

Water

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Table 6.1: Distribution of Large Dams Completed (as on October, 2014)

Year of Completion											Total
Up to 1900	1901 to 1950	1951 to 1960	1961 to 1970	1971 to 1980	1981 to 1990	1991 to 2000	2001 & beyond	Year of Const- ruction not Available	Total Completed Dams	Under Const- ruction	
-	-	1	1	2	-	1	2	-	7	-	7

Table 6.2: Live Storage Capacity of Large Dams/Reservoirs/Projects (as on March, 2015)

Total Live Storage Capacity (BCM)		
Completed	Under Construction	Total
0.479	0.007	0.486

Source (Tables 6.1-6.2): Dam Safety Monitoring Directorate, Water Monitoring Directorate, Central Water Commission, National Registrar of Large Dam, Ministry of Water Resources, Planning and Progress Directorate, Central Water Commission, Govt. of India (Water and Related Statistics, 2015). <http://www.cwc.gov.in/main/downloads/Water%20&%20Related%20Statistics%202015.pdf> (Accessed on 08.02.2017)

Table 6.3: Details of Small Hydro Power Projects (upto 25 MW) Setup & under Implementation

Year	Potential		Projects set-up		Project under Implementation	
	No	Capacity (MW)	No	Capacity (MW)	No	Capacity (MW)
2014	-	-	4	31.03	3	1.70
2015	97	230.05	4	31.03	3	1.7

Source: Ministry of New and Renewable Energy. Ministry of Statistics and Programme Implementation, Central Statistics Office, Social Statistics Division, Govt. of India (Statistics Related to Climate Change – India 2015). http://www.mospi.gov.in/sites/default/files/publication_reports/climateChangeStat2015.pdf (Accessed on 27.02.2017)

Table 6.4: Ultimate Irrigation Potential (UIP)

('000 ha)

Irrigation Potential		2015
Major & Medium		20
Minor	Surface	85
	Ground	63
	Sub-Total	148
Total		168

Source: Dam Safety Monitoring Directorate, Water Monitoring Directorate, Central Water Commission, National Registrar of Large Dam, Ministry of Water Resources, Planning and Progress Directorate, Central Water Commission, Govt. of India (Water and Related Statistics, 2015).

<http://www.cwc.gov.in/main/downloads/Water%20&%20Related%20Statistics%202015.pdf>

(Accessed on 08.02.2017)

Table 6.5: Plan-wise Financial Expenditure on Major and Medium Irrigation

(Rs. Crores)

Ninth Plan (1997-02)	Tenth Plan (2002-07)	Actual Expenditure (2007-08)	Actual Expenditure (2008-09)	Revised Approved Outlay (2009-10)	Revised Approved Outlay (2010-11)	Actual Expenditure (2011-12)
10.7	2.8	0	0	0	0.2	0.55

Source: Dam Safety Monitoring Directorate, Water Monitoring Directorate, Central Water Commission, National Registrar of Large Dam, Ministry of Water Resources, Planning and Progress Directorate, Central Water Commission, Govt. of India (Water and Related Statistics, 2015).

<http://www.cwc.gov.in/main/downloads/Water%20&%20Related%20Statistics%202015.pdf>

(Accessed on 08.02.2017)

Table 6.6: Achievements of Bharat Nirman on Irrigation Potential Creation including Minor Irrigation

('000 ha)

Achievement from April 2005 to March 2009	Achievement				Cumulative Achievement
	2010-11	2011-12	2012-13	2013-2014	
10.27	4.45	6.22	1.31	4.57	31.41

Source: Ministry of Water Resources, Govt. of India (Hand Book on Water and Related Information, Central Water Commission January-2016).
<http://www.cwc.gov.in/main/downloads/Handbook%20on%20Water%20&%20Related%20Information-2016.pdf>; (Accessed on 10.02.2017)

Table 6.7: Year-wise Achievements of Irrigation Potential Created/Utilised in respect of Minor Irrigation Projects of XI plan*

('000 ha)

Ultimate Irrigation Potential			148	
Cumulative Achievement	Up to X Plan	IPC	61.57	
		IPU	53.89	
XI Plan	Target	IPC	16.5	
		IPU	NF	
	Achievement	2007-08	IPC	1.8
			IPU	NF
	Achievement	2008-09	IPC	2.03
			IPU	NF
	Achievement	2009-10	IPC	3.28
			IPU	NF
	Achievement	2010-11	IPC	4.33
			IPU	NF
	Likely Achievement	2011-12	IPC	4.76
			IPU	NF

*: Figures under reconciliation with states; IPC: Irrigation Potential Created; IPU: Irrigation Potential Utilised

Source: Planning and Progress Directorate, Central Water Commission, Water Resources Information System, Directorate, Information System Organisation, Water Planning & Projects Wing, Govt. of India (Water and Related Statistics-2015).
<http://www.cwc.gov.in/main/downloads/Water%20&%20Related%20Statistics%202015.pdf>
 (Accessed on 20.02.2017)

Table 6.8: Financial Expenditure on Flood Management Work

(Rs. Crores)

During IX Plan (1997-02)	Upto IX Plan (1997-02)	During X Plan (2002-07)	Upto X Plan (2002-07)	Actual Expenditure (2007-08)	Actual Expenditure (2008-09)	Revised Approved Outlay (2009-10)	Revised Approved Outlay (2010-11)	Actual Expenditure (2011-12)
12.04	22.51	10.05	32.56	2.26	3.12	2.00	2.50	2.66

Source: Planning and Progress Directorate, Central Water Commission, Water Resources Information System, Directorate, Information System Organisation, Water Planning & Projects Wing, Govt. of India (Water and Related Statistics-2015).

<http://www.cwc.gov.in/main/downloads/Water%20&%20Related%20Statistics%202015.pdf>

(Accessed on 20.02.2017)

Table 6.9: List of on-going Projects under Command Area Development and Water Management (CADWM) Programme during the period of XIth Plan (2007-08 to 2011-12) (as on March, 2013)

('000 ha)

Project Name	Districts benefitted	Year of Inclusion	CCA	CCA Covered till 31.3.2013	Reported balance of executable CCA
Cluster of 10 MI schemes viz. Tienglam and Pdem etc.		2001-02	2.44	1.354	1.086
Cluster of 6 MI schemes -Kynrut, Phudumjer, Nongtraw, Kharukol, Nekora, MadanUmtheid	West khasi Hills, Ri-Bhoi, South Garo Hills	2010-11	0.38	0.371	0.009
Total			2.82	1.725	1.095

CCA - Cultural Command Area

Source: Planning and Progress Directorate, Central Water Commission, Ministry of Water Resource, (CAD wing) Govt. of India (Water and Related Statistics, 2015).

<http://www.cwc.gov.in/main/downloads/Water%20&%20Related%20Statistics%202015.pdf>

(Accessed on 08.02.2017)

Table 6.10: Central Released under the Command Area Development Programme (CADP)
(Rs. Lakh)

Total up to end of VIII Plan	Up to IX Plan	Up to X Plan	Total XI Plan	During XII Plan			Cumulative Up to 2014-15
				2012-13	2013-14	2014-15	
55.9	74.3	118.0	29.1	-	0.0	-	147.1

Source: Planning and Progress Directorate, Central Water Commission, Ministry of Water Resource, (CAD wing) Govt. of India (Water and Related Statistics, 2015).
<http://www.cwc.gov.in/main/downloads/Water%20&%20Related%20Statistics%202015.pdf>
(Accessed on 08.02.2017)

Table 6.11: Installation of Off-Grid/Decentralized Renewable Energy Systems/Devices

Year			31.03.2014	31.03.2015
Biogas Plants		(Nos.)	0.1	0.10
Water Pumping/ Wind Mills		(Nos.)	0	-
SPV Pumps		(Nos.)	19	19
Solar Photovoltaic (SPV) Systems	SLS	(Nos.)	0.0	0.0
	HLS	(Nos.)	0.1	0.1
	SL	(Nos.)	0.2	0.2
	PP	(KWP)	173.5	173.5
Aerogen. Hybrid System		(KW)	191.50	191.50
Solar Cooker#		(MW)	-	-
Biomass Gasifiers (Rural + Industrial)		Nos.)	-	250
Biomass (non bagasse)		(MW)	-	-
Waste to Energy		(MW)	-	-
Remote Village	Villages	(Nos.)	149	149
Electrification Village	Hamlets	(Nos.)	-	-

Data reported for the year 2012

* Others includes installations through NGOs/IREDA in different states

SLS=Street Lighting System; HLS=Home Lighting System; SL=Solar Lantern; PP=Power Plants; SPV=Solar Photovoltaic; SHP=Small Hydro Power; MW=Mega Watt; KWP=Kilowatt Peak; BOV=Battery Operated Vehicles

Source: Ministry of New and Renewable Energy, Ministry of Statistics and Programme Implementation. Ministry of Statistics and Programme Implementation, Govt. of India (Energy Statistics 2015-2016).
http://www.mospi.gov.in/sites/default/files/publication_reports/Energy_statistics_2016.pdf
(Accessed on 27.02.2017)

Table 6.12: Source-wise Estimated Potential of Renewable Power

(in MW)

Power/ Energy		2012	2013	2014	2015	2016
Biomass Power		11	11	11	11	11
Waste to Energy		2	2	2	2	2
Wind Power		44	44	82	82	82
Small Hydro Power		230	230	230	230	230
Cogeneration bagasse		0	0	0	-	-
Solar Energy		-	-	-	5,860	5,860
Total	Estimated Reverses	287	287	325	6,185	6,185
	Distribution (%)	0.32	0.30	0.22	0.69	0.52

Source: Ministry of New and Renewable Energy, Govt. of India
(Energy Statistics, 2013, 2014, 2015, 2016, 2017)
<http://mospi.nic.in/>; (Accessed on 22.02.2017)

Table 6.13: Installed Capacity of Power Utilities (Including allocated shares in Joint & Central Sector utilities) (as on February, 2017)

Ownership /sector	Mode-wise Breakup							Grand Total
	Thermal				Nuclear	Hydro (Renewal)	RES (MNRE)	
	Coal	Gas	Diesel	Total				
State	0.00	0.00	0.00	0.00	0.00	282.00	31.03	313.03
Private	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01
Central	30.40	109.69	0.00	140.09	0.00	65.19	0.00	205.28
Sub-Total	30.40	109.69	0.00	140.09	0.00	347.19	31.04	518.32

Source: Central Electricity Authority, Ministry of Power, Govt. of India.
http://www.cea.nic.in/reports/monthly/installedcapacity/2017/installed_capacity-03.pdf
(Accessed on 31.03.2017)

Table 6.14: Electricity-Installed Capacity, Generation and Consumption

(Installed Capacity: Thousand KW); Generation: Gwh)

Year		2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
Installed Capacity	Hydro	156	156	156	240	282	-
	Steam	-	0	0	0	0	-
	Diesel and Wind	35	33.08	33.08	33.08	33	-
	Gas	-	0	0	0	0	-
	Nuclear	-	0	0	0	0	-
Total		191	189.08	189.08	273.08	315	0
Electricity generated (Gross)	Hydro	511	481.33	441.39	415.71	610	802.2
	Steam	-	0	0	0	0	0
	Diesel and Wind	105	107.68	86.88	86.884	87	86.88
	Gas	-	0	0	0	0	0
	Nuclear	-	0	0	0	0	0
Total		616	589.01	528.27	502.594	697	889.08
Consumption in Power Station		1	1	1.27	2.15	1	6.8
Electricity Generated (Net)		615	588.01	527	500.444	696	882.28
Consumption*		945.5	898.42	968.96	1074.88	1258.58	1082.04
Per capita consumption (kwh)	655.40	613.36	654.08	607.60	631.90	655.40	241.70
	-	-	-	49.97	58.30	-	-
Total@		655.40	613.36	654.08	657.57	690.20	683.99

*: Relates to sales to ultimate consumers; @: Relates to utility and non utility

Source: Central Electricity Authority, Ministry of Power, Ministry of Statistics & Programme Implementation, Govt. of India (Statistical Year Book India, 2016).<http://www.mospi.gov.in/statistical-year-book-india/2016>; (Accessed on 23.12.2016)

Table 6.15: Status of Hydropower Potential Development

(Installed Capacity)

Capacity	as on 31.03.2016	as on 31.03. 2017
Identified Capacity Total (MW)	2394	2394
Above 25 MW	2298	2298
Capacity Under Operation		
Mega Watts	282.0	282.0
Percent	12.27	12.27
Capacity under Construction		
Mega Watts	40.0	40.00
Percent	1.74	1.74
Capacity Under Operation & Under Construction		
Mega Watts	322.0	322.0
Percent	14.01	14.01
Capacity yet to be taken under Construction		
Mega Watts	1976.0	1976.0
Percent	85.99	85.99

Source: Central Electricity Authority, Ministry of Power, Govt. of India.http://cea.nic.in/reports/monthly/hydro/2015/hydro_potential_region-08.pdf; (Accessed on 23.03.2017)**Table 6.16:** Electricity Sold to Ultimate Consumers (Utilities only)

(Gwh)

Electricity Sold	2009-10	2010-11	2011-12	2012-13	2013-14(P)
Total Sold to Ultimate Consumers	898.42	968.96	1074.88	1258.58	1082.04
Domestic	264.16	301.49	344.72	403.63	359.25
Commercial	52.24	63.29	75.55	88.46	88.87
Industrial Power at Low & Medium Voltage	5.64	6.50	6.85	8.02	5.75
Industrial Power at high voltage	463.00	477.44	513.08	600.77	446.99
Public lighting	1.49	1.33	1.10	1.29	1.31
Traction	0.00	0.00	0.00	0.00	0.00
Agriculture	0.63	0.36	0.41	0.48	0.16
Public water works & sewage pumping	31.58	33.77	37.98	44.47	37.50
Miscellaneous	79.68	84.78	95.19	111.46	142.21

P: Provisional

Source: Central Electricity Authority, Ministry of Power; Ministry of Statistics and Programme Implementation, Govt. of India (Statistical Year Book India, 2016).<http://www.mospi.gov.in/statistical-year-book-india/2016>; (Accessed on 03.02.2017)

Table 6.17: Towns and Villages Electrified

(in Nos.)

Year	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
Towns							
Number of Towns (2011 Census)	16	16	16	16	16	16	16
Electrified	16	16	16	16	16	16	16
Percentage	100	100	100	100	100	100	100
Villages							
Number of Villages (2011 Census)	5,782	5,782	5,782	5,782	5,782	5,782	6,459
Electrified	3,428	3,428	3,428	3,842	4,425	4,988	5,132
Percentage	59.3	59.3	59.3	66.4	76.5	86.3	79.5

Source: Ministry of Statistics and Programme Implementation, Govt. of India

(Statistical Year Book, India 2016).

<http://www.mospi.gov.in/statistical-year-book-india/2016;> (Accessed on 06.01.2017)**Table 6.18:** Ground Water Resources Availability, Utilization and Stage of Development (as on, 2011)

Year			2009	2011
Annual Replenishable Ground Water Resource	Monsoon Season	Recharge from Rainfall	1.0191	1.68
		Recharge from other Sources	0.0000	0.03
	Non-monsoon Season	Recharge from Rainfall	0.2152	0.07
		Recharge from other Sources	0.0000	0.005
Total			1.2343	1.78
Natural Discharge during Non-monsoon Season			0.1234	0.18
Net Annual Ground Water Availability			1.1109	1.60
Annual Ground Water Draft	Irrigation		0.0015	0.0015
	Domestic and Industrial uses		0.0002	0.0002
	Total		0.0017	0.0017
Projected Demand for Domestic and Industrial uses upto 2025			0.0964	0.232
Ground Water Availability for Future Irrigation use			1.0131	1.37
Stage of Ground Water Development (%)			0.15	0.08

Source: Ministry of Water Resources, River Development and Ganga Rejuvenation, Govt. of India;

Central Ground Water Board Faridabad (Ground Water Year Book- India 2013-14 & 2014-15).

<http://www.cgwb.gov.in/documents/Ground%20Water%20Year%20Book%202013-14.pdf><http://www.indiaenvironmentportal.org.in/files/file/Ground%20Water%20Year%20Book%202014-15.pdf>

(Accessed on 20.01.2017)

Table 6.19: Status of Ground Water Monitoring Wells

Year	Number of Ground Water Monitoring Stations		
	DW	PZ	Total
31.03.2013	31	5	36
31.03.2014	57	7	64

Source: Central Ground Water Board, Ministry of Water Resources, River Development and Ganga Rejuvenation, Govt. of India (Ground Water Year Book- India 2013-14 & 2014-15).
<http://www.cgwb.gov.in/documents/Ground%20Water%20Year%20Book%202013-14.pdf>
 (Accessed on 27.02.2017)
<http://www.indiaenvironmentportal.org.in/files/file/Ground%20Water%20Year%20Book%202014-15.pdf>
 (Accessed on 27.02.2017)

Table 6.20: Depth to water Level and Distribution of Percentage of Wells Period

Year		Pre Monsoon-2014	August-2014	November-2014	January-2015	
No. of Wells Analysed		20	6	14	15	
Depth to Water Level (m bgl)	Min	1.16	0.75	0.40	0.57	
	Max	7.78	2.62	6.35	7.69	
Number & Percentage of Wells Showing Depth to Water Level (m bgl) in the Range of	0-2	No	2	5	6	2
		%	10.00	83.33	42.86	13.33
	2-5	No	13	1	6	11
		%	65.00	16.67	42.86	73.33
	5-10	No	5	0	2	2
		%	25.00	0.00	14.29	13.33
	10-20	No	0	0	0	0
		%	0.00	0.00	0.00	0.00
	20-40	No	0	0	0	0
		%	0.00	0.00	0.00	0.00
	> 40	No	0	0	0	0
		%	0.00	0.00	0.00	0.00

Source: Central Ground Water Board, Ministry of Water Resources, River Development and Ganga Rejuvenation, Govt. of India (Ground Water Year Book- India 2014-15).
<http://www.indiaenvironmentportal.org.in/files/file/Ground%20Water%20Year%20Book%202014-15.pdf>
 (Accessed on 27.02.2017)

Table 6.21: Status of Coverage of Rural Habitations under Rural Water Supply
(as on 1st April, 2014)

Total	Total Quality	No. of Habitations	No. of Habitations With	No. of Habitations	No. of Habitations	Total	No. of Habitations
9,326	52	2,158	2,220	1,480	1,498	7,356	1,918

Source: Ministry of Drinking Water & Sanitation. Water Resources Information System Directorate, Information System Organisation, Water Planning & Projects Wing, Central Water Commission (Water and Related Statistics-2015).

<http://www.cwc.gov.in/main/downloads/Water%20&%20Related%20Statistics%202015.pdf>
(Accessed on 20.01.2017)

Table 6.22: Year-wise Central Assistance release to States for Major, Medium, ERM Projects under AIBP

(Rs. in Crore)

Year	Grant released (Amount in Rs. Crore)												Cumulative CLA/Grant released upto March 15
	CLA released Upto 2004-05	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	
2004-05 to 2013-14	102.90	10.35	70.30	138.07	54.18	182.11	0.00	209.50	0.00	375.00	0.00	82.68	1225.10

AIBP: Accelerated Irrigation Benefits Programme

Source: Mon(C), Project Monitoring Organisation, Central Water Commission. Water Resources Information System Directorate, Information System Organisation, Water Planning & Projects Wing, Central Water Commission, Govt. of India (Water and Related Statistics, 2015).

<http://www.cwc.gov.in/main/downloads/Water%20&%20Related%20Statistics%202015.pdf>
(Accessed on 20.01.2017)