

GOVERNMENT OF INDIA
MINISTRY OF JAL SHAKTI

DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION
LOK SABHA

STARRED QUESTION NO. *63

ANSWERED ON 07.12.2023

LIVE STORAGE STATUS OF RESERVOIRS

†*63 SHRIMATI HEMA MALINI DR. VISHNU PRASAD M.K.

Will the Minister of JAL SHAKTI be pleased to state:

- (a) whether the Central Water Commission (CWC) monitors the live storage status of 146 reservoirs in the country on a weekly basis;
- (b) if so, the details thereof and the total live storage capacity of the said reservoirs as on date, region-wise;
- (c) whether the overall live storage position is down by six percent as compared to corresponding period of last year in the country;
- (d) if so, the details thereof and the corrective measures taken/being taken by the Government to improve/increase the storage capacity of these reservoirs;
- (e) whether water tables of forty reservoirs in southern region have remained eighteen per cent below the last year's level due to deficient rainfall whereas reservoirs in northern region have improved significantly due to surplus rain; and
- (f) if so, the details thereof and the steps taken by the Government to tackle the problem in southern region?

ANSWER

THE MINISTER OF JAL SHAKTI

(SHRI GAJENDRA SINGH SHEKHAWAT)

(a) to (f) : A statement is laid on the Table of the House.

STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (f) OF STARRED QUESTION NO. *63 TO BE ANSWERED ON 07.12.2023 IN LOK SABHA REGARDING “LIVE STORAGE STATUS OF RESERVOIRS”

- (a) Central Water Commission (CWC) monitors live storage status of 150 important reservoirs spread across the country and issues weekly bulletin on every Thursday.
- (b) Region & State wise details of total live storage capacity of 150 important reservoirs as per CWC bulletin dated 30.11.2023 is given as **Annexure-I**.
- (c) & (d) As per CWC bulletin dated 30.11.2023, the live storage available in 150 reservoirs is 78% of the live storage of corresponding period of last year. The details is enclosed as **Annexure-II**. The prime reason for this is attributed to the non-uniform distribution of monsoon rainfall, this year in the country.

Advisories are issued to the States to take necessary corrective measures and judicious use of available water.

The World Bank funded Dam Rehabilitation and Improvement Project (DRIP), Phase-I implemented during 2012-2021, had provision for need based de-siltation of few reservoirs to restore their lost capacity to the extent possible. Currently, DRIP Phase II and III scheme (2021-2031) is being implemented and this scheme has provision similar to DRIP Phase-I for carrying out need based de-siltation of selected reservoirs. The sediment management interventions under the scheme include *inter alia* catchment area treatment, de-siltation of reservoirs etc.

Recently, in this regard the Ministry of Jal Shakti has also formulated a “National Framework for Sediment Management” for managing sediments in a holistic manner.

(e) & (f) As per the CWC bulletin dated 30.11.2023, the live storage of 42 reservoirs in southern region is 52% of last year's storage of the corresponding period. The live storage status of these 42 reservoirs is given as **Annexure-III**. The live storage of 10 reservoirs monitored by CWC in northern region is 88% of last year's storage of corresponding period.

Further, weekly bulletin is shared with the Water Resources Departments of concerned States and also uploaded on the CWC website. This weekly bulletin is also shared with Crop Weather Watch Group (CWWG) of the Ministry of Agriculture and Farmers Welfare. Representatives of CWC attend meetings convened by CWWG to review agricultural activities across the country and to suggest remedial measures to States in case of distress situation. Crop Weather Watch Group on Drought Management (CWWGDM) of Ministry of Agriculture & Farmers Welfare, Government of India holds meeting every week during pre-monsoon season which is attended by representative of CWC to appraise status of reservoir storage in the country to enable CWWGDM to take further necessary action.

Also, whenever the percentage of departure of current storage of all reservoirs under CWC monitoring in a State falls below 80% of normal (average storage of last ten years), advisory is issued to the State Government for judicious use of available water.

ANNEXURE-I

ANNEXURE REFERRED TO IN REPLY TO PART (b) OF LOK SABHA STARRED QUESTION NO. 63 TO BE ANSWERED ON 07.12.2023 REGARDING "LIVE STORAGE STATUS OF RESERVOIRS"

Region & state wise details of total live storage capacity of 150 reservoirs as per CWC bulletin dated 30.11.2023

S.NO	NAME OF RESERVOIR	(STATE)	FRL (MTS.)	LIVE CAP. AT FRL (BCM)	THIS SEASON	
					LEVEL (MTS)	LIVE STORAGE (BCM)
1	SRISAILAM	Andhra Pradesh/Telangana	269.75	6.013	255.64	1.602
2	NAGARJUNA SAGAR	Andhra Pradesh/Telangana	179.83	5.108	159.78	0.719
3	SOMASILA	Andhra Pradesh	100.58	1.994	91.5	0.839
4	YELELU	Andhra Pradesh	86.56	0.508	78.52	0.16
5	KANDALERU	Andhra Pradesh	85	1.792	66.32	0.186
6	DONKARAYI	Andhra Pradesh	316.08	0.376	312.27	0.28
7	UMRONG	Assam	609.6	0.159	604.6	0.075
8	KHANDONG	Assam	725	0.18	720.4	0.113
9	SRIRAMSAGAR	Telangana	332.54	2.3	331.9	2.246
10	LOWER MANAIR	Telangana	280.42	0.621	278.86	0.562
11	NIZAM SAGAR	Telangana	428.24	0.482	427.92	0.46
12	SINGUR	Telangana	523.6	0.822	522.95	0.745
13	PRIYADARSHINI JURALA	Telangana	318.52	0.168	317.46	0.109
14	MUSI PROJECT	Telangana	196.6	0.123	196.46	0.12
15	KADDAM (K.N.R.)	Telangana	213.36	0.137	208.13	0.112
16	CHANDAN DAM	Bihar	152.39	0.136	145.51	0.066
17	TENUGHAT	Jharkhand	269.14	0.821	260.33	0.43
18	MAITHON	Jharkhand	146.3	0.471	147.05	0.471
19	PANCHET HILL	Jharkhand	124.97	0.184	126.38	0.184
20	KONAR	Jharkhand	425.81	0.176	424.89	0.16
21	TILAIYA	Jharkhand	368.81	0.142	367.93	0.113
22	GETALSUD	Jharkhand	590.06	0.218	588.11	0.156
23	UKAI	Gujarat	105.16	6.615	103.71	5.882
24	SABARMATI(DHAROI)	Gujarat	189.59	0.735	188.76	0.66
25	KADANA	Gujarat	127.7	1.472	127.53	1.174
26	SHETRUNJI	Gujarat	55.53	0.3	55	0.3
27	BHADAR	Gujarat	107.89	0.188	107.06	0.151
28	DAMANGANGA	Gujarat	79.86	0.502	79.2	0.447
29	DANTIWADA	Gujarat	184.1	0.399	182.36	0.329
30	PANAM	Gujarat	127.41	0.697	127.1	0.532
31	SARDAR SAROVAR	Gujarat	138.68	5.76	137.51	5.389
32	KARJAN	Gujarat	115.25	0.523	114.54	0.506
33	SUKHI(GUJ)	Gujarat	147.82	0.167	146.9	0.146
34	WATRAK	Gujarat	136.25	0.154	133.56	0.075
35	HATHMATI	Gujarat	180.74	0.153	178.28	0.063
36	MACHCHHU-I	Gujarat	135.33	0.071	134.11	0.047
37	MACHCHHU-II	Gujarat	57.3	0.091	56.16	0.064
38	UND-I	Gujarat	98	0.066	97.3	0.056
39	BRAHMANI(GUJ)	Gujarat	64.62	0.071	61.87	0.025
40	GOBIND SAGAR(BHAKRA)	Himachal Pradesh	512.06	6.229	502.4	4.193
41	PONG DAM(BEAS)	Himachal Pradesh	423.67	6.157	418.28	4.534
42	KOL DAM	Himachal Pradesh	642	0.089	641.18	0.077

43	KRISHNARAJA SAGARA	Karnataka	752.5	1.163	744.18	0.355
44	TUNGABHADRA	Karnataka	497.74	3.276	485.63	0.396
45	GHATAPRABHA(HIDKAL)	Karnataka	662.95	1.391	658.71	1.086
46	BHADRA	Karnataka	657.76	1.785	647.04	0.75
47	LINGANAMAKKI	Karnataka	554.43	4.294	543.9	1.768
48	NARAYANPUR	Karnataka	492.25	0.863	491.25	0.399
49	MALAPRABHA(RENUKA)	Karnataka	633.83	0.972	627.96	0.379
50	KABINI	Karnataka	696.66	0.444	693.04	0.276
51	HEMAVATHY	Karnataka	890.63	0.927	881.57	0.311
52	HARANGI	Karnataka	871.42	0.22	865.07	0.091
53	SUPA	Karnataka	564	4.12	544.33	2.092
54	VANI VILAS SAGAR	Karnataka	652.28	0.802	648.89	0.561
55	ALMATTI	Karnataka	519.6	3.105	515.44	1.406
56	GERUSOPPA	Karnataka	55	0.13	50.46	0.104
57	MANI DAM	Karnataka	594.36	0.884	581	0.311
58	TATTIHALLA	Karnataka	468.3	0.249	451.25	0.008
59	KALLADA(PARAPPAR)	Kerala	115.82	0.507	113.07	0.424
60	IDAMALAYAR	Kerala	169	1.018	158.21	0.711
61	IDUKKI	Kerala	732.43	1.46	720.12	0.829
62	KAKKI	Kerala	981.46	0.447	975.78	0.355
63	PERIYAR	Kerala	867.41	0.173	867.08	0.161
64	MALAMPUZHA	Kerala	115.06	0.224	109.68	0.116
65	GANDHI SAGAR	Madhya Pradesh	399.9	6.827	399.02	6.082
66	TAWA	Madhya Pradesh	355.4	1.944	354.05	1.787
67	BARGI	Madhya Pradesh	422.76	3.18	420.94	2.716
68	BANSAGAR	Madhya Pradesh	341.64	5.166	339.96	4.413
69	INDIRA SAGAR	Madhya Pradesh	262.13	9.745	260.35	7.837
70	BARNA DAM	Madhya Pradesh	348.55	0.456	346.74	0.338
71	OMKARESHWAR	Madhya Pradesh	196.6	0.299	194.56	0.091
72	SANJAY SAROVAR	Madhya Pradesh	519.38	0.508	518.15	0.352
73	RAJGHAT DAM	Madhya Pradesh	370.89	1.945	369.85	1.735
74	KOLAR DAM	Madhya Pradesh	462.2	0.27	458.9	0.202
75	ATAL SAGAR(MADIKHEDA)	Madhya Pradesh	346.25	0.835	335.1	0.309
76	MINIMATA BANGO	Chhattisgarh	359.66	3.046	354.94	2.123
77	MAHANADI	Chhattisgarh	348.7	0.767	343.65	0.36
78	DUDHAWA	Chhattisgarh	425.1	0.284	417.07	0.062
79	TANDULA	Chhattisgarh	332.2	0.312	327.69	0.13
80	JAYAKWADI(PAITHAN)	Maharashtra	463.91	2.171	460.22	0.948
81	KOYANA	Maharashtra	657.9	2.652	654.13	2.245
82	BHIMA(UJJANI)	Maharashtra	496.83	1.517	493.18	0.468
83	ISAPUR	Maharashtra	441	0.965	438.75	0.761
84	MULA	Maharashtra	552.3	0.609	549.62	0.473
85	YELDARI	Maharashtra	461.77	0.809	458.23	0.481
86	GIRNA	Maharashtra	398.07	0.524	392.57	0.277
87	KHADAKVASLA	Maharashtra	582.47	0.056	581.44	0.042
88	UPPER VAITARNA	Maharashtra	603.5	0.331	603.28	0.325
89	UPPER TAPI	Maharashtra	214	0.255	214	0.255
90	PENCH(TOTLADOH)	Maharashtra	490	1.091	487.02	0.799
91	UPPER WARDHA	Maharashtra	342.5	0.564	341.62	0.484
92	BHATSA	Maharashtra	142.07	0.942	136.85	0.805
93	DHOM	Maharashtra	747.7	0.331	744.2	0.254
94	DUDHGANGA	Maharashtra	646	0.664	642.32	0.558
95	MANIKDOH	Maharashtra	711.25	0.288	707.49	0.224
96	BHANDARDARA	Maharashtra	744.91	0.304	738.71	0.202
97	URMODI	Maharashtra	696	0.273	687.38	0.151
98	BHATGHAR	Maharashtra	623.28	0.673	620.8	0.594

99	NIRA DEOGHAR	Maharashtra	667.1	0.332	664.58	0.297
100	THOKARWADI	Maharashtra	667.14	0.353	665.47	0.306
101	KANHER	Maharashtra	690.78	0.272	684.64	0.171
102	MULSHI	Maharashtra	607.1	0.572	604.85	0.473
103	SURYA	Maharashtra	118.6	0.276	118.2	0.271
104	TILLARI	Maharashtra	113.2	0.447	110.3	0.402
105	DIMBHE DAM	Maharashtra	719.15	0.354	718.08	0.336
106	VEER DAM	Maharashtra	579.85	0.266	575.55	0.15
107	BARVI DAM	Maharashtra	72.6	0.339	71.16	0.296
108	CHASKAMAN	Maharashtra	649.53	0.215	648.93	0.204
109	PANSHET(TANAJISAGAR)	Maharashtra	636.27	0.302	635.52	0.291
110	BHAMA ASKHED	Maharashtra	671.5	0.217	669.56	0.188
111	DARNA DAM	Maharashtra	571.5	0.202	569.37	0.145
112	DOYANG HEP	Nagaland	333	0.535	316.25	0.278
113	HIRAKUD	Odisha	192.02	5.378	191.42	4.439
114	BALIMELA	Odisha	462.08	2.676	453.15	1.323
115	SALANADI	Odisha	82.3	0.558	74.2	0.315
116	RENGALI	Odisha	123.5	3.432	122.44	3.081
117	MACHKUND(JALAPUT)	Odisha	838.16	0.893	830.73	0.378
118	UPPER KOLAB	Odisha	858	0.935	855.79	0.726
119	UPPER INDRAVATI	Odisha	642	1.456	636.2	0.863
120	SAPUA	Odisha	168.5	0.006	167.3	0.005
121	HARIHARJHOR	Odisha	147.5	0.059	145.66	0.047
122	MANDIRA DAM	Odisha	210.31	0.309	210.19	0.255
123	THEIN DAM	Punjab	527.91	2.344	513.2	1.318
124	MAHI BAJAJ SAGAR	Rajasthan	280.75	1.711	279.35	1.528
125	JHAKAM	Rajasthan	359.5	0.132	355.4	0.094
126	RANA PRATAP SAGAR	Rajasthan	352.81	1.436	350.43	1.011
127	BISALPUR	Rajasthan	315.5	1.076	313.01	0.636
128	JAWAI DAM	Rajasthan	313.4	0.193	312.04	0.175
129	JAISAMAND	Rajasthan	295.54	0.296	292.94	0.175
130	LOWER BHAWANI	Tamil Nadu	278.89	0.792	273.23	0.466
131	METTUR(STANLEY)	Tamil Nadu	240.79	2.647	224.41	0.837
132	VAIGAI	Tamil Nadu	279.2	0.172	277.25	0.129
133	PARAMBIKULAM	Tamil Nadu	556.26	0.38	549.75	0.248
134	ALIYAR	Tamil Nadu	320.04	0.095	306.13	0.018
135	SHOLAYAR	Tamil Nadu	1002.79	0.143	974.03	0.033
136	SATHANUR	Tamil Nadu	222.2	0.207	221.61	0.195
137	GUMTI	Tripura	93.55	0.312	91.9	0.236
138	MATATILA	Uttar Pradesh	308.46	0.707	304.83	0.287
139	RIHAND	Uttar Pradesh	268.22	5.649	259.2	1.937
140	SHARDA SAGAR	Uttar Pradesh	190.5	0.33	189.51	0.33
141	SIRSI	Uttar Pradesh	217.93	0.19	210.95	0.026
142	MAUDAHA	Uttar Pradesh	147.8	0.179	146.8	0.145
143	JIRGO	Uttar Pradesh	98.2	0.147	88.99	0.001
144	RANGAWAN	Uttar Pradesh	233.17	0.155	225.06	0.029
145	MEJA	Uttar Pradesh	178	0.299	163.75	0.061
146	RAMGANGA	Uttarakhand	365.3	2.196	362.96	2.02
147	TEHRI	Uttarakhand	830	2.615	817.61	2.121
148	NANAK SAGAR	Uttarakhand	215.19	0.176	214.49	0.144
149	MAYURAKSHI	West Bengal	121.31	0.48	115.37	0.221
150	KANGSABATI	West Bengal	134.14	0.914	130	0.58

ANNEXURE-II

ANNEXURE REFERRED TO IN REPLY TO PART (c) & (d) OF LOK SABHA STARRED QUESTION NO. 63 TO BE ANSWERED ON 07.12.2023 REGARDING "LIVE STORAGE STATUS OF RESERVOIRS"

Comparison of Live storage of 150 reservoirs with corresponding period of last year

		STATUS OF CURRENT STORAGE		
		30.11.2023		
S. NO.	REGION/STATE	LIVE STORAGE (BCM)		CURRENT YEAR % FROM LAST YEAR
		CURRENT YEAR	LAST YEAR	
NORTHERN REGION				
1	HIMACHAL PRADESH	8.804	9.570	92
2	PUNJAB	1.318	1.721	77
3	RAJASTHAN	3.619	4.407	82
EASTERN REGION				
1	JHARKHAND	0.188	0.044	427
2	ODISHA	1.514	1.480	102
3	WEST BENGAL	11.432	11.506	99
4	TRIPURA	0.801	0.626	128
5	NAGALAND	0.236	0.247	96
6	BIHAR	0.278	0.304	91
WESTERN REGION				
1	GUJARAT	15.846	15.328	103
2	MAHARASTRA	13.876	18.216	76
CENTRAL REGION				
1	UTTAR PRADESH	2.816	4.085	69
2	UTTARAKHAND	4.285	4.345	99
3	MADHYA PRADESH	25.862	28.745	90
4	CHHATTISGARH	2.675	3.661	73
SOUTHERN REGION				
1	ANDHRA PRADESH/TELANGANA	2.321	8.799	26
2	ANDHRA PRADESH	1.465	3.946	37
3	TELANGANA	4.354	4.627	94
4	KARNATAKA	10.293	19.630	52
5	KERALA	2.596	3.040	85
6	TAMAIL NADU	1.926	4.202	46
COUNTRY AS A WHOLE		116.571	148.612	78

ANNEXURE-III

ANNEXURE REFERRED TO IN REPLY TO PART (e) & (f) OF LOK SABHA STARRED QUESTION NO. 63 TO BE ANSWERED ON 07.12.2023 REGARDING "LIVE STORAGE STATUS OF RESERVOIRS"

Details of reservoirs live storage in Southern Region

S.NO	NAME OF RESERVOIR	(STATE)	THIS YEAR	LAST YEAR	CURRENT YEAR % FROM LAST YEAR
			LIVE STORAGE (BCM)	LIVE STORAGE (BCM)	
1	SRISAILAM	Andhra Pradesh/Telangana	1.602	3.905	41
2	NAGARJUNA SAGAR	Andhra Pradesh/Telangana	0.719	4.894	15
3	SOMASILA	Andhra Pradesh	0.839	1.994	42
4	YELERU	Andhra Pradesh	0.16	0.419	38
5	KANDALERU	Andhra Pradesh	0.186	1.344	14
6	DONKARAYI	Andhra Pradesh	0.28	0.189	148
7	SRIRAMSAGAR	Telangana	2.246	2.3	98
8	LOWER MANAIR	Telangana	0.562	0.621	90
9	NIZAM SAGAR	Telangana	0.46	0.482	95
10	SINGUR	Telangana	0.745	0.801	93
11	PRIYADARSHINI JURALA	Telangana	0.109	0.167	65
12	MUSI PROJECT	Telangana	0.12	0.119	101
13	KADDAM (K.N.R.)	Telangana	0.112	0.137	82
14	KRISHNARAJA SAGARA	Karnataka	0.355	1.024	35
15	TUNGABHADRA	Karnataka	0.396	2.617	15
16	GHATAPRABHA(HIDKAL)	Karnataka	1.086	1.204	90
17	BHADRA	Karnataka	0.75	1.639	46
18	LINGANAMAKKI	Karnataka	1.768	3.361	53
19	NARAYANPUR	Karnataka	0.399	0.354	113
20	MALAPRABHA(RENUKA)	Karnataka	0.379	0.838	45
21	KABINI	Karnataka	0.276	0.284	97
22	HEMAVATHY	Karnataka	0.311	0.743	42
23	HARANGI	Karnataka	0.091	0.093	98
24	SUPA	Karnataka	2.092	2.823	74
25	VANI VILAS SAGAR	Karnataka	0.561	0.802	70
26	ALMATTI	Karnataka	1.406	3.063	46
27	GERUSOPPA	Karnataka	0.104	0.111	94
28	MANI DAM	Karnataka	0.311	0.55	57
29	TATTIHALLA	Karnataka	0.008	0.124	6
30	KALLADA(PARAPPAR)	Kerala	0.424	0.399	106
31	IDAMALAYAR	Kerala	0.711	0.773	92
32	IDUKKI	Kerala	0.829	1.129	73
33	KAKKI	Kerala	0.355	0.36	99
34	PERIYAR	Kerala	0.161	0.173	93
35	MALAMPUZHA	Kerala	0.116	0.206	56
36	LOWER BHAWANI	Tamil Nadu	0.466	0.792	59
37	METTUR(STANLEY)	Tamil Nadu	0.837	2.647	32
38	VAIGAI	Tamil Nadu	0.129	0.14	92
39	PARAMBIKULAM	Tamil Nadu	0.248	0.198	125
40	ALIYAR	Tamil Nadu	0.018	0.094	19
41	SHOLAYAR	Tamil Nadu	0.033	0.136	24
42	SATHANUR	Tamil Nadu	0.195	0.195	100
	TOTAL		22.955	44.244	52