

BRIEF NOTE ON LIVE STORAGE STATUS OF 91 RESERVOIRS IN THE COUNTRY (WITH REFERENCE TO RESERVOIR STORAGE BULLETIN OF 02.06.2016)

1. ALL INDIA STATUS

Central Water Commission is monitoring live storage status of 91 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 these 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 storage bulletin dated **02.06.2016**, live storage available in these reservoirs is **26.611 BCM**, which is **17%** of total live storage capacity of these reservoirs. However, last year the live storage available in these reservoirs for the corresponding period was **44.670 BCM** and the average of last 10 years live storage was **32.234 BCM**. Thus, the live storage available in 91 reservoirs **as per 02.06.2016 Bulletin** is **60%** of the live storage of corresponding period of last year and **83%** of storage of average of last ten years.

As per Table-01, the overall storage position is **less than the** corresponding period of last year in the country as a whole and is also **less 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 under CWC monitoring having total live storage capacity of 18.01 BCM. As per Reservoir Storage Bulletin dated **02.06.2016**, the total live storage available in these reservoirs is **3.95 BCM** which is **22%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **42%** and average storage of last ten years during corresponding period was **29%** of live storage capacity of these reservoirs. Thus, storage during current year is less than the corresponding period of last year and is also less 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 under CWC monitoring having total live storage capacity of 18.83 BCM. As per Reservoir Storage Bulletin dated **02.06.2016**, the total live storage available in these reservoirs is **4.09 BCM** which is **22%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **34%** and average storage of last ten years during corresponding period was **19%** of live storage capacity of these reservoirs. Thus, storage during current year is less than the corresponding period of last year and is 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 under CWC monitoring having total live storage capacity of 27.07 BCM. As per Reservoir Storage Bulletin dated **02.06.2016**, the total live storage available in these reservoirs is **3.50 BCM** which is **13%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **22%** and average storage of last ten years during corresponding period was **24%** of live storage capacity of these reservoirs. Thus, storage during current year is less than the storage of last year and is also less than the average storage of last ten years during the corresponding period.

d) CENTRAL REGION

The Central region includes States of Uttar Pradesh, Uttarakhand, Madhya Pradesh and Chhattisgarh. There are 12 reservoirs under CWC monitoring having total live storage capacity of 42.30 BCM. As per Reservoir Storage Bulletin dated

02.06.2016, the total live storage available in these reservoirs is **9.35 BCM** which is **22%** 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 **17%** of live storage capacity of these reservoirs. Thus, storage during current year is less than the storage of last year but is better than the average storage of last ten years during the corresponding period.

e) SOUTHERN REGION

The Southern region includes States of Andhra Pradesh, Telangana, AP&TG(2combined projects in both states) Karnataka, Kerala and Tamil Nadu. There are 31 reservoirs under CWC monitoring having total live storage capacity of 51.59 BCM. As per Reservoir Storage Bulletin dated **02.06.2016**, the total live storage available in these reservoirs is **5.33 BCM** which is **10%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **22%** and average storage of last ten years during corresponding period was **19%** of live storage capacity of these reservoirs. Thus, storage during current year is less than the corresponding period of last year and is also less than the average storage of last ten years during the corresponding period.

STORAGE STATUS OF IMPORTANT RESERVOIRS IN THE COUNTRY

AS ON 02.06.2016

- 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.
- The total live storage in 91 important reservoirs in different parts of the country, monitored by CWC as on **02.06.2016** is **26.222** BCM (**17** percent of the live storage capacity at FRL).The current year's storage is nearly **59** percent of last year's storage and **81** percent of the average of last ten years.

3 Region wise storage status:-

REGION (Monitoring No. of Reservoirs)	(States),	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.)		-	-	-	-	-	-	-	6	H.P.	-29 %
										PUNJAB	-26 %
										RAJASTHAN	-9 %
EAST (Jharkhand, Odisha, Tripura & W. Bengal (15 Resv.))		-	-	-	-	-	-	1	14	JHARKHAND	-27 %
										ODISHA	19 %
										W. BENGAL	38 %
										TRIPURA	404 %
WEST (Guj.& Mah.), (27 Resv.)		-	-	-	1	-	-	1	25	GUJARAT	-30 %
										MAH.	-67 %
CENTRAL (MP, UP, Uttarakhand & Chh.), (12 Resv)		-	-	-	-	-	-	-	12	U.P.	25 %
										UTTARAKHAND	-75 %
										M.P.	73 %
										CHHATISGARH	-29 %
SOUTH (Karnataka, TN, AP&TG, AP, TG, & Kerala), (31 Resv.)		-	-	1	-	-	-	-	30	AP&TG	-85 %
										A,P	-2 %
										TG	-45 %
										KARNATAKA	-24 %
										KERALA	8 %
										T.N.	-67 %
Status of 91 reservoirs		0	0	1	1	0	0	2	87		

4 Basin wise storage position:

- Better than normal:** Rivers of Kutch, Ganga, Sabarmati and Narmada.
- Close to normal:** Godavari, and West Flowing rivers of south.
- Deficient:** Indus, Mahi, Mahanadi & Neighbouring EFRS and Cauvery & neighbouring EFRS
- Highly deficient:** Tapi and Krishna.

- Out of 91 reservoirs, **40** reservoirs reported more than 80% of normal storage & **51** reservoirs reported 80% or below of normal storage. Out of these **51** reservoirs **42** having storage upto 50% of normal storage.

Name of reservoir	%	Name of reservoir	%	Name of reservoir	%
NAGARJUNA SAGAR	0	TUNGABHADRA	9	MALAMPUZHA	29
BHIMA(UJJANI)	0	SALANADI	11	PONG DAM	30
JAYAKWADI(PAITHON)	0	KOYANA	12	KARJAN	32
GIRNA	0	LOWER BHAWANI	14	MAITHON	33
YELDARI	0	NARAYANPUR	20	MATATILA	34
KABINI	0	RAMGANGA	21	METTUR(STANLEY)	36
SHOLAYAR	0	MALAPRABHA(RENUKA)	23	UKAI	36
DUDHGANGA	0	PERIYAR	24	SRISAILAM	39
UPPER TAPI	0	VAIGAI	25	TEHRI	40
PANCHET HILL	8	BHADRA	27	BARNA	41
BHANDARDARA	9	PARAMBIKULAM	28	PANAM	41
ISAPUR	9	TAWA	28	KADANA	43
				BHADAR	43
				PENCH (TOTALADOH)	44
				LOWER MANAIR	45
				JHAKAM	47
				HARANGI	47
				VANIVILAS SAGAR	50

9 reservoirs having storage 51% to 80% of normal storage.		
51% to 60%	61% to 70%	71% to 80%
1	5	3

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

23 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 OF 91 IMPORTANT RESERVOIRS OF INDIA

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

WEEK ENDING :- 02.06.2016

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	478.35	6.229	1.765	02-06-16	28	43	25	676	1200
*2	PONG DAM	423.67	391.06	6.157	0.476	01-06-16	8	37	26	-	360
<u>PUNJAB</u>											
*3	THEIN	527.91	504.47	2.344	0.842	02-06-16	36	79	49	348	600
<u>RAJASTHAN</u>											
*4	MAHI BAJAJ SAGAR	280.75	266.03	1.711	0.341	30-05-16	20	30	22	63	140
5	JHAKAM	359.50	337.50	0.132	0.009	30-05-16	7	18	14	28	-
*6	RANA PRATAP SAGAR	352.81	347.68	1.436	0.515	26-05-16	36	21	39	229	172
<u>EASTERN REGION</u>											
<u>JHARKHAND</u>											
7	TENUGHAT	269.14	255.38	0.821	0.265	26-05-16	32	40	30	-	-
8	MAITHON	146.3	135.37	0.471	0.042	26-05-16	9	17	27	342	-
*9	PANCHET HILL	124.97	119.72	0.184	0.005	26-05-16	3	39	33	\$	80
10	KONAR	425.81	416.91	0.176	0.047	26-05-16	27	41	30	\$	-
11	TILAIYA	368.81	364.46	0.142	0.019	26-05-16	13	28	21	\$	4
<u>ODISHA</u>											
*12	HIRAKUD	192.02	183.63	5.378	0.917	01-06-16	17	20	17	153	307
*13	BALIMELA	462.08	450.19	2.676	0.968	25-05-16	36	50	17	-	360
14	SALANADI	82.30	52.70	0.558	0.017	01-06-16	3	38	25	42	-
*15	RENGALI	123.50	112.29	3.432	0.448	25-05-16	13	48	15	3	200
*16	MACHKUND(JALPUT)	838.16	828.45	0.893	0.275	25-05-16	31	31	37	-	115
*17	UPPER KOLAB	858.00	848.60	0.935	0.208	25-05-16	22	43	19	89	320
*18	UPPER INDRAVATI	642.00	630.62	1.456	0.486	02-06-16	33	34	15	128	600
<u>WEST BENGAL</u>											
19	MAYURAKSHI	121.31	109.58	0.480	0.073	26-05-16	15	15	17	227	-
20	KANGSABATI	134.14	122.71	0.914	0.180	26-05-16	20	21	11	341	-
<u>TRIPURA</u>											
21	GUMTI	93.55	89.45	0.312	0.141	25-05-16	45	5	9	-	15
<u>WESTERN REGION</u>											
<u>GUJARAT</u>											
*22	UKAI	105.16	87.11	6.615	0.592	02-06-16	9	18	25	348	300
23	SABARMATI(DHAROI)	189.59	181.79	0.735	0.163	30-05-16	22	12	21	95	1
*24	KADANA	127.7	115.80	1.472	0.296	29-05-16	20	57	47	200	120
25	SHETRUNJI	55.53	49.02	0.300	0.036	30-05-16	12	10	7	36	-
26	BHADAR	107.89	100.67	0.188	0.013	30-05-16	7	13	16	27	-
27	DAMANAGANGA	79.86	67.05	0.502	0.067	02-06-16	13	13	25	51	1
28	DANTIWADA	184.1	164.09	0.399	0.009	30-05-16	2	3	1	45	-
29	PANAM	127.41	117.65	0.697	0.112	30-05-16	16	45	39	36	2
*30	SARDAR SAROVAR	121.92	120.05	1.566	1.227	02-06-16	78	58	35	2120	1450
31	KARJAN	115.25	91.29	0.523	0.070	02-06-16	13	28	42	51	3

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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
MAHARASHTRA											
32	JAYAKWADI(PAITHON)	463.91	453.81	2.171	0.000	02-06-16	0	3	15	227	-
*33	KOYANA	657.90	621.84	2.652	0.106	01-06-16	4	25	28	-	1920
34	BHIMA(UJJANI)	496.83	486.02	1.517	0.000	01-06-16	0	0	5	125	12
35	ISAPUR	441.00	426.28	0.965	0.022	01-06-16	2	15	25	104	-
36	MULA	552.30	535.97	0.609	0.036	01-06-16	6	7	8	139	-
37	YELDARI	461.77	446.77	0.809	0.000	01-06-16	0	5	11	78	-
38	GIRNA	398.07	379.40	0.524	0.000	01-06-16	0	8	13	79	-
39	KHADAKVASLA	582.47	579.85	0.056	0.024	01-06-16	43	73	29	78	8
*40	UPPER VAITARNA	603.50	595.20	0.331	0.097	01-06-16	29	21	31	-	61
41	UPPER TAPI	214.00	206.98	0.255	0.000	01-06-16	0	60	21	45	-
*42	PENCH (TOTALADOH)	490.00	470.49	1.091	0.106	01-06-16	10	18	22	127	160
43	UPPER WARDHA	342.50	335.74	0.564	0.119	02-06-16	21	30	32	70	-
44	BHATSA	142.07	110.53	0.942	0.299	01-06-16	32	30	33	29.378	15
45	DHOM	747.70	729.05	0.331	0.081	25-05-16	24	35	27	36.2	2
46	DUDHGANGA	646.00	605.22	0.664	0.000	01-06-16	0	25	23	2.441	24
47	MANIKDOH (KUKADI)	711.25	682.08	0.288	0.018	01-06-16	6	8	4	2.2	6
48	BHANDARDARA	342.50	335.74	0.304	0.004	02-06-16	21	30	32	70	-
CENTRAL REGION											
UTTAR PRADESH											
49	MATATILA	308.46	301.26	0.707	0.070	01-06-16	10	57	29	-	30
*50	RIHAND	268.22	256.46	5.649	0.980	26-05-16	17	16	11	-	300
UTTRAKHAND											
*51	RAMGANGA	365.30	322.99	2.196	0.140	02-06-16	6	60	28	1897	198
*52	TEHRI	830.00	742.70	2.615	0.042	30-05-16	2	9	4	2351	1000
MADHYA PRADESH											
*53	GANDHI SAGAR	399.90	392.24	6.827	2.753	25-05-16	40	40	17	220	115
54	TAWA	355.40	337.08	1.944	0.119	02-06-16	6	29	21	247	-
*55	BARGI	422.76	412.20	3.180	0.948	02-06-16	30	19	14	157	90
*56	BANSAGAR	341.64	332.82	5.166	1.873	25-05-16	36	61	22	488	425
*57	INDIRA SAGAR	262.13	247.66	9.745	1.273	02-06-16	13	15	9	2380	1000
58	BARNA	348.55	339.21	0.456	0.026	25-05-16	6	23	14	546	-
CHHATTIS GARH											
*59	MINIMATA BANGOI	359.66	345.82	3.046	0.938	02-06-16	31	71	45	-	120
60	MAHANADI	348.70	340.78	0.767	0.191	24-05-16	25	10	30	319	10
SOUTHERN REGION											
A.P & TG											
*61	SRISAILAM	269.75	236.38	8.288	0.433	02-06-16	5	30	13	0	770
*62	NAGARJUNA SAGAR	179.83	154.41	6.841	0.000	02-06-16	0	3	25	895	810
ANDHRA PRADESH											
63	SOMASILA	100.58	88.84	1.994	0.608	02-06-16	30	15	31	168	0
TELANGANA											
64	SRIRAMSAGAR	332.54	319.03	2.300	0.132	02-06-16	6	14	9	411	27
65	LOWER MANAIR	280.42	267.34	0.621	0.070	02-06-16	11	20	25	199	60

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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	738.00	1.163	0.148	01-06-16	13	12	10	79	-
*67	TUNGABHADRA	497.74	478.62	3.276	0.034	02-06-16	1	49	9	529	72
68	GHATAPRABHA	662.95	631.60	1.391	0.033	01-06-16	2	5	3	317	-
69	BHADRA	657.76	635.49	1.785	0.117	01-06-16	7	26	23	106	39
70	LINGANAMAKKI	554.43	536.71	4.294	0.810	25-05-16	19	16	17	-	55
71	NARAYANPUR	492.25	484.15	0.863	0.063	02-06-16	7	22	35	425	-
72	MALAPRABHA(RENUKA)	633.83	619.96	0.972	0.014	01-06-16	1	7	6	215	-
73	KABINI(Sancherla Tank)	696.16	683.58	0.444	0.000	01-06-16	0	39	9	85	-
74	HEMAVATHY	890.63	872.66	0.927	0.092	01-06-16	10	16	8	265	-
75	HARANGI	871.42	852.26	0.220	0.018	01-06-16	8	14	17	53	-
76	SUPA	564.00	525.90	4.120	0.866	29-05-16	21	35	24	-	-
77	VANIVILAS SAGAR	652.28	634.57	0.802	0.050	02-06-16	6	6	13	123	-
*78	ALMATTI	519.60	515.32	3.105	0.350	02-06-16	11	6	8	@	290
*79	GERUSOPPA	55.00	51.23	0.130	0.108	02-06-16	83	81	84	83	240
<u>KERALA</u>											
80	KALLADA(PARAPPAR)	115.82	100.88	0.507	0.202	02-06-16	40	24	21	62	-
*81	IDAMALAYAR	169.00	131.64	1.018	0.171	02-06-16	17	20	17	33	75
*82	IDUKKI	732.43	705.60	1.460	0.287	02-06-16	20	33	18	-	780
*83	KAKKI	981.46	952.99	0.447	0.129	02-06-16	29	22	22	23	300
*84	PERIYAR	867.41	859.28	0.173	0.014	02-06-16	8	15	33	84	140
85	MALAPMUZHA	867.41	859.28	0.224	0.015	02-06-16	8	15	33	84	140
<u>TAMIL NADU</u>											
86	LOWER BHAWANI	278.89	259.71	0.792	0.057	02-06-16	7	30	36	105	8
*87	METTUR(STANLEY)	240.79	218.13	2.647	0.430	02-06-16	16	37	45	122	360
88	VAIGAI	279.20	267.11	0.172	0.012	02-06-16	7	24	26	61	6
89	PARAMBIKULAM	556.26	536.92	0.380	0.033	02-06-16	9	16	31	101	-
90	ALIYAR	320.04	309.89	0.095	0.036	02-06-16	38	81	47	#	60
*91	SHOLAYAR	1002.79	959.42	0.143	0.000	02-06-16	0	11	8	-	95
TOTAL FOR 91 RESERVOIRS				157.799	26.222						
PERCENTAGE							17	28	20		

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.

SI. No. 30th 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