BRIEF NOTE ON LIVE STORAGE STATUS OF 91 RESERVOIRS IN THE COUNTRY (WITH REFERENCE TO RESERVOIR STORAGE BULLETIN OF 23.05.2019)

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 161.993 BCM which is about 63% of the live storage capacity of 257.812 BCM which is estimated to have been created in the country. As per reservoir storage bulletin dated 23.05.2019, live storage available in these reservoirs is 33.563 BCM, which is 21% of total live storage capacity of these reservoirs. However, last year the live storage available in these reservoirs for the corresponding period was 29.525 BCM and the average of last 10 years live storage was 32.270 BCM. Thus, the live storage available in 91 reservoirs as per 23.05.2019 Bulletin is 114% of the live storage of corresponding period of last year and 104% of storage of average of last ten years.

The overall storage position is **more than the** corresponding period of last year in the country as a whole and is also **more 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 23.05.2019, the total live storage available in these reservoirs is 7.93 BCM which is 44% of total live storage capacity of these reservoirs. The storage during corresponding period of last year was 15% and average storage of last ten years during corresponding period was 26% 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 under CWC monitoring having total live storage capacity of 18.83 BCM. As per Reservoir Storage Bulletin dated 23.05.2019, the total live storage available in these reservoirs is 4.56 BCM which is 24% of total live storage capacity of these reservoirs. The storage during corresponding period of last year was 28% and average storage of last ten years during corresponding period was 22% of live storage capacity of these reservoirs. Thus, storage during current year is less than the corresponding period of last year but 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 31.26 BCM. As per Reservoir Storage Bulletin dated 23.05.2019, the total live storage available in these reservoirs is 3.75 BCM which is 12% of total live storage capacity of these reservoirs. The storage during corresponding period of last year was 16% 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 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 23.05.2019, the total live storage available in these reservoirs is 10.96 BCM which is 26% of total live storage capacity of these reservoirs. The storage during corresponding period of last year was 24% and average storage of last ten years during corresponding period was 22% of live storage capacity of these reservoirs. Thus, storage during current year is better than the storage of last year and is also 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 23.05.2019, the total live storage available in these reservoirs is 6.38 BCM which is 12% 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 15% of live storage capacity of these reservoirs. Thus, storage during current year is equal to 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 4, better than normal storage is available in Ganga, Indus, Narmada and West Flowing Rivers of South Close to Normal in Mahi, and Mahanadi & Neighbouring East Flowing Rivers. Deficient in Sabarmati, Rivers of Kutch, Godavari, Krishna and Cauvery & neighbouring EFRs and Highly Deficient in Tapi.
- Table on page 5-7 of the bulletin. The numbers of reservoirs having storage more than last year are **30** and reservoirs having storage more than average of last ten years are **32**. The numbers of reservoirs having storage less than 20% with respect to last year is **9** and having storage less than 20% with reference to average of last ten years is **14**. The number of reservoirs having storage less than or equal to 50% with respect to last year are **21** and having storage less than or equal to 50% with reference to average of last ten years are **26**.

Disclaimer: The Data contained in this Bulletin is as received from the State Government/Project Authorities.

STORAGE STATUS OF IMPORTANT RESERVOIRS IN THE COUNTRY

AS ON 23.05.2019

- 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
 23.05.2019 is 33.563 BCM (21 percent of the live storage capacity at FRL). The current year's storage is nearly 114 percent of last year's storage and 104 percent of the average of last ten years.

3 Region wise storage status:-

DECION (2: 1)		Filling	positio									
REGION (States), (Monitoring No. of Reservoirs)	100%	91%- 99%	81%- 90%	71%- 80%	61%- 70%	51%- 60%	41%- 50%	40% & below	Departure fr stor			
NORTH (HP,Punjab & Rajasthan), (6 Resv.)	-	-	-	1	-	-	2	3	H.P. PUNJAB RAJASTHAN	92 % 76 % -8 %		
EAST (Jharkhand,Odisha, Tripura & W.Bengal (15 Resv.)	-	-	-	-	-	1	-	14	JHARKHAND ODISHA W. BENGAL TRIPURA	-2 % 8 % 39 % 40 %		
WEST (Guj.& Mah.), (27 Resv.)		-	-	-	-	-	-	27	GUJARAT MAH.	-32 % -57 %		
CENTRAL (MP,UP,Uttarakhand & Chh.), (12 Resv)	-	-	-	-	1	-	1	10	U.P. UTTARAKHAND M.P. CHHATISGARH	-23 % 37 % 33 % -8 %		
SOUTH (Karnataka,TN,AP&TG,AP, TG, & Kerala), (31 Resv.)	-	-	-	1	-	-	1	29	AP&TG A,P TG KARNATAKA KERALA T.N.	-47 % -85 % -13 % 9 % -1 % -31 %		
Status of 91 reservoirs	0	0	0	2	1	1	4	83		2 : //		

4 Basin wise storage position:

Better than normal: Ganga, Indus, Narmada, and West Flowing Rivers of South.

Close to normal: Mahi and Mahanadi & Neighbouring East Flowing Rivers .

Deficient: Sabarmati, ,Rivers of Kutch, Godavari ,Krishna and Cauvery & neighbouring EFRs .

Highly deficient: Tapi

5 Out of 91 reservoirs, 46 reservoirs reported more than 80% of normal storage & 45 reservoirs reported 80% or below of normal storage. Out of these 45 reservoirs 26 having storage upto 50% of normal

storage.

Name of reservoir	%	Name of reservoir	%
YELDARI	0	DAMANAGANGA	31
BHIMA(UJJANI)	0	TUNGABHADRA	31
JAYAKWADI(PAITHON)	0	BHANDARDARA	32
SHOLAYAR	0	MULA	37
UPPER TAPI	0	TAWA	37
PENCH (TOTALADOH)	0	MANIKDOH	40
GANDHI SAGAR	2	DUDHGANGA	42
NAGARJUNA SAGAR	4	UPPER WARDHA	49
BARNA	4	MATATILA	50
ALIYAR	11		
VANIVILAS SAGAR	11		
SOMASILA	15		
UKAI	18		
BHADAR	20		
TILAIYA	27		
ISAPUR	30		
DHOM	30		

₹.	19 reservors having storage 51% to 80% of normal storage. 51% 61% 71% to to to 60% 70% 80% 0 6 13								
	19 reservors having storage 51% to 80% of normal storage. 51% 61% 71%								
	having storage 51% to 80% of normal storage. 51% 61% 71% to to to								
	19 reservors having storage 51% to 80% of normal storage. 51% 61% 71% to to to 60% 70% 80%								
	19 reservors having storage 51% to 80% of normal storage. 51% 61% 71% to to to 60% 70% 80%								
	51%	61%	71%						
	to	to	to						
	60%	70%	80%						
	0	6	13						

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

WEEKLY REPORT - BASINWISE

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

WEEK ENDING :- 23.05.2019

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	6.646 23.65%	6.470 23.03%	6.165 21.94%	7.80
INDUS	14.730	7.123 48.36%	1.655 11.24%	3.792 25.74%	87.84
NARMADA	21.608	5.416 25.06%	4.007 18.54%	3.585 16.59%	51.07
TAPI	7.394	0.348 4.71%	0.963 13.02%	1.739 23.52%	-79.99
MAHI	4.012	1.282 31.95%	1.488 37.09%	1.417 35.32%	-9.53
SABARMATI	0.735	0.074 10.07%	0.109 14.83%	0.121 16.46%	-38.84
RIVERS OF KUTCH	0.887	0.051 5.75%	0.141 15.90%	0.073 8.23%	-30.14
GODAVARI	15.394	2.039 13.25%	2.420 15.72%	2.754 17.89%	-25.96
KRISHNA	32.831	2.488 7.58%	2.810 8.56%	3.929 11.97%	-36.68
MAHANADI & NEIGHBOURING EFRS	13.181	3.556 26.98%	4.671 35.44%	3.600 27.31%	-1.22
CAUVERY& NEIGHBOURING EFRS	8.359	1.157 13.84%	0.956 11.44%	1.781 21.31%	-35.04
WEST FLOWING RIVERS OF SOUTH	14.766	3.383 22.91%	3.835 25.97%	3.314 22.44%	2.08
TOTAL	161.993	33.563	29.525	32.270	
PERCENTAGE					4.01

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

	GOVERNMENT OF INDIA			WEE	K ENDING :-	23.05.2019			VATER CON		
			CURRENT	LIVE			STORAGE AS	S % OF LIVE C FRL	APACITY AT	BENE	FITS
S. NO	NAME OF RESERVOIR	FRL (m)	CURRENT RESERVOIR LEVEL (m)	LIVE CAPACITY AT FRL (BCM)	CURRENT LIVE STORAGE (BCM)	DATE	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
	NORTHERN REGION										
	HIMACHAL PRADESH										
*1	GOBIND SAGAR(BHAKRA)	512.06	492.25	6.229	2.881	23-05-2019	46	7	22	676	1200
*2	PONG DAM PUNJAB	423.67	407.81	6.157	2.521	23-05-2019	41	10	23	-	360
*3	THEIN	527.91	519.79	2.344	1.721	23-05-2019	73	25	42	348	600
	RAJASTHAN										
*4	MAHI BAJAJ SAGAR	280.75	268.05	1.711	0.453	21-05-2019	26	33	24	63	140
5	JHAKAM	359.50	345.20	0.132	0.031	21-05-2019	23	30	19	28	-
*6	RANA PRATAP SAGAR	352.81	346.16	1.436	0.318	23-05-2019	22	33	30	229	172
	EASTERN REGION										
	<u>JHARKHAND</u>										
7	TENUGHAT	269.14	256.93	0.821	0.308	22-05-2019	38	39	33	-	-
8	MAITHON	146.3	137.97	0.471	0.096	22-05-2019	20	30	25	342	-
*9	PANCHET HILL	124.97	122.30	0.184	0.071	22-05-2019	39	21	37	\$	80
10	KONAR	425.81	417.39	0.176	0.052	22-05-2019	30	21	36	\$	-
11	TILAIYA	368.81	363.73	0.142	0.006	22-05-2019	4	7	15	\$	4
	<u>ODISHA</u>										
*12	HIRAKUD	192.02	184.66	5.378	1.231	22-05-2019	23	28	22	153	307
*13	BALIMELA	462.08	448.30	2.676	0.779	22-05-2019	29	9	21	-	360
14	SALANADI	82.30	73.83	0.558	0.305	21-05-2019	55	41	25	42	-
*15	RENGALI	123.50	112.33	3.432	0.437	22-05-2019	13	34	17	3	200
*16	MACHKUND(JALPUT)	838.16	829.39	0.893	0.316	22-05-2019	35	28	34	-	115
*17	UPPER KOLAB	858.00	848.24	0.935	0.191	22-05-2019	20	21	20	89	320
*18	UPPER INDRAVATI	642.00	629.18	1.456	0.280	22-05-2019	19	22	23	128	600
	WEST BENGAL										
	MAYURAKSHI	121.31	109.88	0.480	0.078	22-05-2019	16	35	20	227	-
20	KANGSABATI	134.14	125.71	0.914	0.305	22-05-2019	33	46	20	341	-
	TRIPURA										
21	GUMTI WESTERN REGION	93.55	88.30	0.312	0.101	21-05-2019	32	73	23	-	15
		ı									
*22	GUJARAT UKAI	105.16	94.02	6 615	0.298	22.05.2010	5	12	24	240	300
	SABARMATI(DHAROI)	105.16 189.59	84.93 179.33			23-05-2019 21-05-2019	5 10	13 15	24 16	348 95	300
	KADANA	127.7	120.37			21-05-2019	38	44			120
	SHETRUNJI	55.53	48.12			21-05-2019	8	14		36	-
	BHADAR	107.89	99.52			20-05-2019	3	16			
	DAMANAGANGA	79.86	65.00			23-05-2019	7	24	23		1
	DANTIWADA	184.1	167.04		0.021	21-05-2019	5	17			
	PANAM	127.41	121.75			21-05-2019	35	36	38		
	SARDAR SAROVAR	138.68	119.63			23-05-2019	20	0		2120	1450
	KARJAN	115.25	100.48				36	42	36	51	3
	-						30		30		,

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

	GOVERNMENT OF INDIA			WEE	K ENDING :-	22.05.2040		CENTRAL V	VATER COM	MISSIO	N
					R ENDING	23.05.2019	STORAGE A	S % OF LIVE C	APACITY AT	BENE	FITS
S. NO	NAME OF RESERVOIR	FRL (m)	CURRENT RESERVOIR LEVEL (m)	LIVE CAPACITY AT FRL (BCM)	CURRENT LIVE STORAGE (BCM)	DATE	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	454.55	2.171	0.000	23-05-2019	0	30	11	227	-
*33	KOYANA	657.90	626.77	2.652	0.434	23-05-2019	16	29	26	-	1920
34	BHIMA(UJJANI)	496.83	487.00	1.517	0.000	20-05-2019	0	5	5	125	12
35	ISAPUR	441.00	427.40	0.965	0.054	23-05-2019	6	0	19	104	-
36	MULA	552.30	535.48	0.609	0.027	23-05-2019	4	15	12	139	-
37	YELDARI	461.77	445.61	0.809	0.000	23-05-2019	0	0	9	78	-
38	GIRNA	398.07	384.45	0.524	0.050	23-05-2019	10	16	13	79	-
39	KHADAKVASLA	582.47	579.15	0.056	0.017	23-05-2019	30	27	38	78	8
*40	UPPER VAITARNA	603.50	593.69	0.331	0.070	23-05-2019	21	27	33	-	61
41	UPPER TAPI	214.00	207.50	0.255	0.000	23-05-2019	0	4	23	45	-
*42	PENCH (TOTALADOH)	490.00	463.26	1.091	0.000	23-05-2019	0	9	21	127	160
43	UPPER WARDHA	342.50	334.98	0.564	0.087	23-05-2019	15	36	32	70	-
44	BHATSA	142.07	109.99	0.942	0.292	23-05-2019	31	37	36	29.378	15
45	DHOM	747.70	728.49	0.331	0.024	23-05-2019	7	21	24	36.2	2
46	DUDHGANGA	646.00	617.89	0.664	0.063	23-05-2019	9	26	22	2.441	24
47	MANIKDOH (KUKADI)	711.25	684.08	0.288	0.004	23-05-2019	1	9	3	2.2	6
48	BHANDARDARA CENTRAL REGION	744.91	709.09	0.304	0.017	23-05-2019	6	28	17	63.74	46
	UTTAR PRADESH	ı									
40	MATATILA	308.46	302.00	0.707	0.104	22-05-2019	15	11	29	_	30
	RIHAND	268.22	255.67	5.649	0.749	23-05-2019	13	13	16	_	300
00	UTTRAKHAND	200.22	200.01	0.010	0.740	20 00 2010	10	10	10		000
*51	RAMGANGA	365.30	343.94	2.196	0.878	23-05-2019	40	14	28	1897	198
	TEHRI	830.00	747.30	2.615	0.131	22-05-2019	5	3	5	2351	1000
02	MADHYA PRADESH	000.00		2.0.0	001	22 00 20.0	· ·	· ·	· ·	200.	.000
*53	GANDHI SAGAR	399.90	381.22	6.827	0.030	23-05-2019	0	17	20	220	115
	TAWA	355.40	337.51	1.944	0.140	23-05-2019	7	9	19	247	-
	BARGI	422.76	413.80		1.164	23-05-2019	37	48	24	157	90
	BANSAGAR	341.64	337.59		3.419	23-05-2019	66	44	32	488	425
*57	INDIRA SAGAR	262.13	251.98	9.745	2.757	23-05-2019	28	21	15	2380	1000
58	BARNA	348.55	338.15	0.456	0.003	23-05-2019	1	6	16	546	-
	CHHATTIS GARH										
*59	MINIMATA BANGOI	359.66	349.82	3.046	1.428	23-05-2019	47	52	50	-	120
60	MAHANADI	348.70	340.04	0.767	0.155	22-05-2019	20	28	26	319	10
;	SOUTHERN REGION	•									
	A.P & TG										
*61	SRISAILAM	269.75	246.16	8.288	0.836	23-05-2019	10	9	9	0	770
*62	NAGARJUNA SAGAR	179.83	155.66	6.841	0.034	23-05-2019	0	2	13	895	810
	ANDHRA PRADESH										
63	SOMASILA	100.58	78.35	1.994	0.096	23-05-2019	5	18	31	168	0
	<u>TELANGANA</u>										
64	SRIRAMSAGAR	332.54	319.95	2.300	0.173	23-05-2019	8	8	9	411	27
65	LOWER MANAIR	280.42	269.41	0.621	0.115	23-05-2019	19	17	20	199	60

WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

	GOVERNMENT OF INDIA			WEE	K ENDING :-	23.05.2019	CENTRAL WATER COMMISSION					
				QUEDENT	LIVE			STORAGE A	BENEFITS			
S. NO	NAME OF RESERVOIR	FRL (m)	CURRENT RESERVOIR LEVEL (m)	CAPACITY AT FRL (BCM)	CURRENT LIVE STORAGE (BCM)	DATE	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	ЗА	3B	
	KARNATAKA											
66	KRISHNARAJA SAGRA	752.50	739.33	1.163	0.201	22-05-2019	17	6	11	79		
*67	TUNGABHADRA	497.74	480.51	3.276	0.080	23-05-2019	2	2	8	529	7:	
68	GHATAPRABHA	662.95	635.56	1.391	0.102	23-05-2019	7	9	5	317		
69	BHADRA	657.76	639.25	1.785	0.271	23-05-2019	15	5	19	106	3	
70	LINGANAMAKKI	554.43	535.46	4.294	0.691	22-05-2019	16	16	17	-	5	
71	NARAYANPUR	492.25	487.05	0.863	0.211	23-05-2019	24	25	27	425		
72	MALAPRABHA(RENUKA)	633.83	621.02	0.972	0.041	23-05-2019	4	6	6	215		
73	KABINI(Sancherla Tank)	696.16	688.64	0.444	0.091	22-05-2019	20	10	9	85		
74	HEMAVATHY	890.63	873.05	0.927	0.100	22-05-2019	11	9	8	265		
75	HARANGI	871.42	855.18	0.220	0.032	22-05-2019	15	4	14	53		
76	SUPA	564.00	533.68	4.120	1.323	22-05-2019	32	34	23	-		
77	VANIVILAS SAGAR	652.28	631.80	0.802	0.010	23-05-2019	1	1	11	123		
*78	ALMATTI	519.60	508.91	3.105	0.361	23-05-2019	12	9	7	@	29	
*79	GERUSOPPA	55.00	48.69	0.130	0.095	23-05-2019	73	87	86	83	24	
	KERALA											
80	KALLADA(PARAPPAR)	115.82	101.30	0.507	0.207	23-05-2019	41	63	27	62		
*81	IDAMALAYAR	169.00	128.61	1.018	0.128	23-05-2019	13	17	17	33	7	
*82	IDUKKI	732.43	707.33	1.460	0.340	23-05-2019	23	26	22	-	78	
*83	KAKKI	981.46	944.58	0.447	0.083	23-05-2019	19	30	24	23	30	
*84	PERIYAR	867.41	859.74	0.173	0.021	23-05-2019	12	16	20	84	14	
85	MALAPMUZHA	115.06	101.61	0.224	0.025	23-05-2019	11	15	18	21		
	TAMIL NADU											
86	LOWER BHAWANI	278.89	264.63	0.792	0.149	23-05-2019	19	16	18	105		
*87	METTUR(STANLEY)	240.79	218.84	2.647	0.469	23-05-2019	18	9	28	122	36	
88	VAIGAI	279.20	268.59	0.172	0.019	23-05-2019	11	12	15	61		
89	PARAMBIKULAM	556.26	539.28	0.380	0.068	23-05-2019	18	6	24	101		
90	ALIYAR	320.04	302.10	0.095	0.004	23-05-2019	4	1	40	#	6	
*91	SHOLAYAR	1002.79	960.13	0.143	0.000	23-05-2019	0	0	5	-	9	
	TOTAL FOR 91 RESERVOIRS			161.993	33.563							
	PERCENTAGE						21	18	20			

Sd/-

\$ TOTAL CCA 342 TH. HA OF DVC SYSTEM

Director W. M. , CWC

 $^{^{\}star}$ HYDEL POWER CAPACITY HAVING CAPACITY MORE THAN 60MW

[#] TOTAL CCA 101 TH. HA OF PARAMBIKULAM & ALIYAR

^{@&#}x27;TOTAL CCA 425 TH. HA. OF NARAYANPUR AND ALMATTI

[†] SABARMATI RESERVOIR IS SUPPLEMENTED WITH NARMADA WATER THROUGH PIPELINE.