadah	9	2276
	5 Rohtas	2	639
	6 Sitamarhi	3	547
	Total	30	9533
3	Chattisgarh		
	1 Bastar	6	3857
	2 Bilaspur	3	1709
	3 Dantewada	6	6010
	4 Durg	2	1146
	5 Janjgir	1	440
	6 Kavardha	2	1386
	7 Korba	5	4309
	8 Rajnandgaon	4	2944
	Total	29	21801
4	Gujarat		
	1 Ahmedabad	6	4429
	2 Amreli	11	7393
	3 Bharuch	4	3129
	4 Bhavnagar	6	4896
	5 Dahod	7	3811
	6 Junagarh	6	3162
	7 Narmada	4	2800
	8 Navsari (Valsad)	1	593
	9 Panchmahals	10	4639

Contd..

Table 5.3 List of Districts Covered Under Drought Prone Area Programme (DPAP) (as on April 2003)

SI No.	State/District		No. of Blocks	Area of blocks (Sq. K.M.)
	10	Porbandar	2	1729
	11	Sabarkantha	1	368
	12	The Dangs	1	1723
	13	Vadodara	5	3244
	14	Valsad	3	2022
		Total	67	43938
5	Himachal Pradesh			
	1	Bilaspur	3	1120
	2	Solan	2	685
	3	Una	5	1514
		Total	10	3319
6	Jammu & Kashmir			
	1	Doda	14	11656
	2	Udhampur	8	3049
		Total	22	14705
7	Jharkhand			
	1	Bokaro	2	755
	2	Chatra	4	2493
	3	Deoghar	7	2436
	4	Dhanbad	8	2000
	5	Dumka	10	3693
	6	Garhwa	14	3630
	7	Godda	7	2019
	8	Hazaribagh	10	430
	9	Jamtara	4	0
	10	Kodarma	4	0
	11	Latehar	7	0
	12	Pakur	6	0
	13	Palamau	11	0
	14	Sahebganj	6	0
		Total	100	34843
8	Karnataka			
	1	Bangalore ®	8	5843
	2	Belgaum	7	9450
	3	Bidar	4	4491
	4	Chamarajanagar	1	1406
	5	Chickmagalur	6	6416
	6	Chitradurga	5	6681
	7	Davangere	1	953
	8	Dharwad	4	3016
	9	Gadag	4	4210

Contd..

Table 5.3 List of Districts Covered Under Drought Prone Area Programme (DPAP) (as on April 2003)

SI No.	State/District	No. of Blocks	Area of blocks (Sq. K.M.)
	10 Gulbarga	9	14603
	11 Hassan	4	4002
	12 Haveri	6	4063
	13 Kolar	9	6370
	14 Mysore	3	2630
	15 Tumkur	10	10198
	Total	81	84332
9	Madhya Pradesh		
	1 Badwani	6	3184
	2 Betul	10	7080
	3 Bhind	1	406
	4 Chindwada	8	7474
	5 Damoh	3	2204
	6 Dewas	3	3009
	7 Dhar	8	4981
	8 Guna	6	7196
	9 Jabalpur	1	863
	10 Jhabua	12	6791
	11 Khandwa	5	3886
	12 Khargone	5	3246
	13 Panna	3	2727
	14 Raisen	3	2325
	15 Rajgarh	2	1873
	16 Ratlam	1	681
	17 Rewa	4	2124
	18 Seoni	5	5424
	19 Shahdol	4	5225
	20 Shahjapur	2	1639
	21 Shivpuri	3	2780
	22 Sidhi	8	10350
	23 Umaria	2	3633
	Total	105	89101
10	Maharashtra		
	1 Ahmednagar	10	14109
	2 Akola	7	5363
	3 Washim	6	5177
	4 Amravati	9	6407
	5 Aurangabad	6	8108
	6 Beed	6	9008
	7 Buldhana	9	6877
	8 Chandrapur	3	4206

Contd..

Table 5.3 List of Districts Covered Under Drought Prone Area Programme (DPAP) (as on April 2003)

SI No.	State/District	No. of Blocks	Area of blocks (Sq. K.M.)
	9 Dhule	3	5735
	10 Nandurbar	4	4886
	11 Gadchiroli	3	7686
	12 Jalgaon	7	6504
	13 Jalna	2	2826
	14 Latur	4	5676
	15 Nagpur	1	829
	16 Nanded	4	4703
	17 Nasik	13	15658
	18 Osmanabad	3	3197
	19 Parbhani	2	3288
	20 Hingoli	2	3308
	21 Pune	12	33355
	22 Sangli	7	7164
	23 Satara	4	5035
	24 Sholapur	10	13730
	25 Yeotmal	12	11638
	Total	149	194473
11	Orissa		
	1 Bargarh	6	2648
	2 Bolangir	8	3446
	3 Boudh	2	2516
	4 Dhenkanal	2	1167
	5 Kalahandi	10	5741
	6 Naupada	5	2685
	7 Phulbani (Kandhamal)	12	7376
	8 Sonapur	2	599
	Total	47	26178
12	Rajasthan		
	1 Ajmer	3	2660
	2 Banswara	8	5037
	3 Baran	2	3587
	4 Bharatpur	1	501
	5 Dungarpur	5	3793
	6 Jhalawar	3	3536
	7 Karouli	1	1393
	8 Kota	2	1964
	9 Swai Madhopur	1	1375
	10 Tonk	3	3176
	11 Udaipur	3	4947
	Total	32	31969

Contd..

Table 5.3 List of Districts Covered Under Drought Prone Area Programme (DPAP) (as on April 2003)

SI No.	State/District	No. of Blocks	Area of blocks (Sq. K.M.)
13	Tamil Nadu		
	1 Coimbatore	5	1530
	2 Dharmapuri	14	5751
	3 Dindigul	3	1846
	4 Karur	2	976
	5 Perambalur	2	2122
	6 Pudukottai	4	1334
	7 Ramanathapuram	7	2988
	8 Salem	5	1087
	9 Namakkal	3	592
	10 Sivaganga	7	2616
	11 Thiruvannamalai	1	255
	12 Thothukudi	8	3662
	13 Tiruchirapalli	1	475
	14 Tirunelveli	1	326
	15 Vellore	6	1349
	16 Virudhunagar	7	2507
	Total	80	29416
14	Uttar Pradesh		
	1 Allahabad	1	587
	2 Bharaich		
	3 Sravasthi	14	5405
	4 Balrampur (Gonda)	4	2090
	5 Banda	6	3546
	6 Chitrakoot	5	3647
	7 Hamirpur	3	2216
	8 Jalaun	3	2140
	9 Jhansi	5	3281
	10 Lakhimpur Kheri	2	392
	11 Lalitpur	2	1793
	12 Mahoba	2	1835
	13 Mirzapur	2	1385
	14 Sitapur	3	1108
	15 Sonebhadra	8	6273
	Total	60	35698

Contd..

Table 5.3 List of Districts Covered Under Drought Prone Area Programme (DPAP) (as on April 2003)

SI No.	State/District	No. of Blocks	Area of blocks (Sq. K.M.)
15	Uttaranchal		
	1 Almora & } 2 Bageswar }	8	3114
	3 Chamoli	4	5850
	4 Garhwal (Pauri)	10	4070
	5 Pithoragarh & } 6 Champavath }	5	1709
	7 Tehri Garhwal	3	1053
	Total	30	15796
16	West Bengal		
	1 Bankura	7	2185
	2 Birbhum	2	397
	3 Midnapur	7	2707
	4 Purulia	20	6305
	Total	36	11594
	DPAP Total: 182 Districts	972	745914

Source: Ministry of Rural Development, DPAP

**TABLE : 5.4 Major, Medium and ERM Irrigation Projects Benefitting Tribal Sub-Plan Districts
(All India Financial Progress)**

Sl. No.	Stage	Number of Projects				Latest Estimated/completed Cost (Rs. Crores)	Expenditure			
		Major	Medium	ERM	Total		Up to end of IX Plan (Rs. Crores)	X Plan (2002-07) Outlay (Rs Crores)	Annual Plan 2004-05 (Rs Crores)	Annual Plan (2005-06) Anticipated (Rs Crores)
1	2	3	4	5	6	7	8	9	10	11
1	Completed Pre-Tribal Sub Plan Projects	32	118	5	155	305.69	305.69	-	-	-
2	Projects Completed during V Plan	3	22	0	25	58.75	58.75	-	-	-
3	Projects Completed during 1978-80	1	4	0	5	18.18	18.18	-	-	-
4	Projects Completed during VI plan	11	58	2	71	581.77	581.77	-	-	-
5	Projects Completed during VII Plan	1	59	4	64	420.32	420.32	-	-	-
6	Projects Completed during 1990-92	0	8	1	9	165.18	165.18	-	-	-
7	Projects Completed during VIII Plan	3	21	1	25	608.82	608.82	-	-	-
8	Projects Completed During IX Plan	15	31	3	49	3210.70	3210.70	-	-	-
9	On Going Projects	80	128	22	230	119749.09	38527.51	30728.03	4677.70	4846.72
10	New Projects of X Plan	15	32	4	51	23545.72	47.37	1366.84	481.59	1523.52
TOTAL		161	481	42	684	148664.22	43944.29	32094.88	5159.28	6370.24

Source: Central Water Commission (WSE Directorate)
ERM : Extension, Renovation and Modernisation.

**TABLE: 5.5 Major, Medium and ERM Irrigation Projects Benefitting Tribal Sub-Plan Districts
(All India Physical Benefits)**

(Unit : '000 Hectare)

Sl. No.	Stage	Number of Projects				Irrigation Potential		Benefit upto the end of IX th Plan		Benefit during 2004-2005		Benefit during 2005-2006	
		Major	Medium	ERM	Total	Ultimate	TSP Area	P	U	P	U	P	U
								9	10	11	12	13	14
1	Completed Pre-Tribal Sub Plan Projects	32	118	5	155	2391.76	29.07	2391.76	N.A.	-	-	-	-
2	Projects Completed During V Plan	3	22	0	25	235.72	4.23	235.72	N.A.	-	-	-	-
3	Projects Completed during 1978-80	1	4	0	5	26.97	-	26.97	N.A.	-	-	-	-
4	Projects Completed during VI plan	11	58	2	71	1311.34	201.90	1311.34	N.A.	-	-	-	-
5	Projects Completed during VII Plan	1	59	4	64	283.10	26.21	283.10	N.A.	-	-	-	-
6	Projects Completed during 1990-92	0	8	1	9	59.13	38.40	59.13	N.A.	-	-	-	-
7	Projects Completed during VIII Plan	3	21	1	25	493.52	36.84	493.52	N.A.	-	-	-	-
8	Projects Completed During IX Plan	15	31	3	49	1593.81	289.92	1593.81	N.A.	-	-	-	-
9	On going Projects	80	128	22	230	10157.95	1190.08	3296.68	227.91	238.48	0.00	216.75	0.00
10	New Projects in X Plan	15	32	4	51	981.75	75.30	0.23	0.22	0.81	N.A.	2.43	N.A.
TOTAL		161	481	42	684	17535.05	1891.95	9692.26	228.13	239.29	0.00	219.18	0.00

Source : Central Water Commission, (WSE Directorate)

P = Potential Created U = Potential Utilised N.A. : Not Available
ERM : Extention, Renovation and Modernisation.

**Table 5.6 Major, Medium and ERM Irrigation Projects Benefitting Tribal
Sub-Plan District (TSP) Completed
During IX Plan (Physical Benefits and Financial Progress)**

SI.No.	State	No of Projects				Cost (Rs.) Crores	Ultimate Irrigation Potential (‘000) Hectare	Benefit in Tribal Area (‘000) Hectare
		Major	Medium	ERM	Total			
1	2	3	4	5	6	9	7	8
1	Andhra Pradesh	0	4	0	4	191.40	36.00	N.A.
2	Gujarat	7	6	2	15	1470.36	331.87	206.88
3	Kerala	2	0	0	2	210.87	41.50	N.A.
4	Karnataka	0	1	0	1	17.35	1.18	N.A.
5	Madhya Pradesh	1	7	0	8	283.42	81.80	32.4
6	Rajasthan	1	1	1	3	335.64	50.64	50.64
7	West Bengal	2	8	0	10	441.96	912.34	N.A.
8	Chattisgarh	2	4	0	6	259.70	138.48	N.A.
TOTAL		15	31	3	49	3210.70	1593.81	289.92

Source : Central Water Commission (WSE Directorate)

NA : Not available

ERM : Extention, Renovation and Modernisation.

Table : 5.7 Major, Medium and ERM Irrigation Projects Benefitting Tribal Sub-Plan Districts (On-Going) Financial Progress

(Rs. in Crores)

Sl. No.	Name of The State	No. of Projects				Latest Estimated Cost	Expenditure			
		Maj.	Med.	ERM	Total		Upto the End of IX Plan	X PLAN (2002-07) Outlay	Annual Plan (2004-05)	Annual Plan (2005-06) Antcipated
1	2	3	4	5	6	7	8	9	10	11
1	Andhra Pradesh	6	6	2	14	7185.08	3805.81	913.35	294.53	492.68
2	Assam	4	5	2	11	981.23	441.02	166.69	19.19	16.87
3	Jharkhand	6	18	0	24	6693.46	2266.33	1196.71	156.54	219.15
4	Gujarat	3	24	0	27	47058.15	12714.03	18197.00	2175.33	2582.43
5	Kerala	3	5	2	10	2803.93	605.20	488.73	104.85	130.27
6	Karnataka	4	2	3	9	3342.34	1514.98	866.30	70.21	172.37
7	Madhya Pradesh	11	3	2	16	10708.26	3583.94	2039.34	634.74	633.13
8	Maharashtra	27	40	1	68	23605.92	7108.54	3946.86	643.19	N.A.
9	Tamil Nadu	1	0	0	1	1531.88	863.90	272.37	0.00	0.00
10	Manipur	2	1	0	3	934.46	368.50	210.93	36.07	125.02
11	Orissa	7	7	3	17	7681.66	2374.76	1258.73	242.79	231.04
12	Rajasthan	1	1	1	3	925.27	686.22	188.00	49.58	64.74
13	West Bengal	2	9	6	17	3979.65	1009.94	232.96	55.80	20.35
14	Chattisgarh	3	7	0	10	2317.80	1184.35	750.06	194.88	158.68
TOTAL		80	128	22	230	119749.09	38527.51	30728.03	4677.70	4846.72

Source: Central Water Commission (WSE Directorate)

NA : Not available

ERM : Extention, Renovation and Modernisation.

Table : 5.8 Major, Medium and ERM Irrigation Projects Benefitting Tribal Sub-Plan District (On-Going) Physical Benefits

(Unit : '000 Hectare)

Sl. No.	State	No. of Projects				Irrigation Potential		Benefits up to end of IX Plan		Benefit During 2004-2005		Benefit During 2005-2006 (Target)	
		Major	Medium	ERM	Total	Ultimate	T.S.P. Area	P	U	P	U	P	U
								9	10	11	12	13	14
1	Andhra Pradesh	6	6	2	14	1569.61	N.A	1309.11	N.A	28.39	N.A	6.80	N.A
2	Assam	4	5	2	11	256.05	N.A	105.78	N.A	2.52	N.A	3.85	N.A
3	Jharkhand	6	18	0	22	584.69	435.37	19.72	6.64	N.A	N.A	N.A	N.A
4	Gujarat	3	24	0	27	1951.42	141.67	130.90	0.00	60.42	0.00	87.04	0.00
5	Kerala	3	5	2	10	160.68	N.A	19.41	0.00	2.31	0.00	2.52	0.00
6	Karnataka	4	2	3	9	209.87	N.A	105.72	N.A	0.00	N.A	1.17	N.A
7	Madhya Pradesh	11	3	2	16	1167.35	48.50	114.50	2.30	36.30	N.A	38.30	N.A
8	Maharashtra	27	40	1	68	1845.59	N.A	573.04	-	33.97	N.A	30.34	N.A
9	Tamil Nadu	1	0	0	1	-	-	-	-	-	-	-	-
10	Manipur	2	1	0	3	55.95	7.00	4.00	3.80	0.00	0.00	0.00	0.00
11	Orissa	7	7	3	17	938.09	486.34	229.18	148.81	22.82	0.00	2.53	N.A
12	Rajasthan	1	1	1	3	93.52	71.20	64.18	55.48	2.50	0.00	7.00	0.00
13	West Bengal	2	9	6	17	762.17	N.A	127.02	10.88	2.52	N.A	19.00	N.A
14	Chattisgarh	3	7	0	10	737.11	N.A	494.13	0.00	46.73	N.A	18.21	N.A
TOTAL		80	128	22	230	10332.10	1190.08	3296.68	227.91	238.48	0.00	216.75	0.00

Source: Central Water Commission (WSE Directorate)

Note : P - Potential Created, U - Potential Utilised

ERM : Extention, Renovation and Modernisation.

**Table : 5.9 Major, Medium and ERM Irrigation Projects Benefitting Tribal Sub-Plan
Districts - New Projects during X PLAN
(Financial Progress)**

(Unit Rs. Crores)

Sl. No.	Name of The State	No. of Projects				Latest Estimated Cost	Expenditure upto IX Plan	X Plan (2002-2007) Outlay	Annual Plan 2004-05	Annual Plan 2005-06
		Major	Medium	ERM	Total					
1	2	3	4	5	6	7	8	9	10	11
1	Andhra Pradesh	2	4	2	8	18233.84	40.49	643.69	465.26	1489.49
2	Assam	0	2	0	2	187.00	0.00	60.65	N.A	N.A
3	Chattisgarh	2	0	0	2	1200.58	0.00	N.A.	0.63	5.65
4	Jharkhand	0	1	0	1	8.33	0.00	N.A.	N.A.	N.A
5	Gujarat	0	5	0	5	262.45	0.00	17.00	0.00	0.00
6	Madhya Pradesh	3	1	0	4	941.75	2.93	164.75	15.70	28.37
7	Orissa	2	4	0	6	1391.87	0.39	24.42	-	-
8	West Bengal	6	15	2	23	1319.90	3.56	456.33	0.00	0.01
TOTAL		15	32	4	51	23545.72	47.37	1366.84	481.59	1523.52

Source : Central Water Commission (WSE Dte.)
ERM : Extention, Renovation and Modernisation.
NA : Not available

**Table : 5.10 Major, Medium and ERM Irrigation Projects Benefitting Tribal Sub-Plan
Districts - New Projects during X PLAN
(Physical Benefits)**

('000' Ha.)

Sl. No.	Name of The State	No. of Projects				Irrigation Potential		Benefit to the end of IX Plan		Benefit during 2004-05		Benefit During 2005-06 (Target)	
		Major	Med-ium	ERM	Total	Ultimate	Tribal	P	U	P	U	P	U
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Andhra Pradesh	2	4	2	8	623.63	N.A	-	-	0.81	-	2.43	-
2	Assam	0	2	0	2	15.59	N.A	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
3	Chattisgarh	2	0	0	2	99.80	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
4	Jharkhand	0	1	0	1	0.60	0.60	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
5	Gujarat	0	5	0	5	8.59	8.59	0.00	0.00	0.00	0.00	0.00	0.00
6	Madhya Pradesh	3	1	0	4	53.86	N.A	-	-	-	-	-	-
7	Orissa	2	4	0	6	174.47	65.88	0.00	0.00	-	-	-	-
8	West Bengal	6	15	2	23	5.21	0.23	0.23	0.22	N.A.	N.A.	N.A.	N.A.
TOTAL		15	32	4	51	981.75	75.30	0.23	0.22	0.81	N.A.	2.43	N.A.

Source : Central Water Commission (WSE Dte.)

P : Potential Created U : Potential Utilised

ERM : Extention, Renovation and Modernisation.

NA : Not Available

**Table : 5.11 Flood Affected Area & Flood Damages in India
(Abstract for the period 1953 to 2004)**

Sl.No.	Item	Unit	Average Flood Damage During (1953-2004)	Maximum Damage (Year)	Damage During 2004 (Tentative)
1	2	3	4	5	6
1	Area Affected	Million Hectare	7.63	17.50 (1978)	8.03
2	Population Affected	Million	32.92	70.45 (1978)	34.22
3	Human Lives Lost	Nos.	1590	11316 (1977)	1275
4	Cattle Lost	Nos	94485	618248 (1979)	63869
5	Cropped Area Affected	Million Hectare	3.56	10.15 (1988)	2.69
6	Value of Damage to Crops	Rs.Crores	705.87	4246.62 (2000)	615.07
7	Houses Damaged	Million	1.23	3.51 (1978)	1.49
8	Value of Damage to Houses	Rs.Crore	269.70	1307.89 (1995)	852.66
9	Value of Damage to Public Utilities	Rs.Crore	806.78	5604.46 (2001)	1868.87
10	Value of total Damage to Houses, Crops and Public Utilities	Rs.Crore	1805.18	8864.54 (2000)	3336.59

Source : Central Water Commission (FMP Directorate)

Note : Figures from 2003-2004 are tentative.

Chart 34 Flood Damage - Area Affected

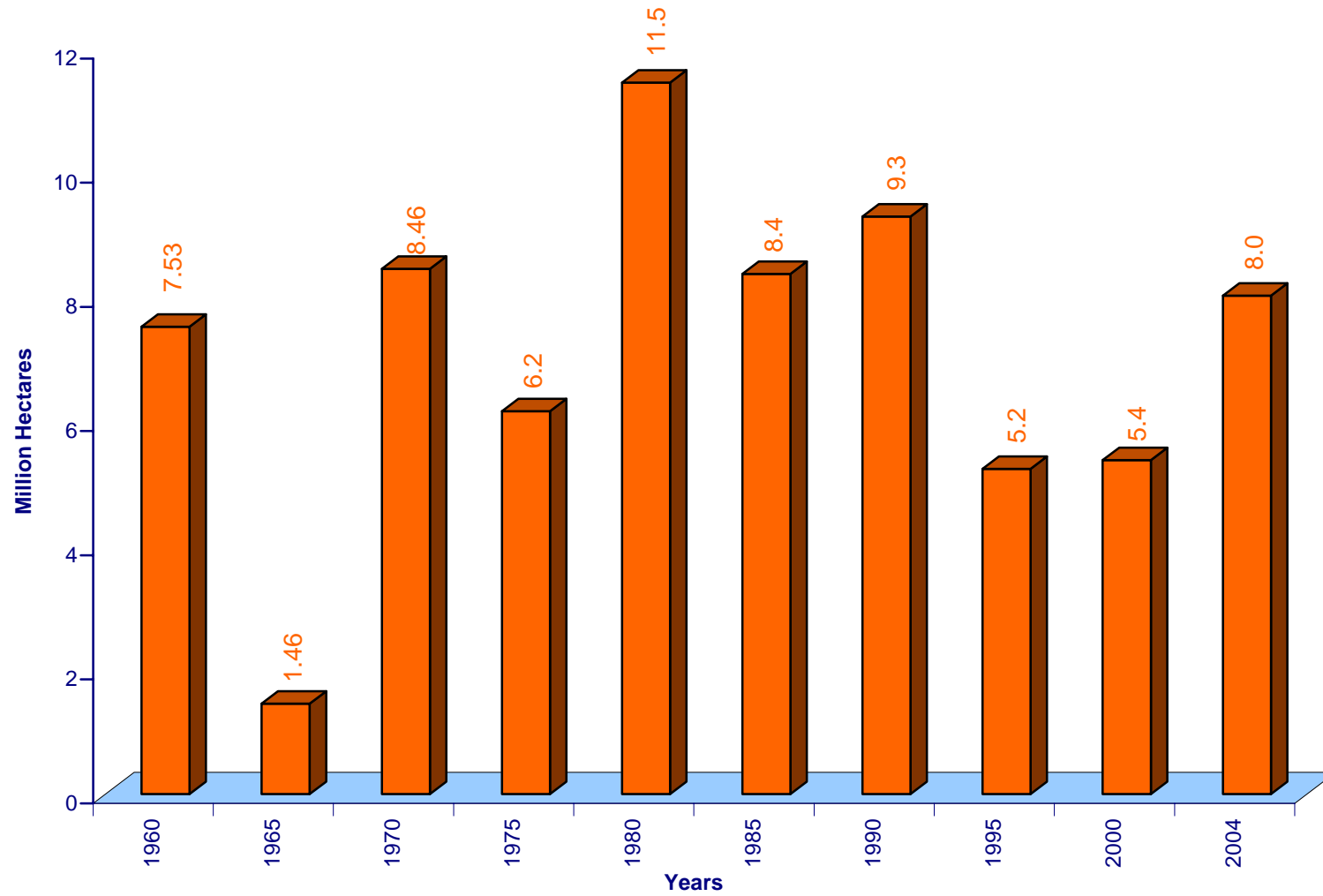


TABLE : 5.12 Flood Damage/Heavy Rains in India

Sl. No.	Year	Area Affected (M.Ha.)	Popul-ation Affected (Million)	Damage to Crops		Damage to House		Cattle Lost Nos. (‘000)	Human Lives Lost (No.)	Damage to Public Utilities (Rs. Crore)	Total Damages Crops Houses & Public Utilities (Rs. Crore)
				Area (M.Ha.)	Value (Rs.Crore)	Nos. (‘000)	Value (Rs. Crore)				
1	2	3	4	5	6	7	8	9	10	11	12
1	1953	2.29	24.28	0.93	42.08	265	7.42	47	37	2.90	52.40
2	1960	7.53	8.35	2.27	42.55	610	14.31	14	510	6.31	63.17
3	1965	1.46	3.61	0.27	5.87	113	0.20	7	79	1.07	7.14
4	1970	8.46	31.83	4.91	162.78	1434	48.61	19	1076	76.44	287.83
5	1975	6.17	31.36	3.85	271.49	804	34.10	17	686	166.05	471.64
6	1980	11.46	54.12	5.55	366.37	2533	170.85	59	1913	303.28	840.50
7	1985	8.38	59.59	4.65	1425.37	2450	583.86	43	1804	2050.04	4059.27
8	1990	9.30	40.26	3.18	695.61	1020	213.73	134	1855	455.27	1708.92
9	1991	6.36	33.89	2.70	579.02	1134	180.42	41	1187	728.89	1488.33
10	1992	2.64	19.26	1.75	1027.58	687	308.28	79	1533	2010.67	3344.53
11	1993	11.44	30.41	3.21	1308.63	1926	528.32	211	2864	1445.53	3382.49
12	1994	4.81	27.55	3.96	888.62	915	165.21	52	2078	740.76	1794.59
13	1995	5.24	35.93	3.24	1714.79	2002	1307.89	62	1814	679.63	3702.31
14	1996	8.05	44.73	3.83	1124.49	727	176.59	73	1803	861.39	3005.74
15	1997	4.57	29.66	2.26	692.74	505	152.50	28	1402	1985.93	2831.18
16	1998	10.85	47.44	7.50	2594.17	1933	1108.78	107	2889	5157.77	8860.72
17	1999	7.77	27.99	1.75	1850.87	1613	1299.06	91	745	462.83	3612.76
18	2000	5.38	45.01	3.58	4246.22	2629	680.94	123	2606	3936.98	8864.54
19	2001	6.18	26.46	3.96	688.48	716	816.47	33	1444	5604.46	7109.42
20	2002	7.09	26.32	2.19	913.09	762	599.37	22	1001	1062.08	2574.54
21	2003*	6.50	34.47	3.43	1424.83	847	802.93	16	1864	2206.60	4434.35
22	2004*	8.03	34.22	2.69	615.07	1493	852.66	64	1275	1868.87	3336.59
Total		396.76	1711.87	185.13	36705.08	64200	14024.22	4913	82704	41952.67	92681.97
Average		7.63	32.92	3.56	705.87	1235	269.70	94	1590	806.78	1782.35
Maximum (Year)		17.50 (1978)	70.45 (1978)	10.15 (1988)	4246.22 (2000)	3508 (1978)	1307.89 (1995)	618 (1979)	11316 (1977)	5604.46 (2001)	8864.54 (2000)

Source : Central water Commision [FMP Directorate]

* : Figure are Tentative.

Table : 5.13 Statewise Damage due to Flood/Heavy Rains during 2005 (Upto 31.10.2005)

Sl. No.	Name of the State/UTs.	Area Affected (Million Ha.)	Population Affected (Million)	Damage to Crops		Damage To Houses		Cattle lost Nos.	Human lives lost Nos.	Damage to Public Utilities (Rs.Crores)	Total Damages to crops, houses & public utilities (Rs Crores)
				Area (M.Ha.)	Value (Rs.Crores)	Nos	Value (Rs.Crores)				
1	2	3	4	5	6	7	8	9	10	11	12
1	Andhra Pradesh	9.04	0.00	9.04	3.45	12385	0.00	0	43.00	0.00	3.45
2	Assam	0.17	0.37	0.07	0.00	0	0.00	0	13.00	0.00	0.00
3	Bihar	0.06	1.85	0.06	7.89	4266	3.14	0	51.00	3.05	14.08
4	Chhattisgarh	0.00	0.00	0.00	0.00	0	0.00	0	0.00	0.00	0.00
5	Goa	0.01	0.00	0.00	0.06	580	0.51	0	18.00	0.15	0.72
6	Gujarat	0.00	0.30	0.00	0.00	0	0.00	0	213.00	2.20	2.20
7	Himachal Pradesh	0.53	1.09	0.06	452.00	2872	15.10	3081	15.00	790.40	1257.50
8	Madhya Pradesh	0.00	2.50	0.01	5.98	231714	173.88	45293	95.00	232.01	411.87
9	Maharashtra	0.23	12.00	0.23	0.02	10000	0.00	15120	910.00	0.00	0.02
10	Manipur	0.03	0.01	0.03	11.34	5375	0.15	0	0.00	0.00	11.49
11	Meghalaya	0.00	0.01	0.00	0.00	79	0.00	15	1	0.48	0.48
12	Orissa	0.23	1.60	0.23	0.00	4871	0.00	32	10	0.00	0.00
13	Tripura	0.00	0.00	0.00	0.00	0	0.00	0	0	0.00	0.00
14	Uttaranchal	0.00	0.00	0.00	0.00	88	0.00	2	0	0.00	0.00
15	Uttar Pradesh	0.51	0.06	0.00	0.00	9688	11.33	11	13	2.44	13.77
16	West Bengal	1.38	8.11	1.38	400.00	52878	106.15	49174	25	511.74	1017.89
17	Lakshadweep	0.00	0.00	0.00	0.00	0	0.00	0	0	0.00	0.00
Total		12.18	27.88	9.04	880.74	334796	310.25	112728	1407	1542.48	2733.46

Sources : Central Water Commission(FMP Directorate)

**TABLE : 5.14 Planwise Expenditure Under
Flood Management**

(Unit: Rs.Crore)

Sl. No.	Period	States & U.Ts	Centre	Total
1	2	3	4	5
1.	First Plan (1954-56)	13.21	-	13.21
2.	Second Plan (1956-61)	48.06	-	48.06
3.	Third Plan (1961-66)	82.09	-	82.09
4.	Annual Plans(1966-69)	41.96	-	41.96
5.	Fourth Plan (1969-74)	157.37	4.67	162.04
6.	Fifth Plan (1974-78)	242.46	56.15	298.61
7.	Annual Plans (1978-80)	290.13	39.83	329.96
8.	Sixth Plan (1980-85)	618.88	167.97	786.85
9.	Seventh Plan(1985-90)	781.02	160.56	941.58
10.	Annual Plan(1990-92)	393.61	66.83	460.44
11	Eighth Plan (1992-97)	1,641.14	226.17	1,867.31
Expenditure upto March ,1997 (Total 1 to 11)		4,309.93	722.18	5,032.11
12	Ninth Plan (1997-2002)	2,216.36	623.04	2,839.40
13	Ninth Plan (1997-2002) Anticipated/Actual	2,618.50	462.50	3,081.00
14	Tenth Plan (2002-2007) Approved Outlay)	4,619.00	1,308.00	5,922.00
15	Annual Plan (2002-2003) Actual	485.03	110.11	595.14
16	Annual Plan 2003-04 Revised Approved Outlay	506.01	135.92	641.93
17	Annual Plan 2004-05 Approved Outlay	621.84	208.87	830.71

Source : Annual Plan document 2004-05 of Planning Commission

**Table : 5.15 Planwise 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
Expdt. Upto March, 1997 (total 1-11)		10,539.11	1,504.11	12,043.22	N.A
12.	Ninth Plan (1997-2002)	1,231.26	398.60	1,629.86	N.A
13.	Ninth Plan (1997-02) Anticipated	1,800.53	283.88	2,084.41	N.A

Source : Central Water Commission (FMP Directorate)

Table : 5.16 Statewise and Planwise Expenditure on Flood Management Work

(Unit : Rs. Crores)

Sl. No.	Name of the State/U.Ts.	Expd. Upto March 1997	Anti. Expd. during 9th Plan	Anti. Expd. Upto 9th Plan	Approved Outlay 10th Plan	Actual Expenditur 2002-03	Revised Approved Outlay 2003-04	Approved Outlay 2004-05
1	2	3	4	5	6	7	8	9
1.	Andhra Pradesh	462.0	220.8	632.8	17.7	40.1	27.0	72.3
2.	Arunachal Pradesh	17.4	20.1	37.5	5.0	3.8	13.8	3.8
3.	Assam	248.5	73.1	321.6	19.0	21.4	33.7	35.1
4.	Bihar	727.6	309.7	1037.3	1911.9	82.8	63.0	95.0
5	Chhattisgarh	Included in Madhya Pradesh			1.9	0.3	0.2	0.4
6	Delhi	211.8	83.2	295.0	146.0	18.8	20.3	24.0
7	Goa	5.4	6.8	12.2	8.0	2.7	5.0	5.0
8	Gujarat	55.8	16.5	72.3	16.6	1.7	3.0	2.7
9	Haryana	296.9	88.8	385.6	154.3	46.2	46.0	48.0
10	Himachal Pradesh	20.6	31.1	51.6	55.7	13.4	13.0	12.2
11	Jammu & Kashmir	168.3	88.7	257.6	193.1	18.3	25.1	26.1
12	Jharkhand	Included in Bihar			30.0	0.0	2.0	2.5
13	Karnataka	57.5	51.9	109.5	42.8	8.1	6.0	1.5
14	Kerala	189.3	107.4	296.7	50.0	13.7	7.3	7.5
15	Madhya Pradesh	15.0	5.8	20.8	12.0	2.6	1.2	8.8
16	Maharashtra	107.8	8.0	115.8	61.8	1.3	3.2	0.0
17	Manipur	49.6	32.8	82.4	23.9	3.1	11.2	10.2
18	Meghalaya	10.5	12.1	22.6	11.0	1.1	1.6	1.5
19	Mizoram	1.1	0.0	1.1	0.0	0.0	0.0	0.0
20	Nagaland	0.7	0.4	1.1	2.0	0.1	4.0	0.2
21	Orissa	124.3	50.7	175.1	130.0	6.1	7.4	1.0
22	Punjab	353.8	383.9	737.6	594.0	38.7	30.1	27.2
23	Rajasthan	123.6	29.3	152.9	19.4	3.9	4.0	10.0
24	Sikkim	4.8	6.8	11.6	1.0	0.1	5.5	4.0
25	TamilNadu	34.7	0.0	34.7			0.0	0.0
26	Tripura	30.2	33.5	63.7	96.6	4.0	7.4	8.0
27	Uttar Pradesh	387.6	141.1	528.7	247.5	39.7	58.9	46.0
28	Uttranchal	Included in Uttar Pradesh			15.4	3.7	0.0	20.1
29	West Bengal	566.9	767.6	1334.5	712.3	90.6	89.3	127.4
Total States		4271.7	2570.1	6792.3	4578.6	466.2	489.1	600.4
30	A & N Islands	2.5	0.0	2.5	0.0	2.3	4.2	3.0
31	Chandigarh	0.0	0.0	0.0	0.0	0.6	0.0	0.0
32	Dadra & Nagar Haveli	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	Daman & Diu	1.9	1.3	3.2	1.3	0.2	0.3	0.2
34	Lakshadweep	12.8	18.1	30.9	17.3	3.6	3.2	3.5
35	Pondicherry	21.1	23.2	44.3	21.8	12.1	9.3	14.7
Total U.Ts.		38.3	42.6	80.9	40.4	18.9	16.9	21.4
Total States & U.Ts.		4310.0	2612.7	6873.2	4619.0	485.0	506.0	621.8
Central Sector		722.2	462.4	1184.8	1308.0	110.1	135.9	208.9
GRAND TOTAL		5032.1	3081.0	8107.0	5922.0	595.1	641.9	830.7

Source : 1. Central Water Commission (FMP Directorate), 2. Annual Plan Document 2004-05 of Planning Commission.

Note : Total may not tally due to rounding off.

TABLE : 5.17 Statewise Progress of Physical Works under Flood Management Programme till March 2006

Sl. No.	Name of the State/U.T	Length of Embankments (Km.)	Length of Drainage Channels (Km.)	Town/Village Protection Work (No.)	Villages Raised/Protected (No.)	Maximum area Affected in a year (1953-2005)		Area Benefitted Upto March 2006 (Million Ha.)	Raised Platforms (Nos)
						Area	Year		
1	2	3	4	5	6	7	8	9	10
1	Andhra Pradesh	2230.000	13569.000	72	23	3.48	1989	1.3110	-
2	Arunachal Pradesh	6.324	4.447	0	17			0.0550	-
3	Assam	4464.180	850.690	694	0	3.82	1988	1.6420	-
4	Bihar	3430.000	365.000	47	0	4.99	2004	2.9490	58
5	Chattisgarh	0.000	0.000	0	0			0.0000	-
6	Delhi	83.000	453.000	0	0			0.0780	-
7	Goa	23.190	32.770	2	0			0.0030	-
8	Gujarat \$	104.120	271.000	805	30	2.05	1988	0.4830	-
9	Haryana	1144.000	4385.000	448	98	1.00	1977	2.0000	-
10	Himachal Pradesh	58.000	11.000	0	0	0.48	1994	0.0120	-
11	Jammu & Kashmir	230.000	14.000	12	5	0.81	1992	0.2170	-
12	Jharkhand	14.000	0.000	2	5			0.0010	-
13	Karnataka	73.515	10.000	30	0	0.90	1988	0.0050	-
14	Kerala	205.744	31.100	4	6	1.47	1989	0.3460	-
15	Madhya Pradesh	26.000	0.000	37	0	0.38	1994	0.0040	-
16	Maharashtra	44.500	110.000	0	0	0.39	2002	0.0010	-
17	Manipur	577.000	166.000	38	1	0.08	1966	0.1320	-
18	Meghalaya	112.000	0.000	8	2	0.10	1987	0.0010	-
19	Mizoram	0.000	0.000	0	0	-	-	0.0000	-
20	Nagaland	10.519	0.000	8	0			0.6320	-
21	Orissa	6541.000	131.000	29	14	1.40	1960	0.6300	-
22	Punjab	1370.000	6622.000	3	0	2.79	1988	3.1900	-
23	Rajasthan	145.000	197.000	25	0	3.26	1977	0.0820	-

Contd..

TABLE : 5.17 Statewise Progress of Physical Works under Flood Management Programme till March 2006

Sl. No.	Name of the State/U.T	Length of Embankments (Km.)	Length of Drainage Channels (Km.)	Town/Village Protection Work (No.)	Villages Raised/Protected (No.)	Maximum area Affected in a year (1953-2005)		Area Benefitted Upto March 2006 (Million Ha.)	Raised Platforms (Nos)
						Area	Year		
1	2	3	4	5	6	7	8	9	10
24	Sikkim	101.810	64.860	18	0			0.0170	-
25	Tamil Nadu	87.000	19.000	46	4	0.45	1961	0.1220	-
26	Tripura	141.740	95.230	11	0	0.33	1963	0.0330	-
27	Uttar Pradesh	2097.000	3995.000	65	4511	7.34	1978	1.7030	-
28	Uttranchal	9.000	0.000	6	0			0.002	-
29	West Bengal	10539.000	7392.760	48	0	3.08	1978	2.5680	-
30	A&N Islands	0.000	0.000	0	0	0.06	-	0.0000	-
31	Chandigarh	0.000	0.000	0	0			0.0000	-
32	Dadra & Nagar Haveli	0.000	0.000	0	0			0.0000	-
33	Daman & Diu	0.000	0.000	0	0			0.0000	-
34	Lakshadweep	0.000	0.000	0	0			0.0000	-
35	Pondecherry	61.000	20.000	0	0			0.0040	-
		33928.642	38809.857	2458	4716	38.66	-	18.2220	58

Source : Central Water Commission (FMP Dte.)

Table :5.18 Flood Forecasting Performance (River-Wise Site-Wise) at Various Forecasting Stations Between 1.5.2004 and 31.10.2004 during the FLOOD Season

Sl.No.	Name of River	Name of FF site	States codes	Name of State	Warning Level (m)	Danger Level (m)	Previous Highest Flood Level		Maximum Level Attained during 2004	
							Level (m)	Date/Year	Level (m)	Date
1	2	3	7	4	5	6	7	8	9	10
1	Ganga	Rishikesh	12	Uttaranchal	339.50	340.50	341.72	05.09.1995	339.80	08.08.2004
2	Ganga	Haridwar	12	Uttaranchal	293.00	294.00	296.23	3.9.1978	294.55	08.08.2004
3	Ganga	Kannauj	13	Uttar Pradesh	124.90	125.97	126.24	29.8.1998	125.15	08-13/31.8
4	Ganga	Ankinghat	13	Uttar Pradesh	123.00	124.00	124.31	09.09.1978	123.11	16/30.8-08/31.8
5	Ganga	Kanpur	13	Uttar Pradesh	113.00	114.00	113.47	02.09.1967	112.33	07-17/01.9
6	Ganga	Dalmau	13	Uttar Pradesh	98.36	99.36	99.84	03.08.1973	98.55	08-12/02.9
7	Ganga	Phphamau	13	Uttar Pradesh	83.73	84.73	87.98	08.09.1978	81.98	17-22/28.08
8	Ganga	Allahabad (Chhatnag)	13	Uttar Pradesh	83.73	84.73	88.03	08.9.1978	81.26	12-17/28.08
9	Ganga	Mirzapur	13	Uttar Pradesh	76.72	77.72	80.34	09.09.1978	74.64	21-24/28.08
10	Ganga	Varanasi	13	Uttar Pradesh	70.26	71.26	73.90	09.09.1978	69.31	08-11/29.08
11	Ganga	Ghazipur	13	Uttar Pradesh	62.11	63.11	65.22	09.09.1978	62.73	09-21/29.08
12	Ganga	Buxar	3	Bihar	59.32	60.32	62.09	1948	59.44	19/29.08
13	Ganga	Ballia	13	Uttar Pradesh	56.62	57.62	60.25	14.09.2003	58.26	17/29-08-08/30.08
14	Ganga	Patna (Dighaghat)	3	Bihar	49.45	50.45	52.52	23.08.1975	49.52	10/23.08
15	Ganga	Patna (Gandhighat)	3	Bihar	47.60	48.60	50.27	14.08.1994	48.43	16/23.08
16	Ganga	Hathidah	3	Bihar	40.76	41.76	43.15	07.08.1971	41.08	08/24.08
17	Ganga	Munger	3	Bihar	38.33	39.33	40.99	19.09.1976	37.41	10/24.08
18	Ganga	Bhagalpur	3	Bihar	32.68	33.68	34.20	17.09.2003	32.92	12/25.08
19	Ganga	Colgong/ Kahaigaon	3	Bihar	30.09	31.09	32.87	17.09.2003	31.47	09/25.08
20	Ganga	Farakka	14	West Bengal	21.25	22.25	25.14	07.09.1998	22.73	15/01.09
21	Alaknanda	Srinagar	12	Uttaranchal	539.00	540.00	536.85	05.09.1995		
22	Ramganga	Moradabad	13	Uttar Pradesh	189.60	190.60	192.68	03.09.1978	191.20	01-02/29.8
23	Ramganga	Bareilly	13	Uttar Pradesh	162.70	163.70	162.88	06.8.1978	161.47	13-18/29.8
24	Yamuna	Mawi	13	Uttar Pradesh	230.00	230.85	232.45	1988	230.22	01/20.08.04
25	Yamuna	Delhi Rly Bridge	16	NCT Delhi	204.00	204.83	207.49	1978	203.72	24/27.08.04
26	Yamuna	Mathura	13	Uttar Pradesh	164.20	165.20	169.73	1978	164.29	17/30.08.04

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Table :5.18 Flood Forecasting Performance (River-Wise Site-Wise) at Various Forecasting Stations Between 1.5.2004 and 31.10.2004 during the FLOOD Season

Sl.No.	Name of River	Name of FF site	States codes	Name of State	Warning Level (m)	Danger Level (m)	Previous Highest Flood Level		Maximum Level Attained during 2004	
							Level (m)	Date/Year	Level (m)	Date
1	2	3	7	4	5	6	7	8	9	10
27	Yamuna	Agra	13	Uttar Pradesh	151.40	152.40	154.76	09.09.1978	149.00	31.08.2004
28	Yamuna	Etawa	13	Uttar Pradesh	120.92	121.92	126.13	11.09.1978	117.95	01.09.2004
29	Yamuna	Auraiya	13	Uttar Pradesh	112.00	113.00	118.19	25.08.1996	112.20	26.08.2004
30	Yamuna	Kalpi	13	Uttar Pradesh	107.00	108.00	112.98	25.08.1996	106.99	27.08.2004
31	Yamuna	Hamirpur	13	Uttar Pradesh	102.63	103.63	108.59	12.09.1983	101.45	27.08.2004
32	Yamuna	Chilaghat	13	Uttar Pradesh	99.00	100.00	105.16	06.09.1978	97.25	27.08.2004
33	Yamuna	Naini	13	Uttar Pradesh	83.74	84.74	87.99	08.09.1978	81.88	28.08.2004
34	Sahibi	Dhansa Regulator	16	NCT Delhi	211.44	212.44	213.58	1977	209.80	08/28.08.04
35	Betwa	Mohana	13	Uttar Pradesh	121.66	122.66	133.69	11.09.1983	118.83	24.08.2004
36	Betwa	Sahjina	13	Uttar Pradesh	103.54	104.54	108.67	12.09.1983	101.00	27.08.2004
37	Ken	Banda	13	Uttar Pradesh	103.00	104.00	113.28	14.09.1992	103.45	11.08.2004
38	Gomati	Lucknow (Hanuman Setu)	13	Uttar Pradesh	108.50	109.50	110.85	10.09.1971	106.99	22/30.9-22/01.10
39	Gomati	Jaunpur	13	Uttar Pradesh	73.07	74.07	77.74	22.09.1971	70.45	10-17/01.10
40	SAI	Rae- Bareilly	13	Uttar Pradesh	100.00	101.00	104.81	17.09.1982	98.66	08/26.9-11/27.9
41	Ghaghra	Elgin Bridge	13	Uttar Pradesh	105.07	106.07	107.18	14.09.1983	106.34	17/24.09
42	Ghaghra	Ayodhya	13	Uttar Pradesh	91.73	92.73	93.65	19.08.1998	92.75	02/25.09
43	Ghaghra	Turtipar	13	Uttar Pradesh	63.01	64.01	66.00	28.08.1998	63.84	20/01.08
44	Ghaghra	Darauli	3	Bihar	59.82	60.82	61.74	29.08.1998	59.62	16/22.08
45	Ghaghra	Gangpur Siwan	3	Bihar	56.04	57.04	58.01	18.09.1983	55.49	03/23.08
46	Ghaghra	Chhapra	3	Bihar	52.68	53.68	54.59	03.09.1982	51.18	10/23.08
47	Rapti	Balrampur	13	Uttar Pradesh	103.62	104.62	105.25	11.09.2000	103.96	17/20.07
48	Rapti	Bansi	13	Uttar Pradesh	83.90	84.90	85.82	21.08.1998	83.97	19/12.07
49	Rapti	Gorakhpur (Birdghat)	13	Uttar Pradesh	73.98	74.98	77.54	23.08.1998	73.88	23/21.07
50	Sone	Inderpuri	3	Bihar	107.20	108.20	108.85	23.08.1975	105.80	23/21.08
51	Sone	Koelwar	3	Bihar	54.52	55.52	58.88	20.07.1971	54.17	02/23.08
52	Sone	Maner	3	Bihar	51.00	52.00	53.79	10.09.1976	51.46	10/23.08

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Table :5.18 Flood Forecasting Performance (River-Wise Site-Wise) at Various Forecasting Stations Between 1.5.2004 and 31.10.2004 during the FLOOD Season

Sl.No.	Name of River	Name of FF site	States codes	Name of State	Warning Level (m)	Danger Level (m)	Previous Highest Flood Level		Maximum Level Attained during 2004	
							Level (m)	Date/Year	Level (m)	Date
1	2	3	7	4	5	6	7	8	9	10
53	PunPun	Sripalpur	3	Bihar	49.60	50.60	53.91	18.09.1976	50.50	23/22.06
54	Gandak	Khadda	13	Uttar Pradesh	95.00	96.00	97.50	23.07.2002	96.37	16/11.07
55	Gandak	Chatia	3	Bihar	68.15	69.15	70.04	26.07.2002	68.08	13/13.07
56	Gandak	Rewaghat	3	Bihar	53.41	54.41	55.41	17.09.1986	53.84	22/13.07
57	Gandak	Hazipur	3	Bihar	49.32	50.32	50.93	1948	48.93	12/23.08
58	Burhi Gandak	Lalbeghiaghat	3	Bihar	62.20	63.20	67.09	30.07.1975	64.44	22/13.07
59	Burhi Gandak	Muzaffarpur (Sikandarpur)	3	Bihar	51.53	52.53	54.29	15.08.1987	54.14	13/14.07
60	Burhi Gandak	Samastipur	3	Bihar	45.02	46.02	49.38	15.08.1987	48.72	16/15.07
61	Burhi Gandak	Rosera	3	Bihar	41.63	42.63	46.35	16.08.1987	45.45	10/15.07
62	Burhi Gandak	Khagaria	3	Bihar	35.58	36.58	39.22	1976	36.30	19/24.08
63	Bagmati	Benibad	3	Bihar	47.68	48.68	49.72	26.07.2002	50.01	20/12.07
64	Bagmati	Hayaghat	3	Bihar	44.72	45.72	48.96	14.08.1987	48.76	18/12.07
65	Adhwara Group	Kamtaul	3	Bihar	49.00	50.00	52.99	12.08.1987	52.20	11/12.07
66	Adhwara Group	Ekmighat	3	Bihar	45.94	46.94	49.27	14.08.1987	49.52	18/12.07
67	Kamla Balan	Jhanjharpur	3	Bihar	49.00	50.00	52.73	11.08.1987	53.01	01/10.07
68	Kosi	Basua	3	Bihar	46.75	47.75	48.76	21.07.1996	48.87	20/11.07
69	Kosi	Baltara	3	Bihar	32.85	33.85	36.40	15.08.1987	35.97	16/13.07
70	Kosi	Kursela	3	Bihar	29.00	30.00	32.04	06.09.1998	30.44	17/25.08
71	Mahananda	Dhengraghat	3	Bihar	34.65	35.65	38.09	1968	36.69	10/12.07
72	Mahananda	Jhawa	3	Bihar	30.40	31.40	33.51	14.08.1987	32.40	16/13.07
73	Mayurakshi	Narayanpur	14	West Bengal	26.99	27.99	29.69	27.09.1995	28.80	17-19/07.10
74	Ajoy	Gheropara	14	West Bengal	28.42	39.42	43.94	27.09.1978	39.97	24/17.09
75	Mundeshwari	Harinkhola	14	West Bengal	11.80	12.80	14.58	29.09.1978	11.41	09-18/21.09
76	Kangsabati	Mohanpur	14	West Bengal	24.73	25.73	29.87	02.09.1978	25.10	04-05/21.08
77	Brahmaputra	Dibrugarh	2	Assam	103.24	104.24	106.48	03.09.1998	106.26	21-22/18.07
78	Brahmaputra	Neamatighat	2	Assam	84.04	85.04	87.37	11.07.1991	87.05	09-10/19.07

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Table :5.18 Flood Forecasting Performance (River-Wise Site-Wise) at Various Forecasting Stations Between 1.5.2004 and 31.10.2004 during the FLOOD Season

Sl.No.	Name of River	Name of FF site	States codes	Name of State	Warning Level (m)	Danger Level (m)	Previous Highest Flood Level		Maximum Level Attained during 2004	
							Level (m)	Date/Year	Level (m)	Date
1	2	3	7	4	5	6	7	8	9	10
79	Brahmaputra	Tejpur	2	Assam	64.23	65.23	66.59	27.08.1988	66.20	16-20/20.07
80	Brahmaputra	Guwahati	2	Assam	48.68	49.66	51.37	29.08.1988	51.46	21/07/04.18
81	Brahmaputra	Goalpara	2	Assam	35.27	36.27	37.43	31.10.1954	37.35	13/07/04.14
82	Brahmaputra	Dhubri	2	Assam	27.50	28.50	30.36	28.08.1988	30.07	13/07/04.08-17
83	Burhi -Dihing	Naharkatia	2	Assam	119.40	120.40	122.69	17.06.1973	119.86	09-12/11.07
84	Burhi -Dihing	Khowang	2	Assam	101.11	102.11	103.92	25.08.1988	103.67	14-19/12.07
85	Desang	Nanglamoraghat	2	Assam	93.46	94.46	96.49	06.09.1998	83.25	13-18/11.07
86	Dikhow	Sibsagar	2	Assam	91.40	92.40	95.62	08.07.1974	92.69	18-19/22.06
87	Subansiri	Badatighat	2	Assam	81.53	82.53	86.84	28.06.1972	85.02	18/09.10-08/10.10
88	Dhansiri	Golaghat	2	Assam	88.50	89.50	91.30	11.10.1986	90.55	18-19/31.07
89	Dhansiri	Numaligarh	2	Assam	76.42	77.42	79.87	24.09.1985	79.52	06-09/09.10
90	Jiabharali	N.T. Road Crossing	2	Assam	76.00	77.00	78.25	26.06.1998	77.70	24/22.08
91	Kopili	Kampur	2	Assam	59.50	60.50	61.86	16.06.1973	61.79	13-17/20.07
92	Kopili	Dharamtul	2	Assam	55.00	56.00	57.68	24.05.1988	58.09	14-18/21.07
93	Puthimari	N.H. Crossing	2	Assam	50.81	51.81	54.92	20.06.1993	54.36	12-13/23.06
94	Beki	Road Bridge	2	Assam	44.10	45.10	46.20	04.08.2000	45.96	05/11.07
95	Pagladiya	N.T. Road Crossing	2	Assam	51.75	52.75	55.38	15.09.1984	55.68	22/08.07.2004
96	Manas	N.H. Crossing	2	Assam	47.81	48.42	50.08	15.09.1984	49.39	24/08.9-01/09.9
97	Sankosh	Golakganj	2	Assam	28.94	29.94	30.91	21.07.1993	30.47	03-04/21.07
98	Raidak-1	Tufanganj	14	West Bengal	34.22	35.30	36.36	21.07.1993	36.14	12/13/09.09
99	Torasa	Ghughumari	14	West Bengal	39.80	40.41	41.46	03.08.2000	40.15	14-15/08.07
100	Jaldhaka	N.H.31 Road Bridge	14	West Bengal	80.00	80.90	81.33	28.07.1972	80.28	08/20.07
101	Jaldhaka	Mathabhanga	14	West Bengal	48.20	48.70	49.60	29.07.1972	48.72	11-12/08.07
102	Tista	Domohani Rd.Bridge	14	West Bengal	85.65	85.95	86.78	13.06.1971	85.96	06-07/08.07
103	Tista	Mekhliganj	14	West Bengal	65.45	65.95	66.45	13.07.1996	65.72	15-18/08.07
104	Barak	Silchar(Annapurnghat)	2	West Bengal	18.83	19.83	21.84	01.08.1989	21.61	13-22/20.7

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Table :5.18 Flood Forecasting Performance (River-Wise Site-Wise) at Various Forecasting Stations Between 1.5.2004 and 31.10.2004 during the FLOOD Season

Sl.No.	Name of River	Name of FF site	States codes	Name of State	Warning Level (m)	Danger Level (m)	Previous Highest Flood Level		Maximum Level Attained during 2004	
							Level (m)	Date/Year	Level (m)	Date
1	2	3	7	4	5	6	7	8	9	10
105	Katakhal	Matizuri	2	Assam	19.27	20.27	22.58	09.08.2002	22.63	04-14/25.6
106	Kushiyara	Karimgang		Assam	13.94	14.94	16.36	23.07.1993	16.21	09-22/20.7
107	Gumti	Sonamura		Tripura	11.50	12.50	14.42	23.07.1993	12.62	05-10/15.9
108	Manu	Kailashahar		Tripura	24.34	25.34	25.79	1993	25.76	10/19.7
109	Subernarekna	Rajghat	11	Orissa	9.45	10.36	12.20	07.08.1997	11.50	24/22.08
110	Burhabalang	N.H.5 Rd Bridge	11	Orissa	7.21	8.13	9.50	12.10.1973	7.74	23/06.10
111	Baitarni	Anandpur	11	Orissa	37.44	38.36	41.20	19.08.1975	38.65	19/21.08
112	Baitarni	Akhuapada	11	Orissa	18.29	19.20	21.95	16.08.1960	18.30	07/22.08
113	Brahmani	Jenapur Exp Way	11	Orissa	22.00	23.00	24.78	20.08.1975	21.74	21/23.08
114	Mahanadi	Naraj	11	Orissa	25.41	26.41	27.61	31.08.1982	35.93	12/12.08
115	Mahanadi	Alipingal Devi	11	Orissa	10.85	11.76	12.90	17.07.2001	10.85	13.08
116	Mahanadi	Nimapara	11	Orissa	9.85	10.76	11.60	31.08.1982	10.00	16.08
117	Rushikuluya	Purushottampur	11	Orissa	15.83	16.83	19.65	04.11.1990	15.92	13/05.10
118	Vamsadhara	Gunupur	11	Orissa	83.00	84.00	88.75	17.09.1980	83.22	04/07.10
119	Vamsadhara	Kashinagar	11	Orissa	53.60	54.60	58.93	18.09.1980	54.70	09/11.08
120	Godavari	Kopergaon	10	Maharashtra	490.90	493.68	499.17	1969	494.44	14/04.8
121	Godavari	Gankhed	10	Maharashtra	374.00	375.00	377.57	1947	365.58	17/25.09
122	Godavari	Nanded	10	Maharashtra	353.00	354.00	355.65	1983	342.70	04/07.10
123	Godavari	Kaleswaram	1	Andhra Pradesh	104.50	104.75	107.05	1986	98.89	20-21/05.8
124	Godavari	Eturunagaram	1	Andhra Pradesh	73.29	75.79	77.66	1990	71.87	06-08/06.08
125	Godavari	Dummagudam	1	Andhra Pradesh	53.00	55.00	60.25	1986	52.36	16-18/06.08
126	Godavari	Bhdrachalam	1	Andhra Pradesh	45.72	48.77	55.66	1986	43.80	18-22/06.08
127	Godavari	Kunavaram	1	Andhra Pradesh	37.74	39.24	51.30	1986	33.00	02-03/07.08
128	Godavari	Rajamundri	1	Andhra Pradesh	17.68	19.51	20.48	1986	15.47	12-14/07.08
129	Wardh	Balharsha	1	Andhra Pradesh	171.50	174.00	176.00	1986	165.81	18-19/06.08
130	Godavari	Dowalaiswaram		Maharashtra	14.25	16.08	18.36	1986	14.19	02/24.08

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Table :5.18 Flood Forecasting Performance (River-Wise Site-Wise) at Various Forecasting Stations Between 1.5.2004 and 31.10.2004 during the FLOOD Season

Sl.No.	Name of River	Name of FF site	States codes	Name of State	Warning Level (m)	Danger Level (m)	Previous Highest Flood Level		Maximum Level Attained during 2004	
							Level (m)	Date/Year	Level (m)	Date
1	2	3	7	4	5	6	7	8	9	10
131	Wainganga	Bhandra	10	Maharashtra	244.00	244.50	249.20	1994	240.50	23-24/23.08
132	Wainganga	Pauni	10	Maharashtra	226.73	227.73	232.35	07.09.1994	228.61	01-02/06.8
133	Indravati	Jagdulpur	4	Chhatisgarh	539.50	540.80	544.68	1973	541.99	20-21/15.6
134	Bhima	Deongaon	8	Karnataka	404.46	407.00	406.30	29.08.1997	398.70	18/15.08
135	Tungbhadra	Mantralayam	1	Andhra Pradesh	310.00	312.00	315.80	19.11.1992	309.90	04/17.08
136	Pennar	Nellor Anicut	5	Andhra Pradesh	15.91	17.28	18.70	30.11.1982	16.76	08/29.09
137	Sabarmati	Ahmedabad (Subhash Bridge)	5	Gujarat	44.09	45.34	46.85	18.07.1993	42.30	07/20.09
138	Mahi	Wanakbori	5	Gujarat	71.00	72.54	74.68	24.08.1980	73.76	14.08.04
139	Naramada	Mandla	9	Madhya Pradesh	437.20	437.80	439.40	18.08.1974	438.32	23/08.08.04
140	Naramada	Hoshangabad	9	Madhya Pradesh	292.83	293.83	300.90	30.08.1973	292.70	16/23.08.04
141	Naramada	Garudeswar	5	Gujarat	30.48	31.09	41.65	06.09.1970	23.50	12-14/26.08
142	Naramada	Bharuch	5	Gujarat	6.71	7.31	12.65	07.09.1970	7.10	16-19/26.08
143	Tapi	Surat	5	Gujarat	8.50	9.50	12.01	1968	5.95	08/04.08
144	Damanganga	Vapi Town	5	Gujarat	18.20	19.20	20.72	1976	23.76	15-16/03.08
145	Damanganga	Daman	15	Dadra & Nagar Haveli	2.60	3.40	2.40	02.07.1981	4.00	15-16/03.08

Source : Central Water Commission (Flood Forecast Monitoring Directorate).

FF = Flood Forecasting

Table-5.19 Broad Features of the Flood Forecasting Performance of FF&W Network of CWC During the Flood Season 2004 (i.e. Between 01.05.2004 and 31.10.2004)

S.No.	Details of Flood Forecasting Performance during the Flood Season 2004	No. of F.F. sites	%age of F.F. sites
1	2	3	4
1	No of operational Flood Forecasting stations During the Flood Season	172	100
2	Flood Forecasting Sites where " No Forecast" was issued / required because water levels at those sites were below warning stages during the flood season	60	34.9%
3	Flood Forecasting Sites where " Forecasts were Actually " issued during the flood	112	65.1%
4	Flood Forecasting sites where Forecasting accuracy was "100%" (out of 172 Sites)	49	28.3
5	No of Flood Forecasting sites where Forecasting accuracy was Nil (i.e. where all issued forecasts were out of prescribed limits of accuracy (+/- 15cm, +/- 20% cumecs)	Nil	Not Applicable
6	Total number of flood forecasts issued during the Flood Season	4889	
7	Total number of correct forecasts issued during the flood season within prescribed limit of accuracy of +/- 15cm or +/- 20%cumecs	4696 (96.1%)	
8	Total number of flood forecasting sites where the accuracy of forecasts issued were equal or more than the %age of the accuracy of item no.7cited above	70 (62.5%)	
9	Average number of flood forecasts issued per site (I.e. sites where forecasted sites are acually issued during the flood season	44	

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**Table : 3.19(B) Quantity and Value of Monthly Average Consumption of Different Cereals
Per Person for Urban Areas of Each State and All - India
NSS 58th Round July 2002 - Dec 2002**

URBAN

Sl. No	Cereal\State	AP	Assam	Bihar	Gujarat	Haryana	Jummu & Kashmir	Karna-taka	Kerala	MP	Mahar-asthra
1	2	3	4	5	6	7	8	9	10	11	12
		Quantity (kg)									
1	Rice	8.99	10.43	6.45	1.95	1.03	8.85	5.68	7.30	2.44	3.23
2	Wheat	0.86	1.65	6.38	5.10	7.62	3.59	1.66	1.18	7.77	4.45
3	Jowar	0.18	0.00	0.00	0.06	0.00	0.00	1.31	0.00	0.15	1.20
4	Bajra	0.00	0.00	0.00	0.77	0.01	0.00	0.00	0.00	0.02	0.23
5	Maize	0.00	0.00	0.04	0.04	0.01	0.02	0.00	0.00	0.07	0.00
6	Other Cereals	0.05	0.00	0.00	0.00	0.00	0.00	1.05	0.00	0.00	0.00
	Total Cereals	10.08	12.08	12.87	7.92	8.67	12.46	9.70	8.48	10.45	9.11
		Value (Rs.)									
7	Rice	108.09	123.88	59.59	30.44	15.52	92.90	76.18	84.87	27.30	44.40
8	Wheat	11.31	18.45	48.54	49.65	55.61	41.50	20.68	16.76	56.60	46.50
9	Jowar	1.35	0.00	0.00	0.49	0.00	0.00	9.95	0.00	0.75	9.12
10	Bajra	0.00	0.00	0.00	5.54	0.04	0.00	0.00	0.00	0.12	1.64
11	Maize	0.00	0.09	0.18	0.27	0.11	0.12	0.00	0.00	0.36	0.01
12	Other Cereals	0.43	0.00	0.01	0.01	0.00	0.00	5.97	0.09	0.00	0.08
	Total cereals	121.18	142.41	108.31	86.40	71.27	134.52	112.78	101.73	85.13	101.75

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**Table : 3.19(B) Quantity and Value of Monthly Average Consumption of Different Cereals
Per Person for Urban Areas of Each State and All - India
NSS 58th Round July 2002 - Dec 2002**

URBAN

Sl. No	Cereal\State	Orissa	Punjab	Rajas- than	TN	UP	WB	Delhi	Jhar- khand	North-Est Stat	Group of Uts	All India
1	2	13	14	15	16	17	18	19	20	21	22	23
		Quantity (kg)										
1	Rice	9.56	0.84	0.51	8.19	2.65	7.71	1.79	6.55	12.02	4.16	4.74
2	Wheat	2.33	7.84	9.44	0.75	7.69	2.65	6.26	5.68	0.69	3.93	4.59
3	Jowar	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.28
4	Bajra	0.00	0.00	0.63	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.12
5	Maize	0.00	0.07	0.15	0.00	0.01	0.00	0.01	0.02	0.01	0.06	0.02
6	Other Cereals	0.05	0.00	0.05	0.08	0.00	0.00	0.00	0.00	0.01	0.01	0.07
	Total Cereals	11.95	8.74	10.82	9.03	10.35	10.36	8.06	12.25	12.74	8.21	9.83
		Value (Rs.)										
7	Rice	86.24	11.53	8.25	94.22	29.22	91.73	23.45	69.78	140.78	53.41	56.55
8	Wheat	26.52	60.02	74.75	11.51	57.55	26.99	56.18	50.77	11.30	36.94	40.54
9	Jowar	0.00	0.00	0.34	0.00	0.00	0.00	0.00	0.00	0.00	0.23	2.10
10	Bajra	0.00	0.01	4.44	0.02	0.02	0.01	0.07	0.00	0.00	0.15	0.85
11	Maize	0.02	0.71	0.85	0.00	0.05	0.02	0.06	0.14	0.14	0.76	0.14
12	Other Cereals	0.25	0.01	0.34	0.67	0.00	0.00	0.04	0.00	0.07	0.08	0.45
	Total cereals	113.04	72.28	88.98	106.42	86.55	118.75	79.79	120.69	152.29	91.56	100.64

Source : NSSO, Ministry of Statistics & Programme Implementation (NSS 58th Round July 2002 - Dec 2002)

**Table : 5.20 Comparative Flood Forecast Performance
From 1978 to 2004**

Year	Total no. of Forecasts issued	No. of Forecasts With in +/- 15 cm/+/- 20% cumecs of deviation from actual	Percentage of forecasts within +/- 15 cm/+/- 20% cumecs of deviation from actual	Remarks
1	2	3	4	5
1978	6964	5741	82.4	Excluding Inflow forecasts of 1978
1979	4353	3531	81.1	
1980	5175	4485	86.7	
1981	5185	4480	86.4	
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	95.0	
1988	6982	6554	93.9	
1989	5536	5262	95.1	
1990	8566	8071	94.2	Maximum Number of Forecasts Issued till date
1991	6603	6225	94.3	
1992	4764	4567	95.9	
1993	6643	6438	96.9	
1994	7476	7086	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).

Chart 35 Estimated Sectorwise Requirement of Water in India During 2025

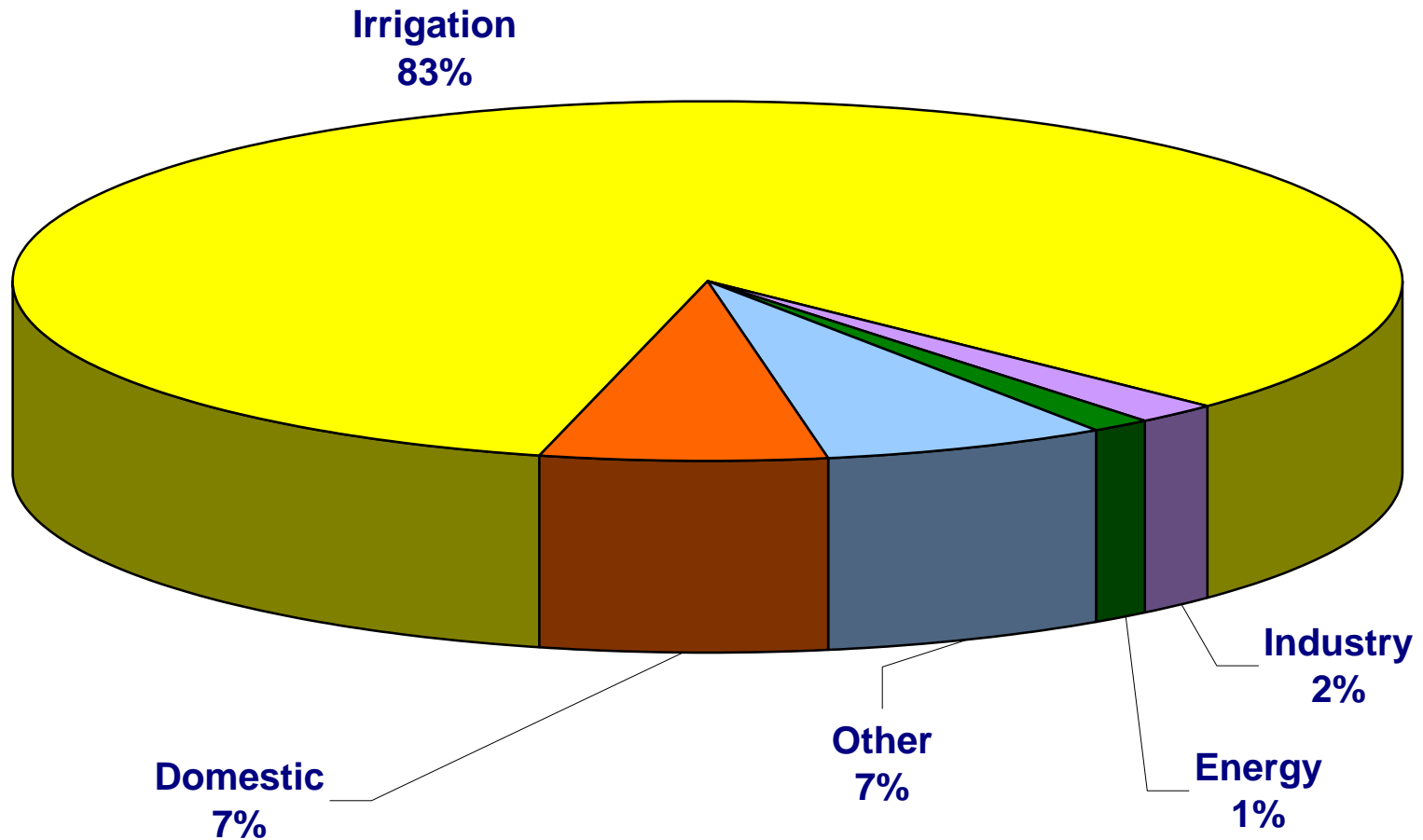


Table 5.21 : Projected Water Demand in India (By Different Uses)

(Unit : BCM)

SI No.	Sector	1990	2000	2010	2025	2050 (Provisional)
1	2	3	4	5	6	7
1	Domestic	32	42	56	73	102
2	Irrigation	437	541	688	910	1072
3	Industry	-	8	12	23	63
4	Energy	-	2	5	15	130
5	Other	33	41	52	72	80
	TOTAL		634	813	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, 2001

**CHART 36 DECENNIAL GROWTH OF POPULATION
BY CENSUS**

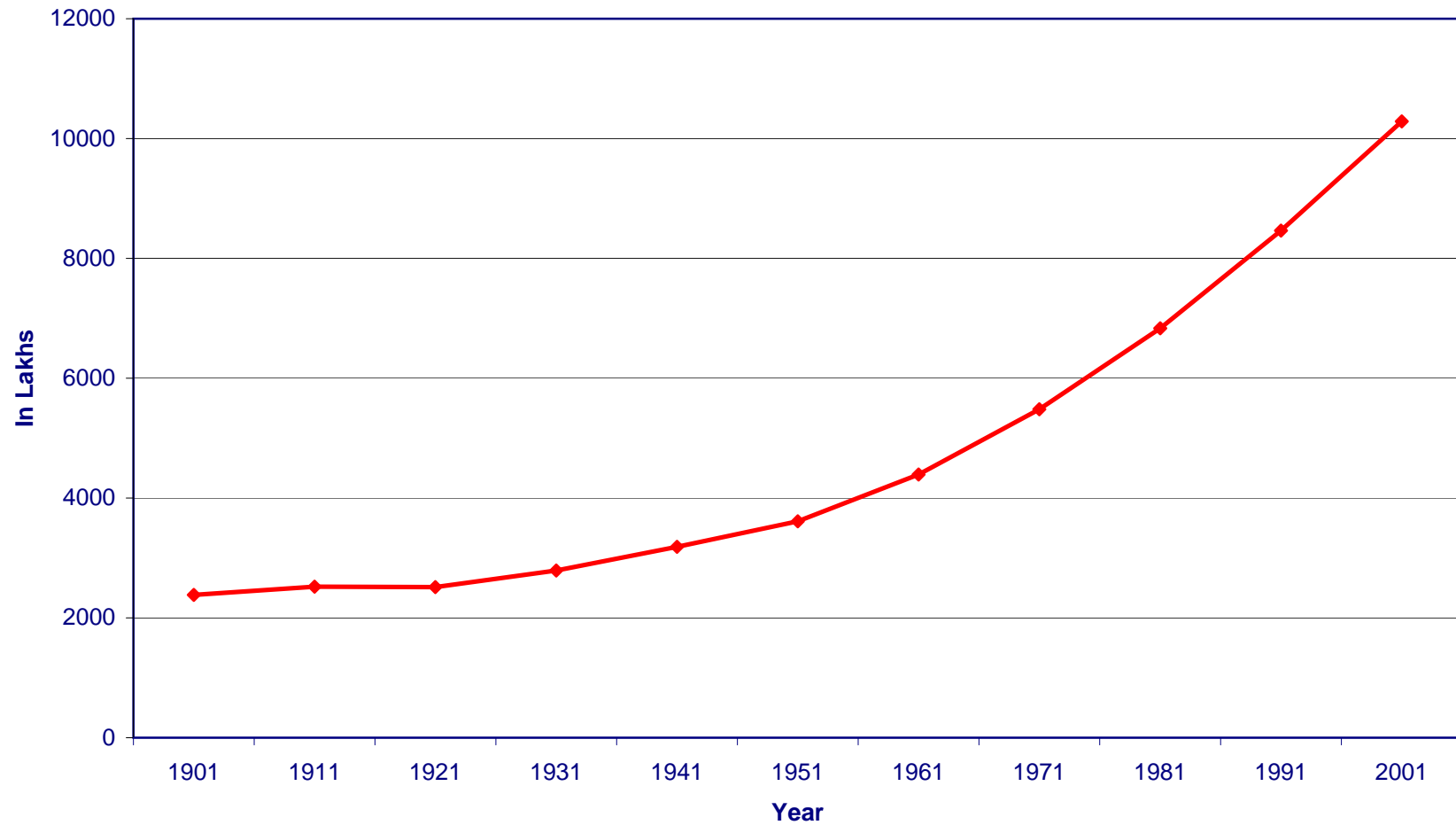


Table 5.22 Decennial Growth of Population By Census

Population in Thousands												
S.No.	Name of the State / Uts	1901	1911	1921	1931	1941	1951	1961	1971	1981	1991	2001
1	2	3	4	5	6	7	8	9	10	11	12	13
	India **	238396	252093	251321	278977	318661	361088	439235	548160	683329	846421	1028737
1	Andhra Pradesh	19066	21447	21420	24204	27289	31115	35983	43503	53551	66508	76210
2	Arunachal Pradesh	-	-	-	-	-	-	337	468	632	865	1098
3	Assam	3290	3849	4637	5560	6695	8029	10837	14625	18041	22414	26656
4	Bihar	27312	28314	28127	31347	35171	38782	46447	56353	69915	64531	82999
5	Chhatisgarh	Included in Madhya Pradesh										20834
6	Goa	476	487	469	505	541	547	590	795	1008	1170	1348
7	Gujarat	9095	9804	10175	11490	13702	16263	20633	26697	34086	41310	50671
8	Haryana	4623	4175	4256	4560	5273	5674	7591	10036	12922	16464	21145
9	Himachal Pradesh	1920	1897	1928	2029	2263	2386	2812	3460	4281	5171	6078
10	Jammu & Kashmir *	2139	2293	2424	2670	2947	3254	3561	4617	5987	7837	10144
11	Jharkhand	Included in Bihar										26946
12	Karnataka	13055	13525	13378	14633	16255	19402	23587	29299	37136	44977	52851
13	Kerala	6396	7148	7802	9507	11032	13549	16904	21347	25454	29099	31841
14	Madhya Pradesh	16861	19441	19172	21356	23991	26072	32372	41654	52179	48566	60348
15	Maharashtra	19392	21475	20850	23959	26833	32003	39554	50412	62783	78937	96879
16	Manipur **	284	346	384	446	512	578	780	1073	1421	1837	2294
17	Meghalaya	341	394	422	481	556	606	769	1012	1336	1775	2319
18	Mizoram	82	91	98	124	153	196	266	332	494	690	889
19	Nagaland	102	149	159	179	190	213	369	516	775	1210	1990
20	Orissa	10303	11379	11159	12491	13768	14646	17549	21945	26370	31660	36805
21	Punjab	7545	6732	7153	8012	9600	9161	11135	13551	16789	20282	24359

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Table 5.22 Decennial Growth of Population By Census

Population in Thousands												
S.No.	Name of the State / Uts	1901	1911	1921	1931	1941	1951	1961	1971	1981	1991	2001
1	2	3	4	5	6	7	8	9	10	11	12	13
22	Rajasthan	10294	10984	10293	11748	13864	15971	20156	25766	34262	44006	56507
23	Sikkim	59	88	82	110	122	138	162	210	316	406	541
24	Tamil Nadu	19253	20903	21629	23472	26268	30119	33687	41199	48408	55859	62406
25	Tripura	173	230	304	382	513	639	1142	1556	2053	2757	3199
26	Uttaranchal	Included in Uttar Pradesh										8489
27	Uttar Pradesh	48628	48155	46672	49780	56535	63220	73755	88342	110863	132062	166198
28	West Bengal	16940	17999	17474	18897	23230	26300	34926	44312	54581	68078	80176
	Union Territory											
29	A & N Islands	25	26	27	29	34	31	64	115	189	281	356
30	Chandigarh	22	18	18	20	23	24	120	257	452	642	901
31	D & N Haveli	24	29	31	38	40	42	58	74	104	138	220
32	Daman & Diu	32	32	31	36	43	49	37	63	79	102	158
33	Delhi	406	414	488	636	918	1744	2659	4066	6220	9421	13851
34	Lakshadweep	14	15	14	16	18	21	24	32	40	52	61
35	Pondicherry	246	257	244	259	285	317	369	472	604	808	974

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

Total May not tally due to rounding off.

* The 1991 Census could not be held in J & K. Total Population for 1991 has been worked out by interpolation based on the final population of 2001 census.

** India and Manipur figures included estimated figures for those of the three sub-divisions viz. Mao Maram, Paomata & Purul of Senapati district of Manipur as census results of 2001 in these three sub-divisions were cancelled due to technical and administrative reasons.

**Table : 5.24 Status of Coverage of Rural Habitations Under
Rural Water Supply as on 1.04.2005**

Sl. No.	Name of the State/UT	Status As On 1-4-2005			
		NC	PC	FC	Total
1	2	3	4	5	6
1.	Andhra Pradesh	0	0	69732	69732
2.	Arunachal Pradesh	158	510	3630	4298
3.	Assam	238	7137	63180	70555
4.	Bihar	0	0	105340	105340
5.	Chhatisgarh	0	0	50379	50379
6.	Goa	0	6	389	395
7.	Gujarat	0	36	30233	30269
8.	Haryana	0	0	6745	6745
9.	Himachal Pradesh	0	6891	38476	45367
10.	Jammu & Kashmir	660	2551	7973	11184
11.	Jharkhand	0	0	100096	100096
12.	Karnataka	0	5618	51064	56682
13.	Kerala	0	7573	2190	9763
14.	Madhya Pradesh	0	0	109489	109489
15.	Maharashtra	327	17411	68192	85930
16.	Manipur	0	0	2791	2791
17.	Meghalaya	12	239	8385	8636
18.	Mizoram	0	112	695	807
19.	Nagaland	41	690	794	1525
20.	Orissa	0	0	114099	114099
21.	Punjab	803	1128	11518	13449
22.	Rajasthan	2300	0	91646	93946
23.	Sikkim	0	74	1605	1679
24.	Tamil Nadu	0	0	66631	66631
25.	Tripura	0	0	7412	7412
26.	Uttar Pradesh	0	0	243508	243508
27.	Uttanchal	30	242	30702	30974
28.	West Bengal	0	0	79036	79036
29.	Andaman & Nicobar	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
	Total	4588	50479	1367216	1422283
	Percentage	0.32	3.55	96.13	100.00
	Number of habitation uninhabited /unpopulated/ migrated/urbanised				381.00
	Grand Total				1422664.00

Source :- Ministry of Rural Development, Department of Drinking Water Supply.

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

Total may not tally due to rounding off.

**Table : 5.25 Expenditure Under Rural Water Supply Programme
(State Sector) during IX Plan and First Four Years of X Plan**

(Rs. In Crore)

Sl. No.	Name of the States/Uts	IX Plan	X PLAN			
			2002-03	2003-04	2004-05	2005-06 *
1	2	3	4	5	6	7
1.	Andhra Pradesh	541.58	161.18	182.40	241.40	67.66
2.	Arunachal Pradesh	114.07	28.96	29.33	23.87	9.91
3.	Assam	285.59	25.41	54.67	64.20	31.01
4.	Bihar	172.80	38.22	49.89	25.14	34.13
5.	Chhattisgarh	65.48	69.23	72.95	74.70	39.35
6.	Goa	57.41	8.59	10.76	13.18	3.49
7.	Gujarat	803.43	156.24	121.50	111.90	53.92
8.	Haryana	226.18	94.22	108.32	98.25	108.39
9.	Himachal Pradesh	316.63	98.56	112.20	114.76	64.53
10.	Jammu & Kashmir	286.65	80.85	162.13	99.00	12.85
11.	Jharkhand	21.94	39.42	50.20	32.31	9.50
12.	Karnataka	493.51	112.16	111.69	99.04	86.37
13.	Kerala	202.78	47.48	42.43	50.00	31.31
14.	Madhya Pradesh	563.10	122.75	111.94	75.25	55.61
15.	Maharashtra	2128.01	141.16	223.19	259.78	41.21
16.	Manipur	68.37	18.97	11.99	7.74	3.27
17.	Meghalaya	95.56	23.61	25.98	28.07	13.82
18.	Mizoram	45.95	13.97	17.56	14.69	4.46
19.	Nagaland	59.51	22.22	15.61	15.16	3.27
20.	Orissa	227.37	58.23	55.66	46.07	21.09
21.	Punjab	137.48	90.48	59.51	71.04	73.64
22.	Rajasthan	815.81	120.02	135.02	191.35	154.95
23.	Sikkim	55.63	12.70	10.98	24.06	13.25
24.	Tamil Nadu	1228.73	454.96	391.80	355.87	220.21
25.	Tripura	96.64	14.71	5.31	2.96	2.61
26.	Uttar Pradesh	1070.51	187.49	122.37	243.71	163.67
27.	Uttaranchal	127.62	43.06	105.50	134.51	98.41
28.	West Bengal	338.21	80.48	69.37	85.39	37.61
29.	A & N Islands	50.57	8.98	6.36	2.56	0.00
30.	D & N Haveli	14.20	1.65	1.65	1.48	0.36
31.	Daman & Diu	5.21	0.00	0.00	0.00	0.00
32.	Delhi	38.49	14.06	0.75	0.00	0.00
33.	Lakshadweep	7.96	2.44	1.65	0.10	0.00
34.	Pondicherry	10.11	3.22	7.41	7.34	6.67
	TOTAL	10773.10	2395.65	2488.06	2614.90	1466.53

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

* As per information received from States/Uts till 31.1.2006

Total may not tally due to rounding off.

TABLE : 5.26 Expenditure Under Accelerated Rural Water Supply Programme (ARWSP) Including Activities taken under DDP during IX Plan and First Four Years of X Plan

(Rs. Crores)

Sl. No.	Name of the State/UT	IX Plan	X PLAN			
			2002-03	2003-04	2004-05	2005-06 *
1	2	3	4	5	6	7
1.	Andhra Pradesh	583.11	149.85	167.62	154.84	97.54
2.	Arunachal Pradesh	112.25	27.49	42.92	76.46	32.13
3.	Assam	217.65	48.49	54.62	115.97	71.74
4.	Bihar	72.39	33.09	24.28	43.88	73.68
5.	Chhattisgarh	61.55	26.03	30.48	16.47	10.04
6.	Goa	18.60	0.24	0.87	5.51	0.00
7.	Gujarat	603.64	94.92	92.07	66.97	47.65
8.	Haryana	180.17	33.46	26.62	27.07	12.39
9.	Himachal Pradesh	197.00	76.76	56.03	41.41	41.56
10.	Jammu & Kashmir	227.71	61.21	145.46	132.62	7.58
11.	Jharkhand	44.83	33.70	14.20	8.36	8.95
12.	Karnataka	532.13	130.70	151.26	120.92	140.54
13.	Kerala	200.80	42.53	49.92	41.57	27.78
14.	Madhya Pradesh	499.56	85.95	89.40	79.45	55.79
15.	Maharashtra	1090.63	168.42	148.24	95.01	114.43
16.	Manipur	18.30	11.93	12.08	13.63	5.37
17.	Meghalaya	59.38	16.64	21.20	22.63	7.55
18.	Mizoram	48.11	20.97	17.66	14.02	9.42
19.	Nagaland	42.69	16.29	23.99	16.61	13.19
20.	Orissa	241.92	65.32	47.50	43.11	54.39
21.	Punjab	104.79	32.37	22.69	25.16	9.82
22.	Rajasthan	789.46	298.81	253.84	227.78	182.34
23.	Sikkim	30.66	6.39	10.05	6.11	5.42
24.	Tamil Nadu	544.58	73.58	74.69	58.82	56.33
25.	Tripura	79.25	13.36	24.38	20.77	17.12
26.	Uttar Pradesh	689.10	126.83	110.86	122.64	109.99
27.	Uttaranchal	63.75	31.70	22.45	36.60	38.77
28.	West Bengal	339.59	79.30	83.62	85.54	52.44
29.	Andman & Nicobar	0.00	0.00	0.00	0.00	
30.	Dadra & Nagar Haveli	0.50	0.00	0.00	0.00	0.00
31.	Daman & Diu	0.00				
32.	Delhi	0.00	0.00	0.00		
33.	Lakshadweep	0.00	0.00	0.00	0.00	
34.	Pandicherry	0.28	0.00	0.00	0.00	0.00
STATES/UT's TOTAL		7694.38	1806.31	1819.00	1719.92	1303.94

Source :- Ministry of Rural Development, Department of Drinking Water Supply.

* As per information received from States/Uts till 31.1.2006

Total may not tally due to rounding off.

Table 5:27 Population Covered Under Urban Water Supply & Sanitation Programme

(Tentative as on March 2004)

Sl. No.	Name of the State/UT	Estimated Urban Population ('000) As On 31.03.2004	POPULATION PROVIDED WITH WATER SUPPLY* THROUGH				POPULATION PROVIDED WITH SEWERAGE & SANITATION THROUGH			
			H.S.C	P.S.P	TOTAL	%	SEWER	L.C.S	TOTAL	%
1	2		4	5	6	7	8	9	10	11
1	Andhra PR-PHED	15105	7988	4730	12718	84	825	7702	8527	56
	Andhra PR-HMWSSBd.\$	3500	2640	500	3140	90	2275	210	2485	71
	Andhra PR Total\$	18605	10628	5230	15858	85	3100	7912	11012	59
2	Arunachal Pradesh	247	132	37	169	68	0	154	154	62
3	Assam	3719	660	200	860	23	15	258	273	7
4	Bihar	8925	3213	4282	7495	84	491	4775	5266	59
5	Jharkhand\$									
6	Delhi	15300	10985	4315	15300	100	6585	730	7315	48
7	Goa	730	581	58	639	88	49	193	242	33
8	Gujarat**\$	16810	13227	3307	16534	98	10871	348	11219	67
9	Haryana	4820	3359	600	3959	82	2350	594	2944	61
10	Himachal Pradesh	674	592	82	674	100	310	249	559	83
11	Jammu & Kashmir\$	1378	1240	50	1290	94	579	66	645	47
12	Karnataka UWS&DBd	12550	7082	3215	10297	82	3605	4912	8517	68
	Karnataka BWSSBd	6823	3953	1317	5270	77	2960	1100	4060	60
	Karnataka Total	19373	11035	4532	15567	80	6565	6012	12577	65
13	Kerala (2001) census	8267	2862	3781	6643	80	350	7027	7377	89
14	Madhya Pradesh\$	25000	16200	8800	25000	100	2500	17500	20000	80
15	Chattisgarh\$									
	Maharashtra exclMumbai\$									
	Maharashtra MMC	12480	6240	6240	12480	100	5390	5006	10396	83
16	Maharashtra Total**P	34309	23744	10176	33920	99	17020	5006	22026	64
17	Manipur	946	377	195	572	60	0	752	752	79
18	Meghalaya@	534	298	191	489	92	20	108	128	24
19	Mizoram	454	266	95	361	80	0	181	181	40
20	Nagaland	367	228	0	228	62	0	206	206	56
21	Orissa	5276	1100	3100	4200	80	245	499	744	14
22	Punjab	8209	5988	299	6287	77	4393	3816	8209	100
23	Rajasthan\$	12897	10318	2579	12897	100	995	9194	10189	79
24	Sikkim	182	160	0	160	88	46	0	46	25
	Tamil Nadu TWAD Bd	25572	10625	12679	23304	91	1926	13052	14978	59
	Tamil Nadu CMWSSBd	6038	5193	604	5797	96	5918	0	5918	98
25	Tamil Nadu Total	31610	15818	13283	29101	92	7844	13052	20896	66
26	Tripura	591	192	355	547	93	0	200	200	34
27	Uttar Pradesh\$	33000	16100	16500	32600	99	12200	5886	18086	55
28	Uttaranchal	2376	1664	712	2376	100	741	381	1122	47
	West Bengal CMBA									
	West Bengal-PHED	7388	1118	4116	5234	71	0	0	0	0
29	West Bengal Total**\$	18495	6261	9505	15766	85	3332	5950	9282	50
	Total States	285574	163468	98504	261972	92	85991	96055	182046	64
	UNION TERRITORIES									
1	A & Nicobar Island	109	98	9	107	98	0	108	108	99
2	Chandigarh	1013	658	354	1012	100	900	113	1013	100

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Table 5:27 Population Covered Under Urban Water Supply & Sanitation Programme

(Tentative as on March 2004)

Sl. No.	Name of the State/UT	Estimated Urban Population ('000) As On 31.03.2004	POPULATION PROVIDED WITH WATER SUPPLY* THROUGH				POPULATION PROVIDED WITH SEWERAGE & SANITATION THROUGH			
			H.S.C	P.S.P	TOTAL	%	SEWER	L.C.S	TOTAL	%
1	2		4	5	6	7	8	9	10	11
3	Dadra & Nagar Haveli	60	17	17	34	57	0	0	0	0
4	Daman & Diu \$	47	6	1	7	15	0	0	0	0
5	Lakshadweep \$	30	0	20	20	67	0	25	25	83
6	Pondicherry	694	571	109	680	98	126	567	693	100
Total UTs		1953	1350	510	1860	95	1026	813	1839	94
Grand Total- ALL INDIA		287527	164818	99014	263832	92	87017	96868	183885	64

Source : Central Public Health Eng. & Environment Organisation, Ministry of Urban Development

Remarks: P : Provisional

H.S.C. - House Service Connection P.S.P. Public Stand L.C.S. - Low Cost Sanitation Septic Tank Etc.

\$: The figures indicates as of 31.03.2000 since the respective states have not furnished the information

* : Indicates Accessibility only. Adequacy and Equitable Distribution of Water Supply is not as per the prescribed norms of Govt of India in some cases

** : The figures indicates as of 31.03.1997 since the respective states have not furnished the information as of 31.3.2000.

Table : 5.28 Aggregated Ground Water Resource Estimates in Tribal Districts of each State as per Norms of Ground Water Estimation Committee

S.No	Name of the State	Total No of Tribal Districts	Total replenishable Ground Water Resources (MCM/Yr)	Provision for drinking, industrial & other uses (MCM/Yr)	Utilisable Ground Water Resources for irrigation (MCM/Yr)	Net Draft (MCM/Yr)	Balance Ground Water potential available for exploitation (MCM/Yr)	Level of Ground Water Development (%)	
1	2	3	4	5	6	7	8	9	
1	Andhra Pradesh	8	12873.06	1930.96	10942.10	1974.31	8967.79	18.00	
2	Assam	8	6709.00	1006.35	5702.65	183.88	5518.77	3.20	
3	Bihar	4	2139.16	320.87	1818.29	35.00	1783.29	1.90	
4	Gujarat	8	9290.22	1393.53	7896.69	2712.82	5183.87	34.40	
5	Himachal Pradesh	3	NOT ESTIMATED						
6	Karnataka	4	2814.12	422.12	2392.00	637.00	1755.00	26.60	
7	Kerala	9	5222.08	911.75	4310.33	616.19	3694.14	14.30	
8	Madhya Pradesh	21	33209.38	4981.41	28227.98	3295.68	24932.30	11.70	
9	Maharashtra	10	14607.23	4782.11	9825.12	3513.26	6311.86	35.80	
10	Manipur	8	3153.67	473.06	2680.61	N.E.	2680.61	N.E.	
11	Orissa	9	9538.91	1430.84	8108.07	753.56	7354.51	9.29	
12	Rajasthan	5	2411.96	361.84	2050.12	798.91	1251.21	38.97	

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Table : 5.28 Aggregated Ground Water Resource Estimates in Tribal Districts of each State as per Norms of Ground Water Estimation Committee

S.No	Name of the State	Total No of Tribal Districts	Total replenishable Ground Water Resources (MCM/Yr)	Provision for drinking, industrial & other uses (MCM/Yr)	Utilisable Ground Water Resources for irrigation (MCM/Yr)	Net Draft (MCM/Yr)	Balance Ground Water potential available for exploitation (MCM/Yr)	Level of Ground Water Development (%)	
1	2	3	4	5	6	7	8	9	
13	Sikkim	1	NOT ESTIMATED						
14	Tamil Nadu	5	10841.33	1626.20	9215.13	6417.68	2797.45	69.60	
15	Tripura	3	2512.03	376.81	2135.22	96.60	2038.62	4.50	
16	Uttar Pradesh	1	2754.00	413.00	2341.00	935.00	1406.00	39.90	
17	West Bengal	13	21295.56	3194.33	18101.22	3978.42	14122.80	22.00	
Grand Total		120	139371.71	23625.18	115746.53	25948.31	89798.22	22.42	

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

N.E.: Not Estimated

MCM/Yr : Million Cubic Metre per Year

Table : 5.29 Ground Water Resource Potential in Drought Prone District of Each State in India

(Provisional & Tentative)

S.No	State/UTs	No of Districts	Total replenishable Ground Water Resources (MCM/Yr)	Provision for drinking, industrial & other uses (MCM/Yr)	Utilisable Ground Water Resources for irrigation (MCM/Yr)	Net G.W. Draft (MCM/Yr)	Balance Ground Water potential available (MCM/Yr)	Level of G.W Development %	
1	2	3	4	5	6	7	8	9	
1	Andhra Pradesh	8	11035.31	1655.30	9380.01	2637.36	6742.65	28.12	
2	Bihar	5	4694.24	704.13	3990.11	564.40	3425.71	14.14	
3	Gujarat	8	8548.03	1282.20	7265.83	2811.14	4454.69	38.69	
4	Haryana	1	164.05	24.61	139.44	233.15	-93.71	167.20	
5	Jammu & Kashmir	2	NOT ESTIMATED						
6	Karnataka	11	9621.18	1443.18	8178.00	2725.00	5453.00	33.32	
7	Madhya Pradesh	6	6426.13	963.92	5462.21	1130.76	4331.45	20.70	
8	Maharashtra	12	17787.63	5823.31	11964.32	5116.20	6848.12	42.76	
9	Orissa	4	3916.33	587.45	3328.88	207.48	3121.40	6.23	
10	Rajasthan	8	4877.88	734.24	4143.64	1370.76	2772.89	33.08	
11	Tamil Nadu	7	5588.72	838.31	4750.41	1975.11	2775.30	41.58	
12	Uttar Pradesh	16	17226.18	2583.92	14642.26	4432.28	10209.97	30.27	
13	West Bengal	3	4610.06	691.51	3918.55	814.58	3103.97	20.79	
Grand Total		91	94495.74	17332.08	77163.66	24018.22	53145.44	31.13	

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

Note:- MCM/Yr - Million Cubic Metres per Year

Table: 5.30 Ground Water Resource Potential in each Desert Development Programme (DDP) Area State in India

(Provisional & Tentative)

S.No	State/UTs	No of Districts	Total replenishable Ground Water Resources (MCM/Yr)	Provision for drinking, industrial & other uses (MCM/Yr)	Utilisable Ground Water Resources for irrigation (MCM/Yr)	Net G.W. Draft (MCM/Yr)	Balance Ground Water potential available (MCM/Yr)	Level of G.W Development %
1	2	3	4	5	6	7	8	9
1	Gujarat	2	2314.49	347.17	1967.32	1695.95	271.37	86.21
2	Haryana	4	3132.51	469.88	2662.63	939.12	1723.51	35.27
3	Rajasthan	11	3210.42	541.83	2668.59	1445.87	1222.73	54.18
4	Jammu & Kashmir	2	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
5	Himachal Pradesh	2	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Grand Total (1 + 2 + 3)		21	8657.42	1358.88	7298.54	4080.94	3217.61	55.91

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

Note:- MCM/Yr - Million Cubic Metres per Year

**Table 5.31 : Minimum & Maximum Observed Value of Water Quality Parameters
at CWC Sites on Godavari Basin
(June 2003 to May 2004)**

Sl. No.	Name of the Sites	Name of the River/ Stream	pH Value		Sp. Conductance in micromhos/cm at 25 degree celcius		Sodium absorption ratio (%/cm)	
			Min.	Max.	Min.	Max.	Min.	Max.
1	2	3	4	5	6	7	8	9
1	Polavaram	Godavari	7.5	8.7	126.0	232.0	0.23	0.99
2	Konta	Sabari	7.6	8.2	67.0	113.0	0.14	0.27
3	Perur	Godavari	7.7	8.9	129.0	466.0	0.23	1.43
4	Pathagudem	Indravathi	7.1	8.9	56.0	215.0	0.14	0.36
5	Jagdapur	Indravathi	6.7	8.5	65.0	251.0	0.12	0.33
6	Nowrangpur	Indravathi	7.0	8.4	52.0	254.0	0.21	0.70
7	Tekra	Pranhita	8.1	8.6	156.0	513.0	0.20	2.23
8	Bhatpally	Peddavagu	8.1	8.7	211.0	640.0	0.41	2.03
9	Bamni	Wardha	7.7	8.6	183.0	1440.0	0.29	3.88
10	P.G.Bridge	Penganga	8.1	8.6	188.0	480.0	0.41	3.01
11	Nandgaon	Wunna	8.0	8.6	270.0	522.0	0.51	1.91
12	Hivra	Wardha	8.2	8.9	303.0	500.0	0.56	3.00
13	Bhishnur	Wardha	7.7	8.3	240.0	620.0	0.28	2.55
14	Asthi	Wainganga	8.1	9.0	14.1	365.0	0.14	2.25
15	Pauni	Wainganga	7.9	8.9	192.0	457.0	0.27	1.16
16	Satrapur	Kanhan	7.8	8.5	159.0	620.0	0.20	1.98
17	Rajegaon	Bagh	7.5	8.1	78.0	298.0	0.12	0.64
18	Kumhari	Wainganga	7.5	8.3	91.0	394.0	0.20	0.79
19	Mancherial	Godavari	8.3	9.0	382.0	535.0	0.90	1.53
20	Gandlopet	Peddabagu	-	-	-	-	-	-
21	Betmogra	Mannar	8.2	8.7	312.0	672.0	0.67	2.04
22	Degloor	Lendi	8.2	8.8	438.0	475.0	0.46	0.90
23	Saigaon	Manjira	8.4	9.0	308.0	375.0	0.62	0.99
24	Yelli	Godavari	8.3	9.0	451.0	603.0	0.97	1.94
25	Purna	Purna	8.1	8.8	136.0	607.0	1.21	2.02
26	Zari	Dhudhna	8.2	8.3	258.0	289.0	1.52	1.70
27	G.R. Bridge	Godavari	8.8	9.0	389.0	540.0	1.90	2.37
28	Dhalegaon	Godavari	8.3	9.3	321.0	583.0	1.13	1.60

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**Table 5.31 : Minimum & Maximum Observed Value of Water Quality Parameters
at CWC Sites on Godavari Basin
(June 2003 to May 2004)**

Sl. No.	Name of the Sites	Name of the River/ Stream	Maximum (me/l)					SP	RSC	Hardness
			Cl	SO4	NO3	Fe	Mg	Max	Max	Max
1	2	3	10	11	12	13	14	15	16	17
1	Polavaram	Godavari	26.0	13.0	3.60	0.001	13.6	35.34	0.43	106
2	Konta	Sabari	11.0	0.0	4.60	0.07	6.1	19.12	0.12	58
3	Perur	Godavari	62.0	23.0	6.50	0.01	15.3	38.11	0.74	155
4	Pathagudem	Indravathi	24.0	11.0	14.70	0.07	11.2	17.95	0.16	122
5	Jagdapur	Indravathi	26.0	12.0	2.00	0.01	15.6	20.29	0.42	132
6	Nowrangpur	Indravathi	16.0	14.0	0.00	0.01	10.7	34.57	0.30	154
7	Tekra	Pranhita	60.0	33.0	3.70	0.56	24.8	46.10	0.82	184
8	Bhatpally	Peddavagu	28.0	27.0	14.90	0.07	32.3	45.44	2.32	233
9	Bamni	Wardha	355.0	336.0	29.10	0.47	46.1	52.49	0.59	464
10	P.G.Bridge	Penganga	21.0	14.0	16.10	0.20	27.5	60.17	2.14	205
11	Nandgaon	Wunna	62.0	20.0	9.90	0.35	23.5	43.01	1.29	180
12	Hivra	Wardha	26.0	14.0	6.80	0.04	28.6	54.83	3.16	177
13	Bhishnur	Wardha	15.0	14.0	3.10	0.20	30.9	53.24	2.91	215
14	Asthi	Wainganga	48.0	31.0	3.10	0.35	16.2	51.91	0.75	138
15	Pauni	Wainganga	33.0	29.0	11.80	0.07	19.3	32.41	0.49	175
16	Satrapur	Kanhan	63.0	49.0	6.20	0.11	25.3	43.72	1.04	217
17	Rajegaon	Bagh	11.0	12.0	5.60	0.58	14.7	21.67	0.26	127
18	Kumhari	Wainganga	14.0	8.0	4.30	0.28	17.5	24.18	0.77	160
19	Mancherial	Godavari	63.0	41.0	2.50	0.08	25.3	35.92	1.37	239
20	Gandlopet	Peddabagu	-	-	-	-	-	-	-	-
21	Betmogra	Mannar	43.0	23.0	5.40	0.00	25.3	40.17	0.26	223
22	Degloor	Lendi	25.0	66.0	4.50	-	32.3	23.81	0.00	232
23	Saigaon	Manjira	25.0	18.0	4.70	-	14.6	27.38	0.24	161
24	Yelli	Godavari	50.0	43.0	14.50	0.00	27.9	42.42	0.00	263
25	Purna	Purna	59.0	39.0	14.50	0.00	23.3	44.33	0.36	268
26	Zari	Dhudhna	11.0	25.0	3.90	0.00	10.7	46.14	0.59	81
27	G.R. Bridge	Godavari	47.0	125.0	4.70	0.00	13.1	48.06	0.00	151
28	Dhalegaon	Godavari	34.0	24.0	1.00	0.00	7.8	40.34	0.78	137

Source : Hydrology Data Directorate (ISO), Central Water Commission.

Remarks : pH : The logarithm to the base 10 of the reciprocal of Hydrogen ion concentration

Cl : Chlorine , SO4 : Sulphate , NO3 : Nitrate , Fe : Iron , Mg : Magnesium ,

SP :Sodium Percentage,RSC :Residual Sodium Carbonate,me/l: milli equivalent per litre

**Table 5.32 Minimum & Maximum Observed Value of Water Quality Parameters
at CWC Sites on Krishna Basin
(June 1999 to May 2000)**

Sl. No.	Name of the Sites	Name of the River/Stream	pH Value		Sp. Conductance in micromhos/cm at 25 degree celcius		Sodium absorption ratio (%/cm)	
			Min.	Max.	Min.	Max.	Min.	Max.
1	2	3	4	5	6	7	8	9
1	Vijaywada	Krishna	7.60	8.65	403	735	0.04	1.76
2	Keesara	Munneru	7.45	8.70	335	1000	0.06	3.62
3	Madhira	Wyra	7.80	8.68	539	1020	0.17	3.72
4	Paleru	Paleru Bridge	6.30	8.18	503	1260	0.05	2.58
5	Wadenapalli	Krishna	7.48	8.46	347	685	0.05	1.63
6	Dameracherla	Musi	7.66	8.60	564	1120	0.03	1.85
7	Pondugala	Krishna	7.34	8.65	316	597	0.03	1.66
8	Halia	Halia	7.84	8.16	535	679	0.30	1.38
9	Bawapuram	Tungbhadra	7.84	9.20	148	1370	0.20	4.86
10	Mantralayam	Tungbhadra	7.78	8.96	122	1490	0.19	4.63
11	T. Ramapuram	Hagari	7.72	8.35	468	3250	0.23	7.33
12	Kelloodu	Vedavathi	7.44	8.21	327	1120	2.47	4.58
13	Oollenur	Tungbhadra	7.65	8.82	107	1330	0.00	2.27
14	Marol	Varada	7.18	8.29	130	239	0.17	0.66
15	Harlahalli	Tungbhadra	7.20	8.19	122	695	0.21	1.64
16	Byaladahalli	Haridra	7.66	8.18	318	893	0.67	1.46
17	Kuppelur	Kumudvathi	7.27	8.10	162	355	0.17	0.61
18	Honali	Tungbhadra	7.02	7.94	82	454	0.14	0.82
19	Shimoga	Tunga	7.08	8.24	68	302	0.09	0.76
20	Krishna Agraharam	Krishna	7.53	8.66	231	1380	0.09	2.67
21	Yadgir	Bhima	7.98	9.04	447	1140	0.48	4.24
22	Malkhed	Kagna	7.75	8.66	301	782	0.14	1.15
23	Wadakbal	Sina	8.05	8.35	629	1477	0.61	2.43
24	Takali	Bhima	7.54	8.03	534	1401	0.70	5.15
25	Sarati	Nira	7.83	8.13	385	882	0.70	5.02
26	Phulgaon	Bhima	7.62	7.83	190	266	0.90	0.92
27	Huvenhedgi	Krishna	8.08	8.80	186	1220	0.00	3.60
28	Cholachguda	Malaprabha	7.91	8.30	351	1357	0.62	6.06
29	Balgalkot	Ghataprabha	7.74	8.45	182	1053	0.499	3.826
30	Galgali	Krishna	7.53	8.40	258	998	0.23	3.35
31	Karad	Krishna	7.92	8.67	122	481	0.62	2.151
32	Waruji	Koyna	7.46	8.60	96	241	0.41	1.11

Contd..

**Table 5.32 Minimum & Maximum Observed Value of Water Quality Parameters
at CWC Sites on Krishna Basin
(June 1999 to May 2000)**

Sl. No.	Name of the Sites	Name of the River/Stream	Maximum (me/l)					SP	RSC	Hardness
			Cl	SO4	NO3	Fe	Mg	Max	Max	Max
1	2	3	10	11	12	13	14	15	16	17
1	Vijaywada	Krishna	4.65	1.61	0.086	0.011	3.21	40.00	0.000	228
2	Keesara	Munneru	4.41	2.71	0.064	0.007	4.44	55.68	0.000	250
3	Madhira	Wyra	19.40	1.67	0.068	0.013	4.03	55.73	0.000	254
4	Paleru	Paleru Bridge	6.87	5.62	0.139	0.020	7.07	40.60	0.000	475
5	Wadenapalli	Krishna	4.75	1.93	0.143	0.011	2.80	35.76	0.000	209
6	Dameracherla	Musi	6.83	2.66	0.182	0.010	5.51	36.64	0.000	387
7	Pondugala	Krishna	3.08	1.82	0.118	0.013	3.13	36.28	0.000	244
8	Halia	Halia	6.87	1.09	0.070	0.005	4.20	32.05	0.000	228
9	Bawapuram	Tungbhadra	6.83	5.83	0.100	0.014	3.78	65.81	0.000	246
10	Mantralayam	Tungbhadra	5.23	4.17	0.164	0.013	5.02	64.00	0.000	317
11	T. Ramapuram	Hagari	14.74	15.62	0.117	0.014	8.97	70.70	0.000	609
12	Kellodu	Vedavathi	5.49	0.08	0.004	0.002	2.09	63.82	0.000	216
13	Oollenur	Tungbhadra	4.16	3.65	0.127	0.016	3.62	50.63	0.000	268
14	Marol	Varada	1.71	0.32	0.005	0.003	0.87	25.91	0.000	90
15	Harlahalli	Tungbhadra	2.68	0.59	0.005	0.008	1.53	40.36	0.000	174
16	Byaladahalli	Haridra	3.750	0.870	0.014	0.001	2.140	30.88	0.000	258
17	Kuppelur	Kumudvathi	2.06	0.55	0.005	0.009	1.07	23.21	0.000	126
18	Honali	Tungbhadra	2.39	0.33	0.003	0.003	1.35	28.84	0.000	162
19	Shimoga	Tunga	1.54	0.37	0.013	0.002	0.81	27.11	0.000	101
20	Krishna Agraharam	Krishna	4.37	3.96	0.207	0.012	4.85	51.46	0.000	317
21	Yadgir	Bhima	6.77	4.69	0.129	0.014	4.69	57.68	0.000	311
22	Malkhed	Kagna	3.64	2.29	0.119	0.016	3.95	28.99	0.000	254
23	Wadakbal	Sina	3.36	0.232	0.002	0.016	7.35	52.33	0.000	412
24	Takali	Bhima	6.90	16.23	0.002	0.013	5.77	70.98	2.420	367
25	Sarati	Nira	4.09	0.303	0.003	0.015	5.77	71.99	0.490	305
26	Phulgaon	Bhima	0.89	0.02	0.002	0.003	1.90	33.47	0.020	119
27	Huvenhedgi	Krishna	5.35	3.54	0.179	0.015	3.78	56.26	0.000	272
28	Cholachguda	Malaprabha	6.26	3.42	0.035	0.036	4.92	63.47	0.760	292
29	Balgalkot	Ghataprabha	2.18	2.46	0.018	0.054	4.11	66.73	1.220	298
30	Galgali	Krishna	3.88	3.33	0.019	0.018	6.78	55.39	0.290	357
31	Karad	Krishna	0.75	0.50	0.027	0.030	3.48	54.29	0.320	232
32	Waruji	Koyna	0.90	0.071	0.008	0.031	2.53	46.98	0.170	159

Source : Hydrology Data Directorate (ISO), Central Water Commission.

Remarks : pH : The logarithm to the base 10 of the reciprocal of Hydrogen ion concentration
Cl : Chlorine , SO4 : Sulphate , NO3 : Nitrate , Fe : Iron , Mg : Magnesium ,
SP :Sodium Percentage,RSC :Residual Sodium Carbonate,me/l: milli equivalent per litre.

**Table 5.33 : Minimum & Maximum Observed Value of Water Quality Parameters
at CWC Sites on West Flowing River
(June 2001 to May 2002)**

Sl. No.	Name of the Sites	Name of the River/Stream	pH Value		Sp. Conductance in micromhos/cm at 25 degree celcius		Sodium absorption ratio (%/cm)	
			Min.	Max.	Min.	Max.	Min.	Max.
1	2	3	4	5	6	7	8	9
1	Badalapur	Ulhas	7.05	8.48	102	437	0.24	0.67
2	Mangaon	Kal	7.30	8.32	93	111	0.20	0.32
3	Adavali	Gad	-	-	-	-	-	-
4	Santeguli	Aghanashini	7.50	8.20	38	88	0.08	0.80
5	Haladi	Haladi	7.30	8.20	50	180	0.13	0.85
6	Yennehole	Yennehole	7.30	8.20	45	109	0.21	1.20
7	Bantwal	Netravathi	7.30	8.20	57	140	0.37	0.89
8	Erinjipuzha	Payaswani	7.12	7.72	32	60	0.28	0.57
9	Perumannu	Valapatanam	7.03	8.28	30	62	0.29	0.58
10	Kuniyil	Chaliyar	7.12	8.39	35	114	0.29	0.57
11	Karathodu	Kadalundi	7.11	7.62	35	82	0.45	0.61
12	Pulamanthole	Pulanthodu	7.22	7.80	37	84	0.33	0.71
13	Kumbidi	Bharathapuzha	7.24	8.11	65	146	0.54	0.71
14	Mankara	Bharathapuzha	7.61	8.37	172	478	0.66	0.91
15	Pudur	Bharathapuzha	7.78	8.50	240	469	0.70	1.00
16	Ambaramplayam	Bharathapuzha	7.41	8.16	143	368	0.34	1.26
17	Arangli	Chalakydy	6.88	7.64	31	54	0.31	0.36
18	Neeleshwaram	Periyar	7.10	7.52	30	51	0.24	0.38
19	Ramangalam	Muvattupuzha	7.05	7.70	30	68	0.29	0.45
20	Kalampur	Kaliyar	7.00	7.47	33	50	0.24	0.38
21	Kidangoor	Meenachil	6.98	7.47	36	54	0.29	0.40
22	Kalloopara	Manimala	6.79	7.36	31	67	0.31	0.61
23	Malakkara	Pamba	6.88	7.56	28	46	0.28	0.45
24	Thumpamon	Achankovil	6.98	7.60	38	60	0.38	0.59
25	Pattazhy	Kallada	6.80	7.65	42	79	0.33	0.75
26	Ayilam	Vamanapuram	7.18	7.43	32	54	0.43	0.88

Contd.

**Table 5.33 : Minimum & Maximum Observed Value of Water Quality Parameters
at CWC Sites on West Flowing River
(June 2001 to May 2002)**

Sl. No.	Name of the Sites	Name of the River/Stream	Maximum (me/l)					SP	RSC	Hardness
			Cl	SO4	NO3	Fe	Mg			
1	2	3	10	11	12	13	14	15	16	17
1	Badalapur	Ulhas	0.69	0.320	0.920	0.012	1.10	36.54	0.00	101
2	Mangaon	Kal	0.28	0.100	0.770	0.010	0.68	20.20	0.00	76
3	Adavali	Gad	-	-	-	-	-	-	-	-
4	Santeguli	Aghanashini	0.29	0.286	0.011	0.015	0.24	50.00	0.00	27
5	Haladi	Haladi	0.32	0.220	0.013	0.064	0.39	48.00	0.00	83
6	Yennehole	Yennehole	0.44	0.140	0.104	0.064	0.39	63.93	0.00	41
7	Bantwal	Netravathi	0.44	0.280	0.072	0.033	0.39	49.06	0.00	47
8	Erinjipuzha	Payaswani	0.32	0.810	0.022	0.000	0.36	38.71	0.04	28
9	Perumannu	Valapatanam	0.28	0.017	0.015	0.000	0.28	41.07	0.04	26
10	Kuniyil	Chaliyar	0.37	0.104	0.012	0.000	0.40	32.97	0.08	57
11	Karathodu	Kadalundi	0.37	0.073	0.013	0.000	0.24	40.00	0.00	24
12	Pulamanthole	Pulanthodu	0.28	0.040	0.012	0.000	0.24	39.77	0.04	26
13	Kumbidi	Bharathapuzha	0.42	0.690	0.016	0.000	0.56	37.97	0.04	56
14	Mankara	Bharathapuzha	0.93	0.129	0.021	0.000	1.04	28.89	0.00	120
15	Pudur	Bharathapuzha	0.92	0.306	0.012	0.000	1.76	28.24	0.16	194
16	Ambaramplayam	Bharathapuzha	1.10	0.155	0.195	0.007	1.12	42.45	0.43	152
17	Arangli	Chalakudy	0.28	0.063	0.007	0.000	0.24	30.23	0.00	24
18	Neeleshwaram	Periyar	0.25	0.017	0.009	0.000	0.12	33.33	0.00	20
19	Ramangalam	Muvattupuzha	0.25	0.033	0.008	0.000	0.20	35.42	0.00	24
20	Kalampur	Kaliyar	0.25	0.190	0.005	0.000	0.16	28.33	0.00	22
21	Kidangoor	Meenachil	0.31	0.033	0.006	0.000	0.20	30.91	0.00	20
22	Kalloopara	Manimala	0.28	0.038	0.010	0.000	0.16	39.53	0.00	18
23	Malakkara	Pamba	0.25	0.021	0.008	0.000	0.12	37.14	0.00	16
24	Thumpamon	Achankovil	0.28	0.054	0.007	0.000	0.20	40.74	0.00	26
25	Pattazhy	Kallada	0.33	0.054	0.010	0.000	0.20	39.77	0.00	22
26	Ayilam	Vamanapuram	0.36	0.085	0.008	0.000	0.28	42.57	0.00	26

Source : Hydrology Data Directorate (ISO), Central Water Commission.

Remarks : pH : The logarithm to the base 10 of the reciprocal of Hydrogen ion concentration

Cl : Chlorine , SO4 : Sulphate , NO3 : Nitrate , Fe : Iron , Mg : Magnesium ,

SP :Sodium Percentage,RSC :Residual Sodium Carbonate,me/l: milli equivalent per litre.

**Table 5.34 : Minimum & Maximum Observed Value of Water Quality Parameters
at CWC Sites on East Flowing Rivers
(June 2001 to May 2002)**

Sl. No.	Name of the Sites	Name of the River/Stream	pH Value		Sp.Conductance in micromhos/cm at 25 degree celcius		Sodium absorption ratio (%/cm)		Maximum (me/l)					SP	RSC	Hardness
			Min.	Max.	Min.	Max.	Min.	Max.	Cl	SO4	NO3	Fe	Mg	Max	Max	Max
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	Thammavaram	Gundalakamma	7.79	8.97	635	1652	2.47	9.26	6.25	3.125	0.029	0.000	2.88	78.73	1.86	219
2	Avaramkuppam	Palar	7.92	8.38	222	861	0.70	3.72	1.31	0.957	0.125	0.005	2.08	58.82	2.85	188
3	Villupuram	Ponniyar	8.31	8.31	596	596	2.05	2.05	1.27	0.446	0.106	0.004	1.68	43.67	1.50	164
4	Vazhavachanur	Ponniyar	7.63	7.99	588	938	1.97	2.72	2.97	0.711	0.181	0.004	3.20	45.76	0.55	310
5	Gummanur	Ponniyar	7.45	8.32	802	1070	2.53	6.02	3.94	1.138	0.628	0.005	2.20	71.51	2.21	280
6	Paramakudi	Vaigai	7.27	7.72	253	396	0.69	1.17	0.88	0.272	0.114	0.005	0.88	33.33	0.54	124
7	Ambasamudram	Vaigai	8.14	8.52	285	507	1.03	1.28	1.75	0.620	0.159	0.006	2.16	40.48	0.06	176
8	Theni	Suruliyar	7.47	8.09	111	374	0.30	1.31	1.05	0.305	0.152	0.006	1.44	45.58	0.47	156
9	Irrukkankudi	Vaippar	7.98	8.32	295.00	525.00	0.67	2.44	1.75	0.747	0.156	0.005	1.68	49.65	0.48	152
10	Murappanadu	Tambraparani	6.89	7.94	159	502	0.45	1.57	1.75	0.454	0.277	0.009	1.76	44.44	Nil	136
11	A.P. Puram	Chittar	8.33	8.39	2509	2570	5.40	5.87	19.31	3.394	0.764	0.007	8.40	54.84	Nil	630

Source : Hydrology Data Directorate (ISO), Central Water Commission.

Remarks : pH : The logarithm to the base 10 of the reciprocal of Hydrogen ion concentration

Cl : Chlorine , SO4 : Sulphate , NO3 : Nitrate , Fe : Iron , Mg : Magnesium ,

SP :Sodium Percentage,RSC :Residual Sodium Carbonate,me/l: milli equivalent per litre.

**Table 5.35 Minimum & Maximum Observed Value of Water Quality Parameters
at CWC Sites on Narmada Basin
(June 2002 to May 2003)**

Sl. No.	Name of the Sites	Name of the River/ Stream	pH Value		Sp.Conductance in micromhos/cm at 25 degree celcius		Sodium absorption ratio (%/cm)		Maximum (me/l)					SP	RSC	Hardness
			Min.	Max.	Min.	Max.	Min.	Max.	Cl	SO4	NO3	Fe	Mg	Max	Max	Max
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	Chandwada	Orsang	8.10	8.48	169	300	0.36	0.96	0.901	0.172	0.005	0.000	0.477	31.8	-	100
2	Gurudeshwar	Narmada	7.91	8.60	180	330	0.31	1.02	0.959	0.247	0.006	0.006	0.560	33.2	-	108
3	Rajghat	Narmada	7.96	8.61	181	401	0.30	1.35	0.457	0.316	0.090	0.000	1.498	30.2	1.25	220
4	Mandaleshwar	Narmada	8.02	8.64	156	330	0.23	0.70	0.412	0.364	0.094	0.000	1.802	25.7	0.75	172
5	Kogaon	Kundu	7.98	8.51	242	706	0.38	2.28	0.702	0.641	0.419	0.000	2.181	41.9	3.88	246
6	Mortaka	Narmada	7.48	8.72	161	314	0.23	0.79	0.358	0.262	0.084	0.000	2.181	28.2	0.88	174
7	Handia	Narmada	7.84	8.58	158	309	0.22	0.72	0.401	0.285	0.087	0.000	1.638	24.4	0.71	178
8	Chhidgaon	Ganjal	7.95	8.51	271	508	0.19	1.76	1.106	0.450	0.090	0.000	2.206	41.5	2.42	253
9	Hoshangabad	Narmada	7.96	8.53	146	378	0.11	1.05	0.403	0.344	0.100	0.000	1.720	29.4	1.26	183
10	Sandia	Narmada	7.84	8.49	155	318	0.14	0.43	0.446	0.360	0.139	0.000	1.802	16.1	0.62	170
11	Gadarwara	Sheekkar	7.91	8.39	200	451	0.17	0.69	0.570	0.375	0.119	0.000	2.461	21.6	0.87	239
12	Barmanghat	Narmada	7.91	8.40	177	259	0.14	0.45	0.454	0.221	0.116	0.000	1.704	17.2	0.55	146
13	Belkheri	Sherat	7.86	8.50	164	473	0.09	0.60	0.533	0.493	0.090	0.000	2.337	17.5	1.56	236
14	Patan	Hiran	7.77	8.54	199	506	0.16	1.24	0.496	0.471	0.126	0.000	2.321	30.1	1.70	258
15	Bamni	Banjar	7.80	8.36	149	435	0.06	0.52	0.271	0.394	0.084	0.000	1.942	23.2	0.34	221
16	Mohgaon	Burhner	7.92	8.43	130	340	0.19	0.62	0.206	0.252	0.270	0.000	1.399	21.8	0.89	140
17	Manot	Narmada	7.88	8.44	132	375	0.15	0.67	0.333	0.252	0.094	0.000	1.621	21.7	1.12	181
18	Dindori	Narmada	7.88	8.43	126	373	0.11	0.54	0.288	0.362	0.082	0.000	1.597	19.50	0.70	157

Source : Hydrology Data Directorate (ISO), Central Water Commission.

Remarks : pH : The logarithm to the base 10 of the reciprocal of Hydrogen ion concentration

Cl : Chlorine , SO4 : Sulphate , NO3 : Nitrate , Fe : Iron , Mg : Magnesium , SP : Sodium Percentage

RSC : Residual Sodium Carbonate, me/l: milli equivalent per litre.

**Table 5.36 : Minimum & Maximum Observed Value of Water Quality Parameters
at CWC Sites on Cauvery Basin
(June 2001 to May 2002)**

Sl. No.	Name of the Sites	Name of the River/Stream	pH Value		Sp. Conductance in micromhos/cm at 25 degree celcius		Sodium absorption ratio (%/cm)	
			Min.	Max.	Min.	Max.	Min.	Max.
1	2	3	4	5	6	7	8	9
1	Musiri	Cauvery	7.89	8.72	337	630	0.87	2.04
2	Nallamaranpatty	Amravathi	7.89	8.43	348	489	1.44	1.95
3	Elunuthimangalam	Noyyal	8.38	8.71	2030	8221	4.92	19.31
4	Kodumudi	Cauvery	7.41	8.59	304	587	0.78	2.15
5	Savandapur	Bhavani	6.94	8.07	231	542	0.54	1.27
6	Thengumaradala	Moyar	6.64	7.81	100	273	0.19	1.34
7	Nellithurai	Bhavani	6.83	8.66	61	259	0.14	1.50
8	Urachikottai	Cauvery	7.50	8.44	290	508	0.70	1.65
9	Kudlur	Palar	7.94	8.66	744	1190	1.95	2.76
10	Biligundulu	Cauvery	6.50	8.20	332	671	0.79	2.90
11	Kanakapura	Arkavatty	6.00	8.20	399	1789	1.93	4.11
12	T.K. Halli	Shimsha	7.40	8.00	211	888	0.94	2.23
13	Kollegal	Cauvery	7.60	8.20	190	482	0.77	1.65
14	T.Narsipur	kabini	7.60	8.20	115	545	0.08	1.00
15	Muthankera	Kabini	7.04	7.85	38	108	0.33	0.69
16	Kathemalavadi	Lakshmanathirtha	7.70	8.10	309	716	0.34	1.31
17	Mukundur Hosahalli	Hemavathy	7.80	8.20	78	200	0.07	1.60
18	Kudige	Cauvery	7.70	8.20	42	104	0.08	0.97
19	Chittar	Savanur	7.62	8.34	648	1210	0.95	1.68
20	Sarabenga	Thenur	7.36	8.13	837	905	1.88	2.36
21	Thoppaiyar	Thoppur	-	7.840	-	1280	-	2.03

Contd..

**Table 5.36 : Minimum & Maximum Observed Value of Water Quality Parameters
at CWC Sites on Cauvery Basin
(June 2001 to May 2002)**

Sl. No.	Name of the Sites	Name of the River/Stream	Maximum (me/l)					SP	RSC	Hardness
			Cl	SO4	NO3	Fe	Mg	Max	Max	Max
1	2	3	10	11	12	13	14	15	16	17
1	Musiri	Cauvery	1.62	0.723	0.039	0.010	2.32	43.43	0.83	196
2	Nallamaranpatty	Amravathi	1.06	0.498	0.104	0.005	1.60	43.82	0.68	144
3	Elunuthimangalam	Noyyal	64.97	9.213	0.323	0.008	16.40	72.99	0.00	1161
4	Kodumudi	Cauvery	1.78	0.614	0.053	0.010	2.40	44.27	0.83	188
5	Savandapur	Bhavani	1.27	0.785	0.046	0.006	2.16	31.24	0.00	220
6	Thengumaradala	Moyar	1.07	0.158	0.065	0.009	0.80	42.11	0.03	80
7	Nellithurai	Bhavani	0.93	0.169	0.016	0.008	0.72	46.62	0.01	76
8	Urachikottai	Cauvery	1.07	0.493	0.054	0.009	2.48	42.69	0.88	172
9	Kudlur	Palar	1.56	0.900	0.109	0.007	4.60	42.98	2.31	340
10	Biligundulu	Cauvery	2.76	0.620	0.010	0.013	2.67	60.61	0.00	275
11	Kanakapura	Arkavatty	11.55	0.920	0.005	0.026	4.32	54.83	0.00	519
12	T.K. Halli	Shimsha	4.19	0.624	0.000	0.035	3.53	44.74	0.00	317
13	Kollegal	Cauvery	2.23	0.260	0.000	0.015	1.68	45.08	0.00	160
14	T.Narsipur	kabini	1.69	0.330	0.001	0.014	2.24	36.41	0.00	229
15	Muthankera	Kabini	0.44	0.056	0.002	0.000	0.40	36.36	0.00	34
16	Kathemalavadi	Lakshmanathirtha	2.17	0.170	0.010	0.015	3.45	31.77	0.00	365
17	Mukundur Hosahalli	Hemavathy	0.55	0.150	0.001	0.024	1.03	67.03	0.00	100
18	Kudige	Cauvery	0.56	0.120	0.000	0.041	0.39	49.46	0.00	43
19	Chittar	Savanur	2.81	1.503	0.419	0.007	6.60	34.46	1.30	460
20	Sarabenga	Thenur	2.34	0.869	0.404	0.006	3.92	41.63	1.19	290
21	Thoppaiyar	Thoppur	2.07	1.377	-	0.005	5.60	32.28	1.40	430

Source : Hydrology Data Directorate (ISO), Central Water Commission.

Remarks : pH : The logarithm to the base 10 of the reciprocal of Hydrogen ion concentration

Cl : Chlorine , SO4 : Sulphate , NO3 : Nitrate , Fe : Iron , Mg : Magnesium , SP : Sodium Percentage ,

RSC : Residual Sodium Carbonate,me/l: milli equivalent per litre.

**Table 5.37 Minimum & Maximum Observed Value of Water Quality Parameters
at CWC Sites on Mahi, Sabarmati and Other West Flowing rivers of
Saurashtra and Kutch Basin (June 1997 to May 1998)**

Sl. No.	Name of the Sites	Name of the River/Stream	pH Value		Sp.Conductance in micromhos/cm at 25 degree celcius		Sodium absorption ratio (%/cm)		Maximum (me/l)					SP	RSC	Hardness
			Min.	Max.	Min.	Max.	Min.	Max.	Cl	SO4	NO3	Fe	Mg	Max	Max	Max
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	Mataji	Mahi	7.70	8.20	138	320	0.289	0.683	0.451	0.267	0.002	0.006	0.559	24.86	0.16	107.95
2	Paderdibadi	Mahi	7.80	8.20	138	526	0.290	1.830	1.352	0.385	0.004	0.011	0.715	44.98	0.36	119.78
3	Khanpur	Mahi	7.70	8.20	150	687	0.290	2.700	1.972	0.372	0.005	0.011	0.715	54.72	0.69	119.78
4	Derol Bridge	Sabarmati	7.80	8.20	172	1455	0.270	4.780	3.887	0.552	0.006	0.020	1.138	66.50	1.46	151.97
5	Nabhoi	Sabarmati	7.50	8.10	180	2629	0.440	10.090	9.014	4.625	0.016	0.090	1.191	77.89	2.38	180.80
6	Lakhpuri	Tapi	7.80	8.20	142	1192	0.290	4.850	3.944	0.633	0.007	0.029	1.039	65.75	1.42	148.88
7	Gopal Kheda	Tapi	7.70	8.20	135	909	0.290	3.440	2.817	0.466	0.004	0.021	1.039	58.74	1.08	140.97
8	Yerli	Tapi	7.80	8.20	137	895	0.290	3.370	2.930	0.558	0.006	0.023	1.039	58.44	0.82	140.97
9	Dapuri	Tapi	7.60	8.20	131	431	0.290	1.410	1.127	0.518	0.004	0.023	0.798	38.23	0.24	123.89
10	Malkheda	Tapi	7.70	8.20	137	511	0.290	1.750	1.296	0.468	0.004	0.016	0.798	43.86	0.19	119.87
11	Morane	Tapi	7.90	8.20	137	275	0.290	0.700	0.507	0.175	0.001	0.008	0.477	25.57	0.10	99.95

Source : Hydrology Data Directorate (ISO), Central Water Commission.

Remarks : pH : The logarithm to the base 10 of the reciprocal of Hydrogen ion concentration

Cl : Chlorine , SO4 : Sulphate , NO3 : Nitrate , Fe : Iron , Mg : Magnesium ,

SP :Sodium Percentage,RSC :Residual Sodium Carbonate,me/l: milli equivalent per litre.

**Table 5.38 Minimum & Maximum of Observed Value of Water Quality Parameters
at CWC Sites on Mahanadi Basin (June 2002 to May 2003)**

Sl. No.	Name of the Site	Name of the River/ Stream	pH value		Sp. Conductance in micromhos/cm at 25degree celsius		Sodium absorption ratio (%/cm)		Maximum (me/l)					SP	RSC (me/l)	Total Hardness
			Min	Max	Min	Max	Min	Max	Cl	Mg	Fe	So4	No3	Max	Max	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	Tikarapara	Mahanadi	7.40	8.20	146	200	0.32	0.57	0.438	0.640	0.023	0.183	0.132	26.11	0.00	72.06
2	Kesinga	Tel	7.69	8.38	102	250	-	0.11	0.310	0.658	-	0.192	-	6.88	0.34	87.87
3	Kantamal	Tel	7.94	8.33	121	262	-	0.15	0.195	0.599	-	0.102	-	8.78	0.54	83.02
4	Salebhata	Ong	7.87	8.52	169	430	0.31	0.74	0.367	0.782	-	0.308	-	26.56	0.43	129.65
5	Sundergarh	Ib	7.92	8.42	134	227	-	-	0.210	0.576	-	0.000	-	-	0.31	63.80
6	Kurubhanta	Mand	7.34	8.16	137	310	-	-	0.167	0.448	-	-	-	-	0.34	42.23
7	Basantpur	Mahanadi	7.35	8.20	103	300	0.43	0.74	0.603	0.880	0.015	0.308	0.084	38.58	0.32	120.10
8	Bamnidhi	Hasdeo	6.75	8.15	118	170	0.05	0.80	0.472	0.480	0.026	0.333	0.333	35.08	0.16	60.05
9	Manendragarh	Hasdeo	6.98	8.86	103	340	0.19	0.22	0.210	0.329	-	0.160	-	13.45	0.37	93.67
10	Rampur	Jonk	7.57	8.33	118	240	0.39	0.39	0.903	0.796	-	0.167	-	15.72	3.18	97.98
11	Jondhra	Jonk	7.53	8.90	161	620	0.43	0.48	0.346	1.349	-	0.192	-	17.24	0.60	188.35
12	Ghatora	Arpa	7.30	8.10	154	1000	0.22	1.31	2.466	3.760	0.011	0.642	-	35.73	0.00	444.36
13	Andhiyarkore	Hamp	7.34	8.64	530	900	0.80	1.34	0.564	1.740	-	1.312	-	35.42	0.72	285.88
14	Simga	Seonath	7.97	8.60	197	600	0.46	0.60	0.236	1.082	-	0.279	-	22.23	0.26	184.20
15	Pathardhi	Kharun	7.81	8.70	219	340	-	-	0.223	0.576	-	0.250	-	-	0.34	97.13
16	Rajim	Mahanadi	7.44	8.36	75	340	0.15	0.32	0.277	0.494	-	0.142	-	15.76	0.12	87.27
17	Baronda	Pairi	7.51	7.95	64	134	0.14	0.21	0.226	0.247	-	0.156	-	15.14	0.24	49.84

Sources : Hydrology Data Directroate (ISO), CWC, New Delhi.

Remarks :pH : The logrithe to the base 10 of the reciprocal of hydrogen ionic concentration Cl : Chlorine, So4 : Sulphate, No3 : Nitrate, Fe : Iron, Mg : Magnesium, SP : Sodium Percentage, RSC : Residual Sodium Carbonate, me/l : milli equivalent per litre