

BRIEF NOTE ON STORAGE STATUS OF 91 IMPORTANT RESERVOIRS IN THE COUNTRY (WITH REFERENCE TO RESERVOIR BULLETIN OF 18.06.2015)

1. ALL INDIA STATUS

Central Water Commission is monitoring live storage status of 91 important reservoirs of the country on weekly basis and is issuing weekly bulletin on every Thursday. Out of these reservoirs, 37 reservoirs have hydropower benefit with installed capacity of more than 60 MW. The total live storage capacity of the 91 reservoirs is 157.799 BCM which is about 62% of the live storage capacity of 253.388 BCM which is estimated to have been created in the country. As per reservoir bulletin of 18.06.2015, live storage available in these reservoirs was **39.605 BCM** which is **25%** of total live storage capacity of these reservoirs. This storage is **103%** of the storage of corresponding period of last year and **139%** of storage of average of last ten years. The present storage position during current year is better than the storage position of last year and is also better than the storage of average of last ten years.

As per Table-01, the overall storage position is **better than the** corresponding period of last year in the country as a whole and is also **better than the** average storage of last ten years during the corresponding period.

2. REGION WISE STORAGE STATUS:

a) NORTHERN REGION

The northern region includes States of Himachal Pradesh, Punjab and Rajasthan. There are 6 reservoirs in this region having total live storage capacity of 18.01 BCM. The total live storage available in these reservoirs is **7.56 BCM** which is **42%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **40%** and average storage of last ten years during corresponding period was **28%** of live storage capacity of these reservoirs. Thus, storage during current year is better than the corresponding period of last year and is also better than the average storage of last ten years during the corresponding period.

b) EASTERN REGION

The Eastern region includes States of Jharkhand, Odisha, West Bengal and Tripura. There are 15 reservoirs in this region having total live storage capacity of 18.83 BCM. The total live storage available in these reservoirs is **5.21 BCM** which is **28%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **25%** and average storage of last ten years during corresponding period was **13%** of live storage capacity of these reservoirs. Thus, storage during current year is better than the corresponding period of last year and is also better than the average storage of last ten years during the corresponding period.

c) WESTERN REGION

The Western region includes States of Gujarat and Maharashtra. There are 27 reservoirs in this region having total live storage capacity of 27.07 BCM. The total live storage available in these reservoirs is **5.67 BCM** which is **21%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **25%** and average storage of last ten years during corresponding period was **21%** of live storage capacity of these reservoirs. Thus, storage during current year is less than the storage of last year and is equal to the average storage of last ten years.

d) CENTRAL REGION

The Central region includes States of Uttar Pradesh, Uttarakhand, Madhya Pradesh and Chhattisgarh. There are 12 reservoirs in this region having total live

storage capacity of 42.30BCM. The total live storage available in these reservoirs is **12.44** BCM which is **29%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **32%** and average storage of last ten years during corresponding period was **13%** of live storage capacity of these reservoirs. Thus, storage during current year is less than the storage of last year but better than the average storage of last ten years.

e) SOUTHERN REGION

The Southern region includes States of Andhra Pradesh, Telangana, AP&TG (2combined project in both states) Karnataka, Kerala and Tamil Nadu. There are 31 reservoirs in this region having total live storage capacity of 51.59 BCM. The total live storage available in these reservoirs is **8.74** BCM which is **17%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **12%** and average storage of last ten years during corresponding period was **18%** of live storage capacity of these reservoirs. Thus, storage during current year is better than the corresponding period of last year but is less than the average storage of last ten years during the corresponding period.

The region wise and reservoir wise details are given in the following pages of the bulletin.

BROAD ANALYSIS OF OTHER TABLES IN THE BULLETIN

- Normal storage means average storage of last ten years, Close to normal storage means where shortfall is upto 20% of normal, deficient storage is where shortfall is more than 20% of the normal and upto 60% of the normal, highly deficient means where shortfall is more than 60% of normal.
- In the table on page 6, better than normal storage is available in Ganga, Indus, Narmada, Mahi, Rivers of Kutch, Godavari, Mahanadi & neighbouring East Flowing Rivers, and West Flowing Rivers of South. Close to Normal in Tapi and Cauvery& neighbouring EFRs and Deficient in Sabarmati and Krishna.
- Table on page 5: IMD has divided India in 36 meteorological sub-divisions. The data in respect of reservoir storage as compared with observed rainfall is given in the table.
- Table on page 6: Normal, Close to normal, Deficient and Highly Deficient having the same meaning as given at Bullet No.1.
- Table on page 7-9 of the bulletin. The numbers of reservoirs having storage more than last year are 43 and reservoirs having storage more than average of last ten years are 51. The numbers of reservoirs having storage less than 20% with respect to last year is 2 and having storage less than 20% with reference to average of last ten years is 6. The numbers of reservoirs having storage less than 50% with respect to last year are 16 and having storage less than 50% with reference to average of last ten years are 11.

States having better storage than last year for corresponding period: Himachal Pradesh, Punjab, Odisha, Tripura, Uttar Pradesh, Karnataka, Kerala and Tamil Nadu.

States having equal storage to last year for corresponding period: Uttarakhand.

States having lesser storage than last year for corresponding period: Rajasthan, Jharkhand, West Bengal, Gujarat, Maharashtra, , Madhya Pradesh, Chhattisgarh, Andhra Pradesh, Telangana, AP&TG(2combined project in both states).

STORAGE STATUS OF IMPORTANT RESERVOIRS IN THE COUNTRY

- 1 Central Water Commission is monitoring storage status of 91 important reservoirs spread all over the country, in which 37 reservoirs have hydropower benefit each with installed capacity of more than 60 MW. These reservoirs are identified thus(*) in the enclosed weekly report.
- 2 The total live storage in 91 important reservoirs in different parts of the country, monitored by CWC as on **18.06.2015** is **39.605** BCM (**25** percent of the storage capacity at FRL). The current year's storage is nearly **103** percent of last year's storage and **139** percent of the average of last ten years.

3 Region wise storage status:-

REGION (States), (Monitoring No. of Reservoirs)	Filling position of 91 reservoirs w.r.t. FRL								Departure from Normal storage	
	100%	91%-99%	81%-90%	71%-80%	61%-70%	51%-60%	41%-50%	40% & below		
NORTH (HP,Punjab & Rajasthan), (6 Resv.)	-	-	-	1	-	-	1	4	H.P.	64 %
									PUNJAB	67 %
									RAJASTHAN	-21 %
EAST (Jharkhand,Odisha, Tripura & W.Bengal (15 Resv.)	-	-	-	-	-	-	2	13	JHARKHAND	-5 %
									ODISHA	158 %
									W. BENGAL	24 %
									TRIPURA	18 %
WEST (Guj.& Mah.), (27 Resv.)	1	-	-	-	-	2	1	23	GUJARAT	21 %
									MAH.	-29 %
CENTRAL (MP,UP,Uttarakhand & Chh.), (12 Resv)	-	-	-	-	1	3	-	8	U.P.	96 %
									UTTARAKHAND	110 %
									M.P.	169 %
									CHHATISGARH	44 %
SOUTH (Karnataka,TN,AP&TG,AP, TG, & Kerala), (31 Resv.)	-	-	-	2	-	1	-	28	AP&TG	-94 %
									A,P	-42 %
									TG	35 %
									KARNATAKA	63 %
									KERALA	22 %
									T.N.	-6 %
Status of 91 reservoirs	1	0	0	3	1	6	4	76		

4 Basin wise storage position:

Better than normal: Ganga,Indus,Narmada,Mahi,,Rivers of Kutch,Godavari,Mahanadi & Neighbouring EFRS, and West Flowing rivers of south.

Close to normal: Tapi and Cauvery & neighbouring EFRS. .

Deficient: Sabarmati and Krishna

Highly deficient: NIL

- 5 Out of 91 reservoirs, **64** reservoirs reported more than 80% of normal storage & **27** reservoirs reported 80% or below of normal storage. Out of these **27** reservoirs **11** having storage upto 50% of normal storage.

Name of reservoir	%	Name of reservoir	%	Name of reservoir	%
SRISAILAM	0	VANIVILAS SAGAR	46		
BHIMA(UJJANI)	0				
NAGARJUNA SAGAR	10				
TEHRI	13				
YELDARI	15				
JAYAKWADI(PAITHON)	16				
MAHANADI	26				
MULA	33				
MAITHON	39				
RANA PRATAP SAGAR	41				

16 reservoirs having storage 51% to 80% of normal storage.

51% to 60%	61% to 70%	71% to 80%
6	3	7

- 6 Out of 37 reservoirs with significant(*) hydropower generation, the storage build up is less than or equal to normal in

14 reservoirs.

NOTE : **Normal:** Average of previous ten years, **Close to normal:** Where shortfall is up to 20% of the normal, **Deficient:** Where shortfall is more than 20% of the normal and up to 60% of the normal, **Highly deficient :** Where shortfall is more than 60% of the normal

WEEKLY REPORT - BASINWISE

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

WEEK ENDING :- 18.06.2015

NAME OF BASIN	LIVE CAP. AT FRL	THIS YEAR'S STORAGE		LAST YEAR'S STORAGE		LAST 10 YEARS' AVG. STORAGE		% DEPARTURE W.R.T. AVE. OF 10 YEARS'
GANGA	28.096	8.889	31.64%	11.234	39.98%	4.415	15.71%	101.34
INDUS	14.730	6.756	45.87%	5.614	38.11%	4.105	27.87%	64.58
NARMADA	17.414	3.497	20.08%	2.502	14.37%	1.778	10.21%	96.68
TAPI	7.394	1.181	15.97%	2.093	28.31%	1.465	19.81%	-19.39
MAHI	4.012	1.668	41.58%	2.200	54.84%	1.340	33.40%	24.48
SABARMATI	0.735	0.076	10.34%	0.110	14.97%	0.135	18.37%	-43.70
RIVERS OF KUTCH	0.887	0.071	8.00%	0.100	11.27%	0.037	4.17%	91.89
GODAVARI	15.394	3.191	20.73%	4.664	30.30%	2.268	14.73%	40.70
KRISHNA	32.831	3.986	12.14%	1.905	5.80%	5.581	17.00%	-28.58
MAHANADI & NEIGHBOURING EFRS	13.181	4.320	32.77%	3.855	29.25%	2.344	17.78%	84.30
CAUVERY & NEIGHBOURING EFRS	8.359	2.116	25.31%	1.567	18.75%	2.192	26.22%	-3.47
WEST FLOWING RIVERS OF SOUTH	14.766	3.854	26.10%	2.557	17.32%	2.816	19.07%	36.86
TOTAL	157.799	39.605		38.401		28.476		
PERCENTAGE								39.08

GOVERNMENT OF INDIA WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA CENTRAL WATER COMMISSION

WEEK ENDING :- 18.06.2015

S. NO	NAME OF RESERVOIR	FRL (m)	CURRENT RESERVOIR LEVEL (m)	LIVE CAPACITY AT FRL (BCM)	CURRENT LIVE STORAGE (BCM)	DATE	STORAGE AS % OF LIVE CAPACITY AT FRL			BENEFITS	
							CURRENT YEAR	LAST YEAR	LAST 10 YEARS AVERAGE	IRR. (CCA) IN TH. HA	HYDEL IN MW
1	2	4	6	5	7	8	9	10	11	3A	3B
<u>NORTHERN REGION</u>											
<u>HIMACHAL PRADESH</u>											
*1	GOBIND SAGAR(BHAKRA)	512.06	487.13	6.229	2.590	6/17/2015	42	34	25	676	1200
*2	PONG DAM	423.67	405.81	6.157	2.286	6/16/2015	37	27	23	-	360
<u>PUNJAB</u>											
*3	THEIN	527.91	522.11	2.344	1.880	6/18/2015	80	77	48	348	600
<u>RAJASTHAN</u>											
*4	MAHI BAJAJ SAGAR	280.75	268.85	1.711	0.512	6/17/2015	30	45	21	63	140
5	JHAKAM	359.50	343.15	0.132	0.023	6/17/2015	17	34	17	28	-
*6	RANA PRATAP SAGAR	352.81	345.79	1.436	0.264	6/18/2015	18	52	44	229	172
<u>EASTERN REGION</u>											
<u>JHARKHAND</u>											
7	TENUGHAT	269.14	257.02	0.821	0.311	6/18/2015	38	50	32	-	-
8	MAITHON	146.3	136.27	0.471	0.058	6/18/2015	12	36	31	342	-
*9	PANCHET HILL	124.97	122.81	0.184	0.090	6/18/2015	49	59	38	\$	80
10	KONAR	425.81	416.24	0.176	0.040	6/18/2015	23	52	31	\$	-
11	TILAIYA	368.81	365.42	0.142	0.038	6/18/2015	27	39	27	\$	4
<u>ODISHA</u>											
*12	HIRAKUD	192.02	182.98	5.378	0.728	6/18/2015	14	15	10	153	307
*13	BALIMELA	462.08	452.02	2.676	1.180	6/17/2015	44	47	13	-	360
14	SALANADI	82.30	69.45	0.558	0.206	6/18/2015	37	78	24	42	-
*15	RENGALI	123.50	115.86	3.432	1.171	6/17/2015	34	4	4	3	200
*16	MACHKUND(JALPUT)	838.16	829.00	0.893	0.297	6/17/2015	33	39	30	-	115
*17	UPPER KOLAB	858.00	850.52	0.935	0.316	6/17/2015	34	19	10	89	320
*18	UPPER INDRAVATI	642.00	631.16	1.456	0.430	6/18/2015	30	15	11	128	600
<u>WEST BENGAL</u>											
19	MAYURAKSHI	121.31	109.45	0.480	0.071	6/18/2015	15	30	20	227	-
20	KANGSABATI	134.14	123.00	0.914	0.191	6/18/2015	21	38	13	341	-
<u>TRIPURA</u>											
21	GUMTI	93.55	87.55	0.312	0.078	6/17/2015	25	9	21	-	15
<u>WESTERN REGION</u>											
<u>GUJARAT</u>											
*22	UKAI	105.16	90.01	6.615	1.060	6/11/2015	16	30	21	348	300
23	SABARMATI(DHAROI)	189.59	179.38	0.735	0.076	6/17/2015	10	15	18	95	1
*24	KADANA	127.7	123.80	1.472	0.819	6/17/2015	56	69	47	200	120
25	SHETRUNJI	55.53	48.52	0.300	0.023	6/15/2015	8	15	6	36	-
26	BHADAR	107.89	101.44	0.188	0.021	6/15/2015	11	23	9	27	-
27	DAMANAGANGA	79.86	67.00	0.502	0.502	6/11/2015	100	13	11	51	1
28	DANTIWADA	184.1	162.94	0.399	0.027	6/17/2015	7	3	1	45	-
29	PANAM	127.41	123.30	0.697	0.314	6/17/2015	45	53	38	36	2
*30	SARDAR SAROVAR	121.92	117.70	1.566	0.889	6/18/2015	57	28	27	2120	1450
31	KARJAN	115.25	97.24	0.523	0.132	6/11/2015	25	38	40	51	3

WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA
GOVERNMENT OF INDIA CENTRAL WATER COMMISSION

WEEK ENDING :- 18.06.2015

S. NO	NAME OF RESERVOIR	FRL (m)	CURRENT RESERVOIR LEVEL (m)	LIVE CAPACITY AT FRL (BCM)	CURRENT LIVE STORAGE (BCM)	DATE	STORAGE AS % OF LIVE CAPACITY AT FRL			BENEFITS	
							CURRENT YEAR	LAST YEAR	LAST 10 YEARS AVERAGE	IRR. (CCA) IN TH. HA	HYDEL IN MW
1	2	4	6	5	7	8	9	10	11	3A	3B
<u>MAHARASHTRA</u>											
32	JAYAKWADI(PAITHON)	463.91	455.87	2.171	0.055	6/18/2015	3	5	16	227	-
*33	KOYANA	657.90	632.77	2.652	0.552	6/17/2015	21	5	26	-	1920
34	BHIMA(UJJANI)	496.83	489.11	1.517	0.000	6/17/2015	0	0	5	125	12
35	ISAPUR	441.00	429.55	0.965	0.168	6/17/2015	17	49	23	104	-
36	MULA	552.30	534.63	0.609	0.011	6/17/2015	2	3	5	139	-
37	YELDARI	461.77	448.21	0.809	0.013	6/17/2015	2	44	11	78	-
38	GIRNA	398.07	384.18	0.524	0.044	6/17/2015	8	9	9	79	-
39	KHADAKVASLA	582.47	579.15	0.056	0.017	6/17/2015	30	13	18	78	8
*40	UPPER VAITARNA	603.50	592.10	0.331	0.051	6/17/2015	15	28	28	-	61
41	UPPER TAPI	214.00	210.40	0.255	0.077	6/17/2015	30	35	15	45	-
*42	PENCH (TOTALADOH)	490.00	470.23	1.091	0.100	6/17/2015	9	44	18	127	160
43	UPPER WARDHA	342.50	336.81	0.564	0.169	6/18/2015	30	36	31	70	-
44	BHATSA	142.07	106.84	0.942	0.250	6/17/2015	27	32	29	29.378	15
45	DHOM	747.70	730.90	0.331	0.099	6/17/2015	30	12	23	36.2	2
46	DUDHGANGA	646.00	625.71	0.664	0.161	6/15/2015	24	17	21	2.441	24
47	MANIKDOH (KUKADI)	711.25	683.52	0.288	0.022	6/17/2015	8	5	3	2.2	6
48	BHANDARDARA	342.50	336.81	0.304	0.169	6/18/2015	30	36	31	70	-
<u>CENTRAL REGION</u>											
<u>UTTAR PRADESH</u>											
49	MATATILA	308.46	305.87	0.707	0.375	6/17/2015	53	11	19	-	30
*50	RIHAND	268.22	255.43	5.649	0.678	6/16/2015	12	17	7	-	300
<u>UTTRAKHAND</u>											
*51	RAMGANGA	365.30	350.90	2.196	1.227	6/18/2015	56	53	20	1897	198
*52	TEHRI	830.00	741.60	2.615	0.021	6/18/2015	1	2	6	2351	1000
<u>MADHYA PRADESH</u>											
*53	GANDHI SAGAR	399.90	391.84	6.827	2.610	6/17/2015	38	59	14	220	115
54	TAWA	355.40	343.97	1.944	0.559	6/17/2015	29	12	19	247	-
*55	BARGI	422.76	408.40	3.180	0.494	6/17/2015	16	14	9	157	90
*56	BANSAGAR	341.64	335.97	5.166	2.837	6/17/2015	55	56	17	488	425
*57	INDIRA SAGAR	262.13	247.85	9.745	1.325	6/18/2015	14	10	4	2380	1000
58	BARNA	348.55	341.76	0.456	0.098	6/17/2015	21	37	15	546	-
<u>CHHATTIS GARH</u>											
*59	MINIMATA BANGOI	359.66	355.08	3.046	2.144	6/17/2015	70	75	42	-	120
60	MAHANADI	348.70	338.25	0.767	0.071	6/17/2015	9	28	35	319	10
<u>SOUTHERN REGION</u>											
<u>A.P & TG</u>											
*61	SRISAILAM	269.75	244.35	8.288	0.000	6/18/2015	0	0	14	0	770
*62	NAGARJUNA SAGAR	179.83	156.58	6.841	0.180	6/18/2015	3	5	27	895	810
<u>ANDHRA PRADESH</u>											
63	SOMASILA	100.58	83.92	1.994	0.291	6/18/2015	15	32	25	168	0
<u>TELANGANA</u>											
64	SRIRAMSAGAR	332.54	322.33	2.300	0.315	6/17/2015	14	31	8	411	27
65	LOWER MANAIR	280.42	269.57	0.621	0.119	6/17/2015	19	45	24	199	60

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GOVERNMENT OF INDIA CENTRAL WATER COMMISSION

WEEK ENDING :- 18.06.2015

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							CURRENT YEAR	LAST YEAR	LAST 10 YEARS AVERAGE	IRR. (CCA) IN TH. HA	HYDEL IN MW
1	2	4	6	5	7	8	9	10	11	3A	3B
<u>KARNATAKA</u>											
66	KRISHNARAJA SAGRA	752.50	737.91	1.163	0.144	6/17/2015	12	8	10	79	-
*67	TUNGABHADRA	497.74	483.16	3.276	1.895	6/18/2015	58	8	7	529	72
68	GHATAPRABHA	662.95	633.99	1.391	0.072	6/17/2015	5	1	5	317	-
69	BHADRA	657.76	640.46	1.785	0.471	6/17/2015	26	22	24	106	39
70	LINGANAMAKKI	554.43	534.30	4.294	0.590	6/18/2015	14	9	14	-	55
71	NARAYANPUR	492.25	487.49	0.863	0.245	6/18/2015	28	35	42	425	-
72	MALAPRABHA(RENUKA)	633.83	620.73	0.972	0.061	6/17/2015	6	3	6	215	-
73	KABINI	696.16	690.16	0.444	0.148	6/17/2015	33	28	7	85	-
74	HEMAVATHY	890.63	875.43	0.927	0.157	6/17/2015	17	16	9	265	-
75	HARANGI	871.42	855.51	0.220	0.034	6/17/2015	15	20	19	53	-
76	SUPA	564.00	533.78	4.120	1.329	6/18/2015	32	24	20	-	-
77	VANIVILAS SAGAR	652.28	634.37	0.802	0.047	6/18/2015	6	4	13	123	-
*78	ALMATTI	519.60	507.01	3.105	0.164	6/18/2015	5	6	10	@	290
*79	GERUSOPPA	55.00	50.12	0.130	0.103	6/18/2015	79	72	80	83	240
<u>KERALA</u>											
80	KALLADA(PARAPPAR)	115.82	92.28	0.507	0.098	6/18/2015	19	18	24	62	-
*81	IDAMALAYAR	169.00	131.48	1.018	0.169	6/18/2015	17	14	16	33	75
*82	IDUKKI	732.43	710.30	1.460	0.444	6/18/2015	30	15	16	-	780
*83	KAKKI	981.46	940.37	0.447	0.066	6/18/2015	15	7	19	23	300
*84	PERIYAR	867.41	860.68	0.173	0.050	6/18/2015	29	22	34	84	140
85	MALAPMUZHA	867.41	860.68	0.224	0.050	6/18/2015	29	22	34	84	140
<u>TAMIL NADU</u>											
86	LOWER BHAWANI	278.89	268.69	0.792	0.271	6/18/2015	34	13	38	105	8
*87	METTUR(STANLEY)	240.79	226.85	2.647	1.032	6/18/2015	39	15	41	122	360
88	VAIGAI	279.20	271.18	0.172	0.039	6/18/2015	23	6	19	61	6
89	PARAMBIKULAM	556.26	538.89	0.380	0.062	6/18/2015	16	13	30	101	-
90	ALIYAR	320.04	315.68	0.095	0.068	6/18/2015	72	18	36	#	60
*91	SHOLAYAR	1002.79	968.87	0.143	0.021	6/18/2015	15	9	18	-	95
TOTAL FOR 91 RESERVOIRS				157.799	39.755						
PERCENTAGE							25	24	18		

Sd/-

Director

W. M. , CWC

* HYDEL POWER CAPACITY HAVING CAPACITY MORE THAN 60MW

\$ TOTAL CCA 342 TH. HA OF DVC SYSTEM

TOTAL CCA 101 TH. HA OF PARAMBIKULAM & ALIYAR

@ TOTAL CCA 425 TH. HA. OF NARAYANPUR AND ALMATTI

† SABARMATI RESERVOIR IS SUPPLEMENTED WITH NARMADA WATER THROUGH PIPELINE.

Sl. No. 19th The FRL of S.S.P. 138.38 M and Live capacity at FRL will be 5.760 BCM. However at present the lowest block of the dam is at the level of 121.92 M. and the live capacity at this level is 1.566 BCM

(At sl. 30th) 0.444 BCM, Live storage at FRL of Kabini reservoir is intrim