

11.Irrigation Infrastructure



Top view of Tehri Dam Reservoir

11. IRRIGATION

Concepts and Definitions

Irrigation Potential Created- The total gross area proposed to be irrigated under different crops during a year by a scheme. The area proposed to be irrigated under more than one crop during the same year is counted as many times as the number of crops grown and irrigated.

Irrigation Potential Utilised- The gross area actually irrigated during reference year out of the gross proposed area to be irrigated by the scheme during the year.

Minor Irrigation(M.I.) Scheme- A scheme having CCA up to 2,000 hectares individually is classified as minor irrigation scheme

Medium Irrigation Scheme: A scheme having CCA more than 2,000 hectares and up to 10,000 hectares individually is a medium irrigation scheme.

Major Irrigation Scheme- A scheme having CCA more than 10,000 hectares is a major irrigation scheme.

Dug Well- It covers ordinary open wells of varying dimension dug or sunk from the ground surface into water bearing stratum to extract water for irrigation purposes. These are broadly masonry wells, kuchcha wells and dug-cum-bore wells. All such schemes are of private nature belonging to individual cultivator.

Shallow Tubewells- It consist of a bore hole built into ground with the purpose of taping ground water from porus zone. In sedimentary formations depth of a shallow tube well does not exceed 60-70 metres. The tube wells are generally operated for 6 to 8 hours during irrigation season and give yield of 100-300 cubic metre per day, which is roughly 2 to 3 times that of a dug well.

Deep Tubewells- It usually extends to the depth of 100 metre and more and is designed to give a discharge of 100 to 200 cubic metre per hour. These tube wells operate round the clock during the irrigation season, depending upon the availability of power. Their annual out put is roughly 15 times that of an average shallow tube well and are usually constructed

as public scheme which are owned and operated by government departments or corporations.

Surface Flow Scheme- These schemes use rainwater for irrigation purposes either by storing it or by diverting it from a stream, nala or river. Sometimes permanent diversions are constructed for utilising the flowing water of a steam or river . Temporary diversions are also constructed in many areas which are usually washed away during the rainy season. The command areas of such schemes are 20 hectares or less. The large storage tanks whose command varies from 20 to 2000 hectares are generally constructed by government departments or local bodes. These are the biggest items of surface minor irrigation works.

Surface Lift Scheme- In regions where the topography does not permit direct flow irrigation from rivers and streams, water has to be lifted into the irrigation channels. These works are similar to diversion schemes, but in addition pumps are installed and pump houses constructed.

11. IRRIGATION

11.1 Data source for irrigation data is M/o Water Resources. Data tables are based on data available up to

Accessibility

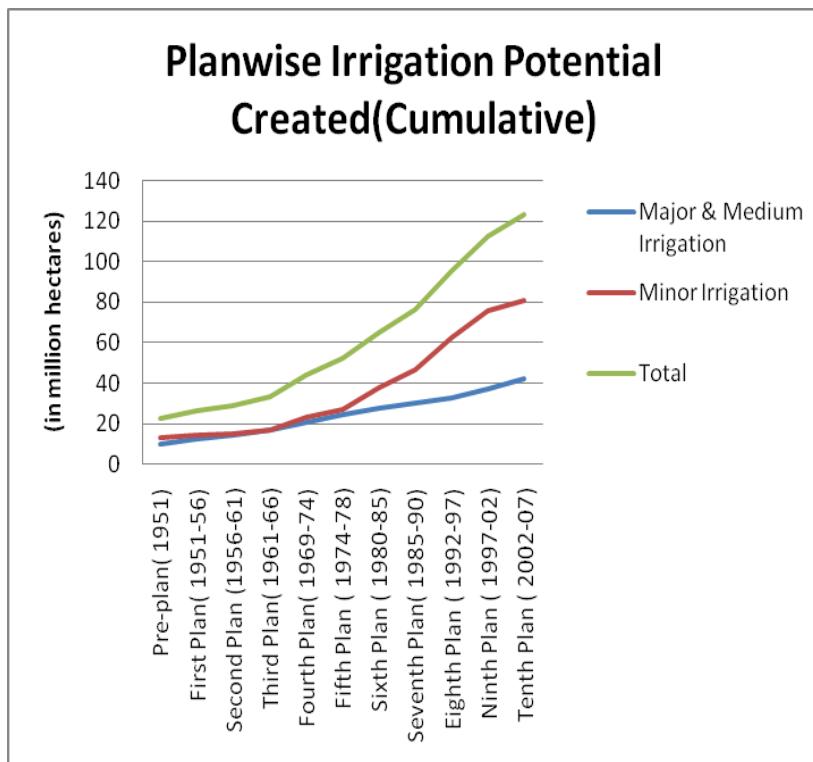
Accessibility of irrigation resources has increased manifold in terms of Irrigation Potential created over the plan periods. The total irrigation potential created has increased from 23 million hectares in the pre plan period to 123 million hectare by the end of tenth plan (Table 11A.6).

There has been a progressive increase in the number of large dams, number of major and medium irrigation projects and network of field channels; over the years (Tables 11A.3, 11A.4 and 11A.11).

The number of large dams increased from 365 in 1950 to 4223 in 2000. As on 31st January 2009 there are 4711 completed large dams and further 390 dams are under construction (Table 11A.3).

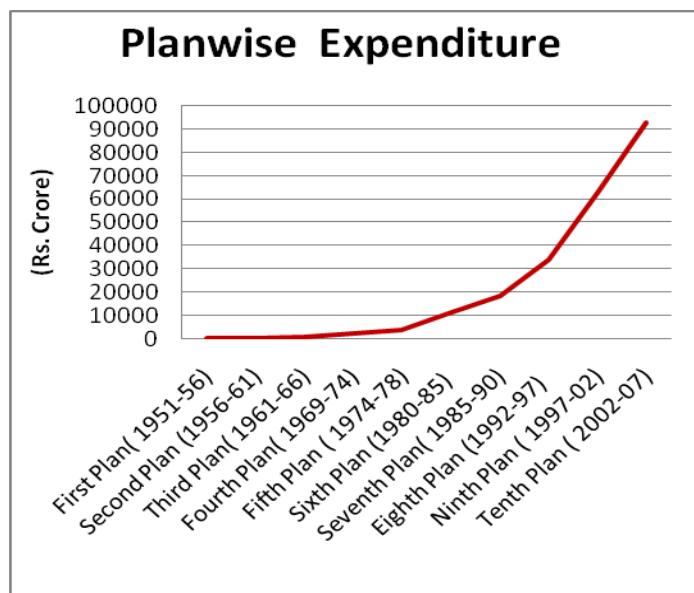
To achieve speedy utilisation of irrigation potential created, the network of field channels constructed under Command Area Development programmes increased from 14 million hectares up to the VIII plan to 15.7 million hectares up to the end of IX plan (Table 11A.11). Further network of field drains constructed under Command Area Development programmes increased from 0.8 million hectares up to the VIII plan to 1.1 million hectares up to the end of IX plan (Table 11A.12).

Quality



Share of major and medium irrigation potential in total irrigation potential decreased from 43% in pre plan period to 34% in the tenth plan. Accordingly share of minor irrigation in total irrigation potential increased from 57% to 66% during the same period (Table 11A.6).

Fiscal Cost



Total expenditure on irrigation increased from ₹442 crore in first plan to ₹93074 crore in the tenth plan (Table 11C.1).

Utilisation

In the pre plan period 100% irrigation potential was utilised but after that utilisation percentage has always been below 100%. In the tenth plan utilisation was 74% of the irrigation potential (Table 11D.1).

Table 11A.1 : Basinwise Storages for Projects having Live Storage Capacity of 10 MCM & above

Sl.No	Basin	Live Storage Capacities upto July 2007				(in MCM)
		Completed Project	Project Under Construction	Total	Project Under Consideration	
1	Indus	16285.90	282.53	16568.43	2576.39	
2	a) Ganga	42060.20	18600.18	60660.38	30083.92	
	b) Brahmaputra & Barak	2326.92	9353.64	11680.56	41262.88	
3	Godavari	25124.6	6205.79	31330.39	5841.16	
4	Krishna	41803.98	7743.54	49547.52	1127.84	
5	Cauvery	8597.2	269.82	8867.02	261.99	
6	Pennar	2649.4	2170.71	4820.11	-	
7	EFR from Mahanadi to Godavari and Krishna to Pennar	1601.44	1424.97	3026.41	945.29	
8	EFR B/W Pennar and Kanyakumari	1838.41	68.49	1906.9	-	
9	Mahanadi	12334.80	1873.00	14207.80	10094.20	
10	Brahmani & Baitarni	4648.09	875.6	5523.69	8721.19	
11	Subernrekha	672.02	1650.19	2322.21	1380.5	
12	Sabarmati	1306.77	60.77	1367.54	99.33	
13	Mahi	4722.60	261.43	4984.03	11.81	
14	WER of Kutch, Saurashtra including Luni	4726.92	797.23	5524.15	2849.06	
15	Narmada	16979.5	6625.1	23604.6	465.73	
16	Tapi	9408.37	847.42	10255.79	286.92	
17	WFR from Tapi to Tadri	11268.03	3464.38	14732.41	81.69	
18	WFR from Tadri to Kanyakumari	10236.16	1317.54	11553.7	1453.31	
19	Area of inland drainage of Rajasthan	-	-	0	-	
20	Minor River Basins draining into Myanmar and Bangladesh	312.00		312.00	1.47	
21	Medium Projects each having a capacity of less than 10 MCM for which basin wise breakup is not available	6241.00	-	6241.00	-	
Grand Total		225144.31	63892.33	289036.64	107544.68	

EFR: East Flowing Rivers

WFR: West Flowing Rivers

MCM : Million Cubic Metre

Note : In Completed projects only projects having Live storage more than 10 MCM (sl. No. 1 to 20) are included.

Source: Water and Related Statistics published by CWC, M/o Water Resources

**Table 11A.2 : Statewise Storages for Projects having
Live Storage Capacity of 10 MCM & above**

(in MCM)

Sl. No.	State / UT	Live Storage Capacities			
		Completed Projects	Ongoing Projects	Total	Consideration Projects
1	Andhra Pradesh	27305.13	6148.33	33453.46	1611.28
2	Assam	12.46	-	12.46	725.49
3	Arunachal Pradesh	-	241.06	241.06	37934.03
4	Bihar	1842.22	675.3	2517.52	5822.22
5	Chhattisgarh	6217.24	787.55	7004.79	519.30
6	Goa	44.3	227.16	271.46	-
7	Gujarat	16137.8	7406.84	23544.64	3446.02
8	Haryana	-	-	0	258
9	Himachal Pradesh	13917.15	188.73	14105.88	985.8
10	Jammu & Kashmir	-	93.8	93.8	1831.59
11	Jharkhand	2472.07	6877.64	9349.71	475.53
12	Karnataka	33631.21	1413.15	35044.36	66.23
13	Kerala	5384.27	1336.22	6720.49	1686.07
14	Madhya Pradesh	26906.28	7026.46	33932.74	7335.04
15	Maharashtra	25523.01	13242.89	38765.9	763.23
16	Manipur	396.5	8449.58	8846.08	-
17	Meghalaya	697.96	-	697.96	516.26
18	Mizoram	-	663	663	1561
19	Nagaland	1220.00	-	1220.00	526.10
20	Orissa	17224.61	1997.66	19222.27	21099.70
21	Punjab	2368.75	-	2368.75	-
22	Rajasthan	8284.85	1425.95	9710.8	1807.02
23	Sikkim	-	-	0	1.47
24	Tamil Nadu	6500.47	68.49	6568.96	13.24
25	Tripura	312	-	312	-
26	Uttarakhand	5671.08	2726.52	8397.6	153.63
27	Uttar Pradesh	15345.01	2711.59	18056.6	18406.45
28	West Bengal	1475.15	184.44	1659.59	-
29	A & N Island	-	-	0	-
30	Chandigarh	-	-	0	-
31	Dadra & Nagar Haveli, Daman & Diu	-	-	0	-
32	Delhi	-	-	0	-
33	Lakshadweep	-	-	0	-
34	Puducherry	13.79	-	13.79	-
35	Medium Projects each having a capacity of less than 10 MCM for which basin wise breakup is not available	6241	-	6241	-
Total		225144.31	63892.36	289036.67	107544.70

MCM : Million Cubic Metre

Source: Water and Related Statistics published by CWC, M/o Water Resources

Table 11A.3 : Statewise Number of Large Dams

Sl. No.	State / UT	Upto 1950	Upto 2000	Total Completed Dams upto 31.01.09	Under Construction	Total
1	A & N Islands		1	2		2
2	Andhra Pradesh	42	154	283	51	334
3	Arunachal Pradesh			1		1
4	Assam			2	2	4
5	Bihar	1	22	24	4	28
6	Chhattisgarh	11	213	243	16	259
7	Goa		5	5		5
8	Gujarat	65	569	598	68	666
9	Haryana			0		0
10	Himachal Pradesh		6	13	6	19
11	Jammu & Kashmir		5	10	3	13
12	Jharkhand		46	49	28	77
13	Karnataka	32	203	229	7	236
14	Kerala	1	51	53	1	54
15	Madhya Pradesh	89	805	899	7	906
16	Maharashtra	60	1561	1676	145	1821
17	Manipur		2	2	3	5
18	Meghalaya		4	5	2	7
19	Mizoram				0	0
20	Nagaland				0	0
21	Orissa	2	155	157		157
22	Punjab		11	14	1	15
23	Rajasthan	22	163	180	23	203
24	Sikkim		1	2		2
25	Tamil Nadu	11	97	107	1	108
26	Tripura		1	1		1
27	Uttar Pradesh	29	113	115	16	131
28	Uttrakhand		11	13	6	19
29	West Bengal		24	28		28
India Total		365	4223	4711	390	5101

Source : www.cwc.nic.in

Table 11A.4 : Statewise Number of Major, Medium and ERM Irrigation Projects

Sl. No.	State / UT	Major Projects		Medium Projects		ERM		Total	
		Complet ed upto IX Plan (includi ng Pre- plan Period)	Under Compl etion	Comple ted upto IX Plan (includi ng Pre- plan Period)	Unde r Com pletio n (includi ng Pre- plan Period)	Comp leted in Plan Period upto IX Plan	Unde r Com pletio n Plan upto IX Plan	Compl eted upto IX Plan (includi ng Pre- plan Period)	Unde r Com pletio n Plan (includi ng Pre- plan Period)
1	Andhra Pradesh	16	42	114	35	0	15	130	92
2	Arunachal Pradesh	0	0	0	3	0	0	0	3
3	Assam	2	4	8	7	1	2	11	13
4	Bihar	16	23	19	4	2	14	37	41
5	Chhattisgarh	7	10	26	34	2	1	35	45
6	Goa	0	1	1	0	0	1	1	2
7	Gujarat	19	6	114	42	12	40	145	88
8	Haryana	6	10	0	3	9	6	15	19
9	Himachal Pradesh	0	1	4	3	0	0	4	4
10	Jammu & Kashmir	2	0	16	14	4	11	22	25
11	Jharkhand	1	9	34	26	1	9	36	44
12	Karnataka	8	16	40	38	0	5	48	59
13	Kerala	10	5	7	5	1	2	18	12
14	Madhya Pradesh	11	34	101	16	1	6	113	56
15	Maharashtra	21	67	187	148	1	6	209	221
16	Manipur	1	3	4	4	0	5	5	12
17	Meghalaya	0	0	0	1	0	0	0	1
18	Mizoram	0	0	0	0	0	0	0	0
19	Nagaland	0	0	0	1	0	0	0	1
20	Orissa	9	16	40	32	7	30	56	78
21	Punjab	8	2	2	0	8	12	18	14
22	Rajasthan	6	10	97	14	7	3	110	27
23	Sikkim	0	0	0	0	0	0	0	0
24	Tamil Nadu	22	0	46	2	11	4	79	6
25	Tripura	0	0	0	3	0	0	0	3
26	Uttarakhand		3		0		0	117	3
27	Uttar Pradesh	57	22	40	3	20	33		58
28	West Bengal	6	8	17	20	0	9	23	37
State Total		228	292	917	458	87	214	1232	964
UT Total		-	-	-	-	-	0	-	-
North Eastern Council Total		-	-	-	-	-	0	-	-
India Total		228	292	917	458	87	214	1232	964

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

Source: Water and Related Statistics published by CWC, M/o Water Resources

Table 11A.5 : Statewise Ultimate Irrigation Potential

Sl.No.	State / UT	Major & Medium Surface Water	Minor Irrigation			Total (Major, Medium & Minor)
			Surface Water	Ground Water	Total	
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	1544	4120	5664	10888
5	Chhattisgarh	1147	81	490	571	1718
6	Goa	62	25	29	54	116
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	Jharkhand	1276	354	830	1184	2460
12	Karnataka	2500	900	2574	3474	5974
13	Kerala	1000	800	879	1679	2679
14	Madhya Pradesh	4853	2111	9250	11361	16214
15	Maharashtra	4100	1200	3652	4852	8952
16	Manipur	135	100	369	469	604
17	Meghalaya	20	85	63	148	168
18	Mizoram	0	65	5	70	70
19	Nagaland	10	70	5	75	85
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	0	50	70
24	Tamil Nadu	1500	1200	2832	4032	5532
25	Tripura	100	100	81	181	281
26	Uttar Pradesh	12154	1186	16295	17481	29635
27	Uttarakhand	346	14	504	518	864
28	West Bengal	2300	1300	3318	4618	6918
State Total		58367	17317	64066	81383	139750
UT Total		98	20	26	46	144
India Total		58465	17337	64092	81429	139894

Note : Total may not tally due to rounding off

Source: Water and Related Statistics published by CWC, M/o Water Resources

Table 11A.6 : Planwise Irrigation Potential Created According to Schemes (Cumulative)

(thousand hectares)

Sl. No.	Period	Potential Created								(Major, Medium & Minor)
		Major & Medium Irrigation				Minor Irrigation			Surface & Ground Water	% Share in Total Potential created
		Surface Water	% Share in Total Irrigation Potential created	Surface Water	% Share in Total Potential created	Ground Water	% Share in Total Potential created			
1	Pre-plan(1951)	9705	42.9	6401	28.3	6500	28.8	12901	57.1	22606
2	First Plan(1951-56)	12191	46.4	6430	24.5	7630	29.1	14060	53.6	26251
3	Second Plan (1956-61)	14334	49.3	6454	22.2	8277	28.5	14731	50.7	29065
4	Third Plan(1961-66)	16565	49.4	6480	19.3	10520	31.3	17000	50.6	33565
5	Annual Plans (1966-69)	18095	48.8	6512	17.5	12508	33.7	19020	51.2	37115
6	Fourth Plan(1969-74)	20703	46.9	6962	15.8	16438	37.3	23400	53.1	44103
7	Fifth Plan (1974-78)	24717	47.5	7500	14.4	19800	38.1	27300	52.5	52017
8	Annual Plans (1978-80)	26612	47.0	8000	14.1	22000	38.9	30000	53.0	56612
9a	Sixth Plan (1980-85)-Original	30013	44.4	9697	14.4	27823	41.2	37520	55.6	67533
9b	Sixth Plan (1980-85)- Reappraised	27695	42.5	9697	14.9	27823	42.7	37520	57.5	65215
10	Seventh Plan(1985-90)	29920	39.1	10986	14.4	35619	46.5	46605	60.9	76525
11	Annual Plans (1990-92)	30741	37.9	11456	14.1	38892	48.0	50348	62.1	81089
12a	Eighth Plan (1992-97) Original	32954	36.3	12299	13.5	45594	50.2	57893	63.7	90847
12b	Eighth Plan (1992-97) Reappraised	32884	34.5	12189	12.8	50290	52.7	62479	65.5	95363
13	Ninth Plan (1997-02)	36981	32.9	12269	10.9	63145	56.2	75414	67.1	112395
14	Tenth Plan (2002-07)	42277	34.3	14116	11.5	66870	54.2	80985	65.7	123263

Source: Material supplied by M/o Water Resources

Table 11A.7 : Statewise Estimates of Potential Created (Through Major & Medium and Minor Irrigation Schemes) at the end of Five Year Plans

Sl. No.	State/ UT	(thousand hectares)		
		At the end of VIII Plan 1992- 97	At the end of IX Plan 1997-2002	At the end of X Plan 2002-2007
1	Andhra Pradesh	7900.5	8652.1	9699.7
2	Arunachal Pradesh	61.8	77.6	92.6
3	Assam	642.2	652.2	790.3
4	Bihar	7220.4	6929.6	8127.9
5	Chhattisgarh	Included in M.P.	1316.2	1578.8
6	Goa	32	37.5	56
7	Gujarat	4024.7	6372.7	7229.1
8	Haryana	4392.2	4539.1	4669.2
9	Himachal Pradesh	209.1	230.1	263.1
10	Jammu & Kashmir	539.3	620.1	770
11	Jharkhand	Included in Bihar	776.3	1025.8
12	Karnataka	3368.8	4495.7	4543.2
13	Kerala	999.1	1118.8	2030.2
14	Madhya Pradesh	7483.1	7328.4	7639
15	Maharashtra	6969.1	8839.9	9363.8
16	Manipur	100.6	136.1	157.4
17	Meghalaya	81.1	93.9	96.9
18	Mizoram	9	11.8	13.6
19	Nagaland	67.1	106	135
20	Orissa	3134.3	3259.9	3744.9
21	Punjab	9390.4	8885.6	9130.4
22	Rajasthan	6545.5	8678.1	9235.6
23	Sikkim	22.3	24.5	33.8
24	Tamil Nadu	5278.9	5733.8	5825.7
25	Tripura	48.3	85	113.6
26	Uttar Pradesh	22245.4	26678.8	29222.1
27	Uttarakhand	Included in U.P.	925.3	1023.8
28	West Bengal	4505.9	5133.7	5351.6
State Total		95271.2	112306.7	123169.8
UT Total		92	88.6	92.7
India Total		95363.1	112395.2	123262.5

Note : Total may not tally due to rounding off

Source: Material supplied by M/o Water Resources

Table 11A.8 : Statewise Estimates of Potential Created (Through Major & Medium Irrigation (Surface Water) Schemes) during Five Year Plans

Sl. No.	State / UT	(thousand hectares)		
		Eighth Plan 1992-97	Ninth Plan 1997-2002	Tenth Plan 2002-07
1	Andhra Pradesh	3045.1	3303.2	3742.7
2	Arunachal Pradesh	0	0	1.2
3	Assam	196.7	243.9	312.9
4	Bihar	2806	2680	2959
5	Chhattisgarh	Included in M.P.	922.5	1810.7
6	Goa	13	21.2	37.7
7	Gujarat	1350	1430.4	2218.5
8	Haryana	2078.8	2099.5	2191.4
9	Himachal Pradesh	10.6	13.4	15.5
10	Jammu & Kashmir	173.7	179.7	203.3
11	Jharkhand	Included in Bihar	354.5	604
12	Karnataka	1666	2121.1	2127.8
13	Kerala	513.3	609.5	1090.5
14	Madhya Pradesh	2113	1386.9	1451.9
15	Maharashtra	2337	3239	3494.2
16	Manipur	63	91.2	103.1
17	Meghalaya	0	-	0
18	Mizoram	0	-	0
19	Nagaland	0	0	1
20	Orissa	1557.8	1826.6	1990
21	Punjab	2512.9	2542.5	2604.7
22	Rajasthan	2273.9	2482.2	2890.4
23	Sikkim	0	0	0
24	Tamil Nadu	1545.5	1549.3	1561.1
25	Tripura	2.3	4.9	18.7
26	Uttar Pradesh	7190	7910.1	8781.4
27	Uttarakhand	Included in U.P.	280.3	289.7
28	West Bengal	1432.7	1683.3	1769.8
State Total		32881.1	36974.9	42270.6
UT Total		3.5	6.5	6.5
India Total		32884.7	36981.4	42277.1

Note : Total may not tally due to rounding off

Source: Water and Related Statistics published by CWC, M/o Water Resources

**Table 11A.9 : Statewise Estimates of Potential Created
(Through Minor Irrigation (Surface Water) Schemes)
at the end of Five Year Plans**

Sl. No.	State / UT	(thousand hectares)		
		At the end of VIII Plan 1992- 97	At the end of IX Plan 1997- 2002	At the end of X Plan 2002-07
1	Andhra Pradesh	1919.3	2006.9	2547.2
2	Arunachal Pradesh	61.6	77.4	91.1
3	Assam	309.7	161.6	181.8
4	Bihar	871.4	633	682.9
5	Chhattisgarh	Included in M.P.	371.9	379.9
6	Goa	15	11.6	13.4
7	Gujarat	302.8	574.6	636.6
8	Haryana	7.7	9.3	9.3
9	Himachal Pradesh	177	188.1	215.3
10	Jammu & Kashmir	354.4	403.8	511.4
11	Jharkhand	Included in Bihar	209.2	209.2
12	Karnataka	403.7	792.5	824.6
13	Kerala	376.9	383.5	630.3
14	Madhya Pradesh	1568.3	1187.5	1286.7
15	Maharashtra	1432	956.8	1095.5
16	Manipur	37	44.9	54.3
17	Meghalaya	79.3	92.9	95.8
18	Mizoram	8.2	11.8	13.6
19	Nagaland	66.2	105.2	133.2
20	Orissa	1067.6	995.1	1230.4
21	Punjab	22.3	18	25
22	Rajasthan	175.3	221.6	223.7
23	Sikkim	22.3	24.5	33.8
24	Tamil Nadu	1498.9	1206.3	1221.7
25	Tripura	38.7	68.4	82
26	Uttar Pradesh	312.2	96.7	131.1
27	Uttarakhand	Included in U.P.	313.8	396.7
28	West Bengal	1035.8	1081.1	1136.1
State Total		12163.8	12247.9	14092.7
UT Total		25.2	20.7	22.9
India Total		12188.8	12268.6	14115.6

Note: Totals may not tally due to rounding off.

Source: Water and Related Statistics published by CWC, M/o Water Resources

**Table 11A.10 : Statewise Estimates of Potential Created
(Through Minor Irrigation (Ground Water) Schemes) at
the end of Five Year Plans**

Sl. No.	State / UT	(thousand hectares)		
		At the end of VIII Plan 1992-97	At the end of IX Plan 1997-2002	At the end of X Plan 2002-07
1	Andhra Pradesh	2936.1	3342	3409.8
2	Arunachal Pradesh	0.2	0.2	0.3
3	Assam	135.9	246.6	295.6
4	Bihar	3543.1	3616.6	4486
5	Chhattisgarh	Included in M.P.	589.8	595
6	Goa	4	4.5	5
7	Gujarat	2372	4367.8	4374
8	Haryana	2305.7	2430.3	2468.6
9	Himachal Pradesh	21.5	28.7	32.4
10	Jammu & Kashmir	11.2	36.6	55.3
11	Jharkhand	Included in Bihar	212.6	212.6
12	Karnataka	1299.1	1582	1590.8
13	Kerala	108.9	125.8	309.5
14	Madhya Pradesh	3801.8	4754.1	4900.4
15	Maharashtra	3200.1	4644.1	4774.1
16	Manipur	0.6	0.1	0.1
17	Meghalaya	1.8	1.1	1.1
18	Mizoram	0.8	0	0
19	Nagaland	0.9	0.8	0.8
20	Orissa	508.9	438.2	524.5
21	Punjab	6855.2	6325.2	6500.8
22	Rajasthan	4096.3	5974.3	6121.5
23	Sikkim	0	0	0
24	Tamil Nadu	2234.5	2978.2	3043
25	Tripura	7.3	11.7	12.9
26	Uttar Pradesh	14743.1	18672	20309.6
27	Uttarakhand	Included in U.P	331.3	337.5
28	West Bengal	2037.4	2369.3	2445.6
State Total		50226.3	63083.8	66806.6
UT Total		63.3	61.4	63.3
India Total		50289.6	63145.2	66869.9

Table 11A.11 : Statewise Physical Achievements of Field Channels under CAD Programme

Sl.No	State / UT	Cumulative Achievement of Field Channels Up to end of		During Xth Plan till 2006-07	Achievement During (thousand hectares)				
		VIII Plan 1992-97	IX Plan 1997-02		2002-03	2003-04	2004-05	2005-06	2006-07
1	Andhra Pradesh	664.6	680.2	57.8	6.4	0	3.1	21.5	26.9
2	Arunachal Pradesh	0	1	7.9	2.3	2.2	0.9	1	1.5
3	Assam	54.1	56.1	0.6	0.3	0.3	0	0	0
4	Bihar	1282.4	1297.3	46.8	2.8	3.1	2.3	10.2	28.5
5	Chhattisgarh	0	1.5	49.9	7.7	5.4	20.4	11.7	4.7
6	Goa	10.3	10.4	0	0	0	0	0	0
7	Gujarat	852	889.9	217.7	0	0	38.4	89	90.3
8	Haryana	312.7	429.4	167.9	10.3	27.7	54.3	37.7	37.9
9	Himachal Pradesh	10.7	15.7	6.6	0.8	2.1	1.5	1.5	0.7
10	Jammu & Kashmir	55.5	77.9	20.4	3.3	3.5	4.8	4.1	4.6
11	Jharkhand	0	0	0	0	0	0	0	0
12	Karnataka		1116.2	369.3	81.2	70	70	69.1	79
13	Kerala	153.7	174.1	8.2	1.1	2.2	2	1.6	1.3
14	Madhya Pradesh	995.8	1031.2	42	5.7	8.9	10.3	8.2	8.9
15	Maharashtra	1113.1	1223.9	24.2	3.8	2.3	2.9	3	12.2
16	Manipur	36.8	50.6	13.3	2.6	3.2	2.1	3.7	1.7
17	Meghalaya	1	1.1	1.1	0	0.8	0.1	0.1	0.1
18	Mizoram	0	0.1	0.7	0.2	0.2	0.1	0.1	0.1
19	Nagaland	0	2	1.8	0.2	0.7	0.4	0.5	0
20	Orissa	346.5	396.4	41	14.4	10.8	2.9	3.5	9.5
21	Punjab	0	222.7	128.8	18.2	17	18	34.9	40.7
22	Rajasthan	925.5	1177.2	249.9	41.2	34.2	71.6	60.7	42.2
23	Sikkim	0	0.1	0.1	0.1	0	0	0	0
24	Tamil Nadu	629.6	850.8	190.9	56.7	55.7	25.9	19.8	32.9
25	Tripura	0.3	0.3	0.1	0	0	0	0	0.1
26	Uttar Pradesh	5375	5936	639.3	201	200.1	82.1	77.9	78.2
27	Uttarakhand	0	0	4.9	1.4	0	1.9	2.5	0
28	West Bengal	90.1	112.5	23.1	9.4	3.5	2.6	4	3.6
Total		13952.7	15754.6	2314.1	470.8	453.6	417.9	466.4	505.4

Note : Total may not tally due to rounding off

Source: Water and Related Statistics published by CWC, M/o Water Resources

Table 11A.12 : Statewise Physical Achievements of Field Drains under CAD Programme

Sl. No.	State / UT	Cumulative Achievement of Field Drains Up to end of	During X Plan till 2006- 07	Achievement During				
				(thousand hectares)				
				VIII Plan (1985- 90)	IX Plan (1992- 97)	2002- 03	2003- 04	2004- 05
1	Andhra Pradesh	9.1	9.1	0	0	0	0	0
2	Arunachal Pradesh	0	0.7	6.2	2.2	1.4	0.5	0.7
3	Assam	21	21.8	0.3	0.2	0.1	0	0
4	Bihar	0	0	18.8	0	0.1	0	1
5	Chattisgarh	0	0	0	0	0	0	0
6	Goa	0	0	0	0	0	0	0
7	Gujarat	2.9	2.9	30.8	0	0	5.2	8.3
8	Haryana	0	0	24.3	0	0	11	7.6
9	Himachal Pradesh	0.6	2.3	3.7	1.3	1	1.4	0
10	Jammu & Kashmir	6.8	13.5	13.4	2.3	1.4	4.1	2.8
11	Jharkhand	0	0	0	0	0	0	0
12	Karnataka	27.6	37.8	32.1	4.2	4	3.6	7.3
13	Kerala	7.1	95.7	34.2	14.7	8.4	6.2	3.3
14	Madhya Pradesh	37.8	37.8	0	0	0	0	0
15	Maharashtra	292.4	392.5	46.5	38.8	1.6	2.9	2.4
16	Manipur	11.2	12.6	3	0.3	0.7	0.2	1
17	Meghalaya	0	0	0	0	0	0	0
18	Mizoram	0	0.1	0.9	0.2	0.2	0.2	0.2
19	Nagaland	5.8	7.8	3.2	0	1.7	0.4	0.8
20	Orissa	96.1	114.4	19.2	6.6	3	2.3	1.1
21	Punjab	0	0	0	0	0	0	0
22	Rajasthan	16.3	35	7.8	2.5	1.4	2.1	0.9
23	Sikkim	0	0.1	0.1	0.1	0	0	0
24	Tamil Nadu	29.2	29.4	144.5	0.4	14.1	57.5	27.8
25	Tripura	0.1	0.1	0	0	0	0	0
26	Uttar Pradesh	209	310.7	251.7	64.8	83.5	61.7	21.7
28	Uttarakhand	0	0	0.5	0	0	0.5	NR
29	West Bengal	0	0	0	0	0	0	0
India Total		773	1124.3	641.1	138.6	122.4	159.3	87.3
								133.4

Note : Total may not tally due to rounding off

Source: Water and Related Statistics published by CWC, M/o Water Resources

Table 11C.1 : Planwise Financial Expenditure on Irrigation (at current prices)

Sl. No.	Period	Major & Medium Irrigation	Minor Irrigation			Command Area Development	(Rs. Crore)		
			State	Institutional	Total		Major, Medium, Minor and CAD	Total	
1	First Plan(1951-56)	376.2	65.6	NEG.	65.6	-	441.8		
2	Second Plan (1956- 61)	380	142.2	19.4	161.6	-	541.6		
3	Third Plan(1961-66)	576	326.1	115.4	441.5	-	1017.5		
4	Annual Plans (1966- 69)	429.8	321.3	234.7	556	-	985.9		
5	Fourth Plan(1969-74)	1242.3	506.2	661.1	1167.3	-	2409.6		
6	Fifth Plan (1974-78)	2516.2	627.5	798.8	1426.3	147.6	4090.1		
7	Annual Plans (1978- 80)	2078.6	496.2	480.4	976.6	215.3	3270.5		
8	Sixth Plan (1980-85)	7368.8	1979.3	1437.6	3416.8	743.1	11528.7		
9	Seventh Plan(1985- 90)	11107.3	3131.9	3061	6192.9	1447.5	18747.7		
10	Annual Plans (1990- 91)	2634.8	812.2	675.6	1487.8	285.6	4408.2		
11	Annual Plans (1991- 92)	2824	844.1	674	1518.1	333.8	4675.9		
12	Eighth Plan (1992-97)	21669.2	6230.6	4241.8	10472.4	1937.9	34079.5		
13	Ninth Plan (1997-02)	49289.6	8635	2661.7	11296.7	2222.8	62809.1		
14	Tenth Plan (2002-07)	71213.2	14406.7	3257.4	17664	4196.7	93073.9		

NEG. : Negligible

Source: Material supplied by M/o Water Resources

Table 11C.2 : Planwise Financial Expenditure on Irrigation (at 1993-94 Prices)

Sl.No.	Period	Major & Medium	Minor			Command Area Development	(Rs. Crore)		
			State	Institutional	Total		Major, Medium, Minor and CAD	Total	
1	First Plan(1951-56)	5824.1	1015.8	Neg.	1015.8	-	6839.9		
2	Second Plan(1956-61)	5277.8	1975.4	268.8	2244.2	-	7521.9		
3	Third Plan(1961-66)	6560.4	3714.1	1314	5028.1	-	11588.5		
4	Annual Plan(1966-69)	3375.5	2523.3	1843.5	4366.8	-	7742.3		
5	Fourth Plan(1969-74)	7783.8	3171.7	4142	7313.7	-	15097.5		
6	Fifth Plan(1974-78)	9886.8	2465.6	3138.7	5604.3	580	16071.1		
7	Annual Plan(1978-80)	7192.3	1717	1662.3	3379.3	745.1	11316.6		
8	Sixth Plan(1980-85)	17330.3	4654.9	3380.9	8035.8	1747.5	27113.6		
9	Seventh Plan(1985-90)	18980.3	5351.8	5230.6	10582.4	2473.5	32036.3		
10	Annual Plan(1990-91)	3575.1	1102	916.7	2018.7	387.5	5981.3		
11	Annual Plan(1991-92)	3365.9	1006.1	803.3	1809.4	397.9	5573.2		
12	Eight Plan(1992-97)	19567.6	5626.3	3830.4	9456.7	1750	30774.3		
13	Ninth Plan(1997-2002)	33493.9	5867.8	1808.7	7676.5	1510.5	42680.8		
14	Tenth Plan(2002-2007)	38212.7	7730.6	1747.9	9478.5	2251.9	49943.1		
15	Actual Expenditure(2002-2003)	5788.8	982.6	403.2	1385.8	265.3	7439.9		
16	Actual Expenditure(2003-2004)	6279.9	1112.4	361.4	1473.8	213.2	7967		
17	Revi. Approved Outlay(2004-05)	8266.4	1484.4	334.7	1819.1	286.2	10371.8		
18	Approved Outlay(2005-06)	10331.7	1628.9	299.9	1928.8	275.3	12535.8		

Note : 1.All India WPI(Base 1993-94=100) has been used as deflator

2.Totals may not tally due to rounding off.

Source: Water and Related Statistics published by CWC, M/o Water Resources

Table 11C.3 : Statewise and Planwise Financial Expenditure on Major and Medium Irrigation

Sl.No.	State / UT	Ninth Plan (1997-2002)	Tenth Plan (2002-07)	Actual Expenditure (2002-03)	Actual Expenditure (2003-04)	Revised approved Outlay (2004-05)	Approved Outlay (2005-06)
1	Andhra Pradesh	4045.8	9153.8	1246.3	1460.8	3385.6	6933.5
2	Arunachal Pradesh	1.7	1.7	0.4	0.4	0.4	1
3	Assam	213	273.6	19.1	21.4	21.4	39.2
4	Bihar	1621.9	3273.2	248.6	259.7	201.5	
5	Chhattisgarh	160.6	1721.4	14.7	289.6	422.6	560.7
6	Goa	224.2	175.4	274.7	11	30.4	59.1
7	Gujarat	5298.4	7660.9	1348	1642.7	1127.5	1601.1
8	Haryana	1154.4	1129.6	166.9	151.1	200	290
9	Himachal Pradesh	65.1	55	11.9	15.5	18.5	14.5
10	Jammu & Kashmir	128.5	237.4	33.6	71	77.5	77.2
11	Jharkhand	167	1720.9	167	255.7	322.5	374.8
12	Karnataka	8700.5	13277.3	2761.7	3133	3079.6	3509.9
13	Kerala	703.3	600	104.6	110.5	57.9	95.2
14	Madhya Pradesh	2203.7	3819	794.8	1051.7	1270.2	1378.3
15	Maharashtra	14807.3	12150.1	429.4	271.6	2850	1985.8
16	Manipur	171.7	221.6	26.8	51	38	116.8
17	Meghalaya	10.7	24.8	1.1	1.3	0.4	1.4
18	Mizoram	0.1	0.1	0	0.1	0	0
19	Nagaland	0.9	0.5	0	0	0	0.1
20	Orissa	2331.2	2329	489.9	374.5	352.2	280.5
21	Punjab	334.9	1592.5	125.6	36.1	109.3	112.3
22	Rajasthan	1725.1	2269.6	280.1	819.1	695.1	812.8
23	Sikkim	2.2	0	0	0	0	0
24	Tamil Nadu	1218.5	1700	287.1	231.2	224	278.9
25	Tripura	32.4	44.2	2.3	6.5	5.9	12.4
26	Uttar Pradesh	3014.7	6424.6	666	616.3	800	1453.2
27	Uttarakhand	61	103.3	23.3	35.7	26.9	26.7
28	West Bengal	667.8	895.9	81.7	65.4	101.8	107.1
State Total		49066.7	70855.3	9605.3	10982.8	15419.5	20122.3
UT Total		4.2	6.5	1.9	2	0.1	0.1
Central Sector		218.7	351.4	48.5	61.7	63.5	86.3
India Total		49289.6	71213.2	9656	11046.4	15483.1	20208.8

Note : Totals may not tally due to rounding off

Source: Water and Related Statistics published by CWC, M/o Water Resources

Table 11C.4 : Statewise and Planwise Financial Expenditure on Minor Irrigation (State Expenditure)

Sl.No.	State / UT	Ninth Plan (1997- 2002)	Tenth Plan (2002- 07)	Actual Expenditure (2002-03)	Actual Expenditure (2003-04)	Revised approved Outlay (2004-05)	(Rs. Crore) Approved Outlay (2005-06)
1	Andhra Pradesh	976.3	1607.2	193.7	271.6	531.9	610.4
2	Arunachal Pradesh	94.6	160.7	11.7	25.7	32.8	59.9
3	Assam	382.2	305.1	50.7	41.8	30.6	23.9
4	Bihar	231.6	681.8	61.7	198.6	248.6	
5	Chhattisgarh	71.5	776.6	120.9	148.2	254	333.5
6	Goa	26.7	27	10.7	24.2	24.5	45
7	Gujarat	933.3	1098.5	123.2	164.8	293.6	208.7
8	Haryana	200.9	154.3	0	0	0	0
9	Himachal Pradesh	232.7	333	69.1	48.5	57.4	79.5
10	Jammu & Kashmir	142.9	325.8	43	66.5	77.7	67.5
11	Jharkhand	39.3	333.1	39.3	42	75	70
12	Karnataka	459	719.4	113.9	133.9	185.4	384.7
13	Kerala	225.8	205	27.7	29.9	8.8	11.1
14	Madhya Pradesh	746.3	1047.5	194.8	192.3	232.7	255.3
15	Maharashtra	1348.6	2043.2	102.5	54.8	148.4	249.5
16	Manipur	30.1	101.2	8.4	16	6.5	16.6
17	Meghalaya	34.2	60	6.5	5.2	7.2	9
18	Mizoram	26.3	26.8	6.3	14.3	14.2	17.4
19	Nagaland	25.3	35.6	4.4	10.9	12.5	12.4
20	Orissa	435.7	1604.4	84.8	68.7	55	46.3
21	Punjab	189	275.1	31.3	15.5	23	62.5
22	Rajasthan	259.5	285.4	56.6	56.1	78.6	150.6
23	Sikkim	19.4	15	3.7	3.2	4	4
24	Tamil Nadu	287.7	500	64.1	85.3	76.3	130.1
25	Tripura	75.3	219.3	29.8	28.3	20.4	29.1
26	Uttar Pradesh	362	535.2	34.4	37.9	90	127.1
27	Uttarakhand	19.6	59.9	26.4	48	67.3	29
28	West Bengal	346.1	238.5	20.7	36.6	34.1	48.1
State Total		8221.7	13774.5	1540.2	1868.6	2690.2	3081.2
UT Total		55.3	98.4	15.8	13.9	27.1	32.3
Central Sector		358	533.8	82.9	74.3	63	72.6
India Total		8635	14406.7	1638.9	1956.8	2780.4	3186.1

Note : Totals may not tally due to rounding off

Source: Water and Related Statistics published by CWC, M/o Water Resources

**Table 11C.5 : Statewise and Planwise Financial Expenditure
on Minor Irrigation (Institutional)**

Sl.No.	State / UT	IXth Plan (1997-02)	(Rs. Crore)				
			2002-03	2003-04	2004-05	2005-06	2006-07
1	Andhra Pradesh	364.69	31.44	31.81	86.95	53.54	74.1
2	Arunachal Pradesh	0	0	0	0	0.3	0
3	Assam	0.02	0	0	0.42	0.9	0.4
4	Bihar	12.92	0	48.62	113.65	61.72	59.59
5	Chhattisgarh	included in M.P	5.23	7.11	0	20.05	8.58
6	Goa	0.94	0.12	0	0.01	0.04	0.01
7	Gujarat	40.46	6.34	15.86	26.11	46.91	53.51
8	Haryana	183.9	32.51	26.49	46.31	35.73	27.84
9	Himachal Pradesh	113.1	5.77	0	0	9.19	6.29
10	Jammu & Kashmir	0.51	0.06	0	0	0	0.02
11	Jharkhand	included in Bihar	0	0	0	0.84	0.98
12	Karnataka	127.43	18.63	43.24	43.13	70.69	60.04
13	Kerala	92.59	11.67	0	9.07	11.49	41.42
14	Madhya Pradesh	146.29	55.01	50.88	99.09	67.61	95.93
15	Maharashtra	102.16	0.1	95.83	61.45	62.59	57.69
16	Manipur	0	0	0.18	0.1	0	0.1
17	Meghalaya	0	0	0	0	0	0
18	Mizoram	0.11	0	0	0.16	0	0.02
19	Nagaland	0	0	0	0	0	0
20	Orissa	1.24	2.1	7.51	4.28	1.13	6.62
21	Punjab	197.8	34.99	61.85	68.5	21.59	88.98
22	Rajasthan	363.74	81.89	43.66	34.92	37.28	55.04
23	Sikkim	0	0	0	0	0	0
24	Tamil Nadu	15.72	25.55	4.62	2.22	13.06	9.04
25	Tripura	0.09	0	0	0	0.12	0
26	Uttarakhand	included in U.P	0	0	0	0.03	0.05
27	Uttar Pradesh	884.08	379.52	195.41	28.64	65.05	86.08
28	West Bengal	11.85	1.59	2.71	1.84	4.73	3.11
State Total		2659.64	672.43	635.78	626.85	584.59	735.44
UT Total		2	0.16	0	0.05	1.99	0.06
India Total		2661.64	672.59	635.78	626.9	586.58	735.5

Note : Total may not tally due to rounding off

Source: Water and Related Statistics published by CWC, M/o Water Resources

Table 11D.1: Planwise Irrigation Potential Utilised according to Schemes (Cumulative)

(thousand hectares)

Sl. No.	Period	Major & Medium Irrigation				Minor Irrigation				Total		
		(Surface Water)		Surface Water		Ground Water		Surface & Ground Water	(Major, Medium & Minor)			
		Potential Utilised	% Utilisation	Potential Utilised	% Utilisation	Potential Utilised	% Utilisation	Potential Utilised	Potential Utilised	% Utilisation		
1	Pre-plan(1951)	9705	100	6401	100	6500	100	12901	22606	100		
2	First Plan(1951-56)	10985	90.1	6430	100	7630	100	14060	25045	95.41		
3	Second Plan (1956-61)	13052	91.1	6454	100	8277	100	14731	27783	95.59		
4	Third Plan(1961-66)	15175	91.6	6480	100	10520	100	17000	32175	95.86		
5	Annual Plans (1966-69)	16751	92.6	6512	100	12508	100	19020	35771	96.38		
6	Fourth Plan(1969-74)	18688	90.3	6962	100	16438	100	23400	42088	95.43		
7	Fifth Plan (1974-78)	21163	85.6	7500	100	19800	100	27300	48463	93.17		
8	Annual Plans (1978-80)	22645	85.1	8000	100	22000	100	30000	52645	92.99		
9a	Sixth Plan (1980-85)-Original	25330	84.4	9010	92.9	26238	94.3	35248	60578	89.7		
9b	Sixth Plan (1980-85)- Reappraised	23574	85.1	9010	92.9	26238	94.3	35248	58822	87.1		
10	Seventh Plan(1985-90)	25467	85.1	9968	90.7	33152	93.1	43120	68587	89.63		
11	Annual Plans (1990-92)	26315	85.6	10289	89.8	36249	93.2	46538	72853	89.84		
12a	Eighth Plan (1992-97) Original	28410	86.2	10885	88.5	41905	91.9	52790	81200	89.38		
12b	Eighth Plan (1992-97) Reappraised	27893	84.8	8201	67.3	40088	79.7	48289	76182	79.89		
13	Ninth Plan (1997-02)	30972	83.8	7175	58.5	45658	72.3	52833	83805	74.56		
14	Tenth Plan (2002-07)	34382	81.3	8341	59.1	48363	72.3	56704	91086	73.9		

Source: Material supplied by M/o Water Resources

Table 11D.2 : Statewise Estimates of Potential Utilised (Through Major & Medium and Minor Irrigation Schemes) at the end of Five Year Plans

Sl. No.	State/ UT	(thousand hectares)		
		At the end of VIII Plan 1992- 97	At the end of IX Plan 1997- 2002	At the end of X Plan 2002- 2007
1	Andhra Pradesh	6149.9	6513	7307.2
2	Arunachal Pradesh	37.4	46	53.6
3	Assam	351.6	448.3	551.1
4	Bihar	4868.4	4603.7	4976.6
5	Chhattisgarh	Included in M.P.	642.9	865
6	Goa	29.3	29.8	42
7	Gujarat	3097.7	4069.3	4600.5
8	Haryana	4023.4	4130.3	4220.5
9	Himachal Pradesh	178.2	190.8	214.7
10	Jammu & Kashmir	490.5	533.1	616.8
11	Jharkhand	Included in Bihar	521.2	731.5
12	Karnataka	2772.1	3636.6	3659.1
13	Kerala	897.7	996.8	1623.5
14	Madhya Pradesh	5329.5	4392.6	4618
15	Maharashtra	4489.6	6183.5	6492.2
16	Manipur	74.6	101.2	117.6
17	Meghalaya	46.6	70.6	73.1
18	Mizoram	7.8	7.4	8.2
19	Nagaland	39.7	48.6	61.2
20	Orissa	2222	2429.7	2707.7
21	Punjab	8699	8286.8	8505.3
22	Rajasthan	5832.8	6372.7	6817.6
23	Sikkim	14.5	15.6	19.7
24	Tamil Nadu	4558.8	3945.6	3992.5
25	Tripura	39	60.2	81.5
26	Uttar Pradesh	18399.1	20762.6	22849.1
27	Uttarakhand	Included in U.P.	667.4	727.4
28	West Bengal	3447.9	3489	3628.6
State Total		76097	83725.3	91002.4
UT Total		84.8	79.8	83.6
India Total		76181.8	83805.1	91086

Note : Totals may not tally due to rounding off.

Source: Material supplied by M/o Water Resources

**Table 11D.3 : Statewise Estimates of Potential Utilised
(Through Major & Medium Irrigation (Surface
Water) Schemes) during Five Year Plans**

Sl. No.	State / UT	(thousand hectare)		
		Eight Plan 1992-97	Ninth Plan 1997-2002	Tenth Plan 2002-07
1	Andhra Pradesh	2883.8	3051.6	3337.2
2	Arunachal Pradesh	0	0	0.8
3	Assam	138.2	174.4	219.2
4	Bihar	1824	1714.8	1896.2
5	Chhattisgarh	Included in M.P.	760.7	1281.5
6	Goa	12.1	15.3	25.9
7	Gujarat	1200	1300.8	1813.1
8	Haryana	1833	1850	1909.7
9	Himachal Pradesh	5.6	7.5	8.9
10	Jammu & Kashmir	147.6	168.8	184.1
11	Jharkhand	Included in Bihar	230.5	440.7
12	Karnataka	1471.7	1844.8	1849.9
13	Kerala	464.3	558.9	783.2
14	Madhya Pradesh	1542	875.6	917.9
15	Maharashtra	1287.7	2147.2	2313.1
16	Manipur	52	72.9	82.4
17	Meghalaya	0	-	0
18	Mizoram	0	-	0
19	Nagaland	0	0	0.7
20	Orissa	1442.7	1794.2	1900.4
21	Punjab	2451.3	2486	2530
22	Rajasthan	2088.4	2313.9	2611.6
23	Sikkim	0	0	0
24	Tamil Nadu	1545.5	1549.3	1556.9
25	Tripura	2.3	4.5	13.5
26	Uttar Pradesh	6183	6334	6926
27	Uttarakhand	Included in U.P.	185.4	191.5
28	West Bengal	1315.3	1527.1	1583.4
State Total		27890.9	30968.2	34377.7
UT Total		2.3	3.9	3.9
India Total		27893.2	30972.1	34381.7

Note : Totals may not tally due to rounding off.

Source: Water and Related Statistics published by CWC, M/o Water Resources

Table 11D.4 : Statewise Estimates of Potential Utilised (Through Minor Irrigation (Surface Water) Schemes) at the end of Five Year Plans

Sl. No.	State / UT	(thousand hectare)		
		At the end of VIII Plan 1992- 97	At the end of IX Plan 1997-2002	At the end of X Plan 2002- 07
1	Andhra Pradesh	1127.6	1157.3	1609.7
2	Arunachal Pradesh	37.2	46	52.7
3	Assam	146.1	85.1	95
4	Bihar	537.5	399	409.6
5	Chhattisgarh	Included in M.P.	176.8	184.7
6	Goa	13.7	10.7	12
7	Gujarat	139.7	52.7	66.9
8	Haryana	7.7	8.2	8.2
9	Himachal Pradesh	153.7	159.2	178.9
10	Jammu & Kashmir	333.6	332.6	389
11	Jharkhand	Included in Bihar	136.7	136.7
12	Karnataka	291.1	503.7	512.3
13	Kerala	331.8	323.8	546.7
14	Madhya Pradesh	1055	726.7	763.5
15	Maharashtra	993.6	668.7	714.5
16	Manipur	22.2	28.3	35.1
17	Meghalaya	45.5	69.9	72.4
18	Mizoram	7.2	7.4	8.2
19	Nagaland	39.3	48.3	60.3
20	Orissa	579.5	478.2	584.8
21	Punjab	13	16.6	23.6
22	Rajasthan	127.9	80.5	80.5
23	Sikkim	14.5	15.6	19.7
24	Tamil Nadu	1214.4	722.4	726.6
25	Tripura	31.2	47.1	58.4
26	Uttar Pradesh	247.8	71.9	102.7
27	Uttarakhand	Included in U.P.	227.1	276.7
28	West Bengal	668.1	558.2	593.3
State Total		8178.9	7158.5	8322.5
UT Total		21.7	16.4	18.4
India Total		8200.6	7174.9	8340.9

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

Source: Water and Related Statistics published by CWC, M/o Water Resources

Table 11D.5 : Statewise Estimates of Potential Utilised (Through Minor Irrigation (Ground Water) Schemes) at the end of Five Year Plans

(thousand hectare)

Sl. No.	State / UT	At the end of VIII Plan 1992- 97	At the end of IX Plan 1997- 2002	At the end of X Plan 2002-07
1	Andhra Pradesh	2138.5	2304.1	2360.3
2	Arunachal Pradesh	0.2	0	0.1
3	Assam	67.4	188.8	236.8
4	Bihar	2506.8	2489.9	2670.8
5	Chhattisgarh	Included in M.P.	235.7	239.6
6	Goa	3.5	3.7	4.1
7	Gujarat	1758	2715.7	2720.5
8	Haryana	2182.1	2272.1	2302.7
9	Himachal Pradesh	18.9	24.1	26.9
10	Jammu & Kashmir	9.4	31.7	43.7
11	Jharkhand	Included in Bihar	154	154
12	Karnataka	1009.3	1288.1	1296.9
13	Kerala	101.6	114.1	293.6
14	Madhya Pradesh	2732.5	2790.3	2936.6
15	Maharashtra	2208.3	3367.6	3464.7
16	Manipur	0.4	0	0
17	Meghalaya	1.1	0.7	0.7
18	Mizoram	0.6	0	0
19	Nagaland	0.4	0.3	0.3
20	Orissa	199.9	157.3	222.5
21	Punjab	6234.8	5784.2	5951.7
22	Rajasthan	3616.5	3978.3	4125.5
23	Sikkim	0	0	0
24	Tamil Nadu	1798.9	1673.9	1709
25	Tripura	5.5	8.6	9.6
26	Uttar Pradesh	Included in U.P.	254.9	259.2
27	Uttarakhand	11968.3	14356.7	15820.4
28	West Bengal	1464.5	1403.6	1452
State Total		40027.3	45598.6	48302.2
UT Total		60.7	59.4	61.3
India Total		40088	45658	48363.5

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

Source: Water and Related Statistics published by CWC, M/o Water Resources