

BRIEF NOTE ON STORAGE STATUS OF 91 RESERVOIRS IN THE COUNTRY (WITH REFERENCE TO RESERVOIR STORAGE BULLETIN OF 03.03.2016)

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 **03.03.2016**, live storage available in these reservoirs is **48.311 BCM**, which is **31%** of total live storage capacity of these reservoirs. This storage is **72%** of the storage of corresponding period of last year and **75%** 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 **03.03.2016**, the total live storage available in these reservoirs is **5.33 BCM** which is **30%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **31%** and average storage of last ten years during corresponding period was **36%** 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 **03.03.2016**, the total live storage available in these reservoirs is **8.63 BCM** which is **46%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **57%** and average storage of last ten years during corresponding period was **51%** 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.

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 **03.03.2016**, the total live storage available in these reservoirs is **7.35 BCM** which is **27%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **46%** and average storage of last ten years during corresponding period was **51%** 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 **03.03.2016**, the total live storage available in these reservoirs is **15.91 BCM**

which is **38%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **48%** and average storage of last ten years during corresponding period was **36%** 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 (2 combined 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 **03.03.2016**, the total live storage available in these reservoirs is **11.10 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 **38%** 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

- 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 **03.03.2016** is **48.311** BCM (**31** percent of the live storage capacity at FRL). The current year's storage is nearly **72** percent of last year's storage and **75** 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.)	-	-	-	-	-	-	1	5	H.P.	-18 %
									PUNJAB	-33 %
									RAJASTHAN	-9 %
EAST (Jharkhand, Odisha, Tripura & W. Bengal (15 Resv.)	-	-	-	-	-	5	3	7	JHARKHAND	-36 %
									ODISHA	-8 %
									W. BENGAL	-24 %
									TRIPURA	312 %
WEST (Guj. & Mah.), (27 Resv.)	-	-	-	-	-	1	3	23	GUJARAT	-38 %
									MAH.	-57 %
CENTRAL (MP, UP, Uttarakhand & Chh.), (12 Resv)	-	-	-	-	-	2	3	7	U.P.	-17 %
									UTTARAKHAND	-40 %
									M.P.	30 %
									CHHATISGARH	-30 %
SOUTH (Karnataka, TN, AP&TG, AP, TG, & Kerala), (31 Resv.)	-	1	1	-	-	2	2	25	AP&TG	-79 %
									A,P	4 %
									TG	-74 %
									KARNATAKA	-35 %
									KERALA	-4 %
									T.N.	-39 %
Status of 91 reservoirs	0	1	1	0	0	10	12	67		

4 Basin wise storage position:

Better than normal: Ganga, Narmada, Sabarmati and Rivers of Kutch.

Close to normal: Indus, Mahanadi & Neighbouring EFRS and West Flowing rivers of south.

Deficient: Tapi, Mahi, Godavari and Cauvery & neighbouring EFRS

Highly deficient: Krishna.

- 5 Out of 91 reservoirs, **33** reservoirs reported more than 80% of normal storage & **58** reservoirs reported 80% or below of normal storage. Out of these **58** reservoirs **27** having storage upto 50% of normal storage.

Name of reservoir	%	Name of reservoir	%	Name of reservoir	%
NAGARJUNA SAGAR	0	SARDAR SAROVAR	32	HARANGI	44
BHIMA(UJJANI)	0	MALAPRABHA(RENUKA)	33	ISAPUR	45
JAYAKWADI(PAITHON)	6	MULA	33	KARJAN	46
GIRNA	6	SRISAILAM	33	ALIYAR	47
SALANADI	13	TUNGABHADRA	34	DUDHGANGA	47
YELDARI	20	BHANDARDARA	37	BARNA	47
PANCHET HILL	23	MATATILA	40	VAIGAI	50
SRIRAMSAGAR	25	NARAYANPUR	40		
LOWER MANAIR	28	MAITHON	41		
MANIKDOH	29	PANAM	44		

31 reservoirs having storage 51% to 80% of normal storage.		
51% to 60%	61% to 70%	71% to 80%
14	9	8

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

28 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 :- 03.03.2016

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	10.083	35.89%	12.817	45.62%	9.849	35.05%	2.38
INDUS	14.730	4.222	28.66%	4.351	29.54%	5.261	35.72%	-19.75
NARMADA	17.414	6.260	35.95%	7.710	44.27%	6.194	35.57%	1.07
TAPI	7.394	2.588	35.00%	3.470	46.93%	3.901	52.76%	-33.66
MAHI	4.012	1.293	32.23%	2.179	54.31%	1.948	48.55%	-33.62
SABARMATI	0.735	0.270	36.73%	0.160	21.77%	0.258	35.10%	4.65
RIVERS OF KUTCH	0.887	0.254	28.64%	0.118	13.30%	0.229	25.82%	10.92
GODAVARI	15.394	4.142	26.91%	6.444	41.86%	6.520	42.35%	-36.47
KRISHNA	32.831	4.379	13.34%	10.095	30.75%	12.106	36.87%	-63.83
MAHANADI & NEIGHBOURING EFRS	13.181	6.065	46.01%	8.446	64.08%	7.437	56.42%	-18.45
CAUVERY & NEIGHBOURING EFRS	8.359	2.662	31.85%	3.024	36.18%	3.585	42.89%	-25.75
WEST FLOWING RIVERS OF SOUTH	14.766	6.093	41.26%	7.862	53.24%	7.479	50.65%	-18.53
TOTAL	157.799	48.311		66.676		64.767		
PERCENTAGE								-25.41

WEEK ENDING :- 03.03.2016

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	486.68	6.229	2.544	03-03-2016	41	34	39	676	1200
*2	PONG DAM	423.67	398.18	6.157	1.209	03-03-2016	20	24	35	-	360
<u>PUNJAB</u>											
*3	THEIN	527.91	496.10	2.344	0.469	03-03-2016	20	33	30	348	600
<u>RAJASTHAN</u>											
*4	MAHI BAJAJ SAGAR	280.75	270.60	1.711	0.648	02-03-2016	38	49	38	63	140
5	JHAKAM	359.50	340.30	0.132	0.015	02-03-2016	11	23	21	28	-
*6	RANA PRATAP SAGAR	352.81	347.03	1.436	0.443	03-03-2016	31	25	37	229	172
<u>EASTERN REGION</u>											
<u>JHARKHAND</u>											
7	TENUGHAT	269.14	257.28	0.821	0.320	03-03-2016	39	45	39	-	-
8	MAITHON	146.3	139.33	0.471	0.136	03-03-2016	29	48	70	342	-
*9	PANCHET HILL	124.97	120.83	0.184	0.031	03-03-2016	17	36	73	\$	80
10	KONAR	425.81	420.59	0.176	0.091	03-03-2016	52	73	60	\$	-
11	TILAIYA	368.81	365.23	0.142	0.034	03-03-2016	24	77	44	\$	4
<u>ODISHA</u>											
*12	HIRAKUD	192.02	188.78	5.378	2.912	03-03-2016	54	52	58	153	307
*13	BALIMELA	462.08	453.21	2.676	1.331	03-03-2016	50	71	47	-	360
14	SALANADI	82.30	55.10	0.558	0.027	03-03-2016	5	44	37	42	-
*15	RENGALI	123.50	117.40	3.432	1.536	03-03-2016	45	71	54	3	200
*16	MACHKUND(JALPUT)	838.16	833.51	0.893	0.535	03-03-2016	60	61	63	-	115
*17	UPPER KOLAB	858.00	853.45	0.935	0.535	03-03-2016	57	68	47	89	320
*18	UPPER INDRAVATI	642.00	633.81	1.456	0.648	03-03-2016	45	70	53	128	600
<u>WEST BENGAL</u>											
19	MAYURAKSHI	121.31	110.52	0.480	0.090	03-03-2016	19	18	35	227	-
20	KANGSABATI	134.14	123.92	0.914	0.225	03-03-2016	25	26	27	341	-
<u>TRIPURA</u>											
21	GUMTI	93.55	90.45	0.312	0.177	02-03-2016	57	0	14	-	15
<u>WESTERN REGION</u>											
<u>GUJARAT</u>											
*22	UKAI	105.16	96.01	6.615	2.466	03-03-2016	37	47	54	348	300
23	SABARMATI(DHAROI)	189.59	183.87	0.735	0.270	02-03-2016	37	22	35	95	1
*24	KADANA	127.7	118.80	1.472	0.455	02-03-2016	31	64	59	200	120
25	SHETRANJI	55.53	52.37	0.300	0.115	02-03-2016	38	18	44	36	-
26	BHADAR	107.89	102.63	0.188	0.036	03-03-2016	19	26	30	27	-
27	DAMANAGANGA	79.86	74.25	0.502	0.251	03-03-2016	50	50	64	51	1
28	DANTIWADA	184.1	173.77	0.399	0.103	02-03-2016	26	4	10	45	-
29	PANAM	127.41	119.65	0.697	0.175	02-03-2016	25	53	57	36	2
*30	SARDAR SAROVAR	121.92	113.47	1.566	0.304	03-03-2016	19	70	61	2120	1450
31	KARJAN	115.25	100.22	0.523	0.175	03-03-2016	33	60	72	51	3

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

WEEK ENDING :- 03.03.2016

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>MAHARASHTRA</u>											
32	JAYAKWADI(PAITHON)	463.91	455.81	2.171	0.045	02-03-2016	2	19	37	227	-
*33	KOYANA	657.90	641.05	2.652	1.026	02-03-2016	39	69	66	-	1920
34	BHIMA(UJJANI)	496.83	488.95	1.517	0.000	02-03-2016	0	39	52	125	12
35	ISAPUR	441.00	430.03	0.965	0.190	02-03-2016	20	37	44	104	-
36	MULA	552.30	538.65	0.609	0.094	02-03-2016	15	33	47	139	-
37	YELDARI	461.77	449.49	0.809	0.049	02-03-2016	6	22	31	78	-
38	GIRNA	398.07	382.38	0.524	0.009	02-03-2016	2	21	28	79	-
39	KHADAKVASLA	582.47	579.73	0.056	0.022	02-03-2016	39	84	45	78	8
*40	UPPER VAITARNA	603.50	596.98	0.331	0.140	02-03-2016	42	63	67	-	61
41	UPPER TAPI	214.00	211.26	0.255	0.113	02-03-2016	44	91	65	45	-
*42	PENCH (TOTALADOH)	490.00	474.77	1.091	0.228	02-03-2016	21	21	36	127	160
43	UPPER WARDHA	342.50	337.08	0.564	0.183	03-03-2016	32	40	46	70	-
44	BHATSA	142.07	121.89	0.942	0.482	02-03-2016	51	58	59	29.378	15
45	DHOM	747.70	733.34	0.331	0.126	02-03-2016	38	67	50	36.2	2
46	DUDHGANGA	646.00	628.00	0.664	0.200	02-03-2016	30	64	64	2.441	24
47	MANIKDOH (KUKADI)	711.25	684.55	0.288	0.025	02-03-2016	9	40	30	2.2	6
48	BHANDARDARA	342.50	337.08	0.304	0.068	03-03-2016	32	40	46	70	-
<u>CENTRAL REGION</u>											
<u>UTTAR PRADESH</u>											
49	MATATILA	308.46	302.09	0.707	0.109	02-03-2016	15	26	38	-	30
*50	RIHAND	268.22	257.77	5.649	1.417	01-03-2016	25	34	28	-	300
<u>UTTRAKHAND</u>											
*51	RAMGANGA	365.30	336.47	2.196	0.574	03-03-2016	26	63	48	1897	198
*52	TEHRI	830.00	770.70	2.615	0.651	03-03-2016	25	39	39	2351	1000
<u>MADHYA PRADESH</u>											
*53	GANDHI SAGAR	399.90	394.30	6.827	3.599	03-03-2016	53	43	29	220	115
54	TAWA	355.40	341.86	1.944	0.379	02-03-2016	19	32	29	247	-
*55	BARGI	422.76	417.45	3.180	1.834	02-03-2016	58	53	46	157	90
*56	BANSAGAR	341.64	333.90	5.166	2.186	03-03-2016	42	73	40	488	425
*57	INDIRA SAGAR	262.13	253.67	9.745	3.517	03-03-2016	36	39	28	2380	1000
58	BARNA	348.55	340.21	0.456	0.051	03-03-2016	11	25	24	546	-
<u>CHHATTIS GARH</u>											
*59	MINIMATA BANGOI	359.66	348.53	3.046	1.276	03-03-2016	42	82	58	-	120
60	MAHANADI	348.70	342.89	0.767	0.314	02-03-2016	41	58	63	319	10
<u>SOUTHERN REGION</u>											
<u>A.P & TG</u>											
*61	SRISAILAM	269.75	250.40	8.288	1.091	03-03-2016	13	30	40	0	770
*62	NAGARJUNA SAGAR	179.83	154.78	6.841	0.000	03-03-2016	0	11	28	895	810
<u>ANDHRA PRADESH</u>											
63	SOMASILA	100.58	93.54	1.994	1.060	03-03-2016	53	27	51	168	0
<u>TELANGANA</u>											
64	SRIRAMSAGAR	332.54	319.52	2.300	0.150	03-03-2016	7	18	26	411	27
65	LOWER MANAIR	280.42	268.19	0.621	0.086	03-03-2016	14	31	50	199	60

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GOVERNMENT OF INDIA CENTRAL WATER COMMISSION

WEEK ENDING :- 03.03.2016

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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	742.86	1.163	0.383	02-03-2016	33	57	46	79	-
*67	TUNGHADRA	497.74	483.85	3.276	0.228	03-03-2016	7	21	20	529	72
68	GHATAPRABHA	662.95	641.20	1.391	0.252	03-03-2016	18	23	18	317	-
69	BHADRA	657.76	645.98	1.785	0.672	03-03-2016	38	66	65	106	39
70	LINGANAMAKKI	554.43	542.48	4.294	1.536	03-03-2016	36	47	49	-	55
71	NARAYANPUR	492.25	487.51	0.863	0.246	03-03-2016	29	62	71	425	-
72	MALAPRABHA(RENUKA)	633.83	621.34	0.972	0.050	03-03-2016	5	15	16	215	-
73	KABINI(Sancherla Tank)	696.16	689.52	0.444	0.123	02-03-2016	28	67	31	85	-
74	HEMAVATHY	890.63	874.06	0.927	0.125	02-03-2016	13	17	25	265	-
75	HARANGI	871.42	851.89	0.220	0.016	27-02-2016	7	8	16	53	-
76	SUPA	564.00	536.70	4.120	1.527	03-03-2016	37	55	48	-	-
77	VANIVILAS SAGAR	652.28	637.08	0.802	0.095	03-03-2016	12	9	16	123	-
*78	ALMATTI	519.60	508.78	3.105	0.346	03-03-2016	11	21	22	@	290
*79	GERUSOPPA	55.00	53.11	0.130	0.119	03-03-2016	92	82	79	83	240
<u>KERALA</u>											
80	KALLADA(PARAPPAR)	115.82	112.68	0.507	0.416	03-03-2016	82	71	61	62	-
*81	IDAMALAYAR	169.00	146.24	1.018	0.433	03-03-2016	43	61	50	33	75
*82	IDUKKI	732.43	715.93	1.460	0.655	03-03-2016	45	60	49	-	780
*83	KAKKI	981.46	969.04	0.447	0.268	03-03-2016	60	66	64	23	300
*84	PERIYAR	867.41	860.50	0.173	0.038	03-03-2016	22	21	25	84	140
85	MALAPMUZHA	867.41	860.50	0.224	0.035	03-03-2016	22	21	25	84	140
<u>TAMIL NADU</u>											
86	LOWER BHAWANI	278.89	266.86	0.792	0.210	03-03-2016	27	35	48	105	8
*87	METTUR(STANLEY)	240.79	222.82	2.647	0.720	03-03-2016	27	40	45	122	360
88	VAIGAI	279.20	269.53	0.172	0.025	03-03-2016	15	10	29	61	6
89	PARAMBIKULAM	556.26	544.38	0.380	0.151	03-03-2016	40	35	55	101	-
90	ALIYAR	320.04	306.71	0.095	0.021	03-03-2016	22	62	47	#	60
*91	SHOLAYAR	1002.79	963.32	0.143	0.021	03-03-2016	15	7	7	-	95
TOTAL FOR 91 RESERVOIRS				157.799	48.311						
PERCENTAGE							31	42	41		

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