

GOVERNMENT OF INDIA
MINISTRY OF JAL SHAKTI

DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION

RAJYA SABHA

UNSTARRED QUESTION NO. 1215

ANSWERED ON 31.07.2023

DECLINING WATER LEVELS IN RESERVOIRS

1215. SMT. VANDANA CHAVAN

Will the Minister of **JAL SHAKTI** be pleased to state:

- (a) whether water levels in 110 out of 146 reservoirs that are monitored by the Central Water Commission are 40 per cent or below their capacities;
- (b) if so, the various steps undertaken by Government to address this crisis;
- (c) whether Government has collected the State-wise monthly data on the average capacity of the reservoirs, if so, the details thereof;
- (d) whether Government has undertaken any study to assess the impact, declining water levels will have on agricultural activities and produce; and
- (e) if so, the details thereof and if not, the reasons therefor?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI BISHWESWAR TUDU)

(a) to (c) Central Water Commission (CWC) monitors live storage status of 146 important reservoirs in the country on weekly basis and publishes weekly bulletin on every Thursday. As per reservoir storage bulletin dated 20.07.2023, 86 reservoirs are 40% or below their capacity.

The weekly bulletin is shared with the Water Resources Departments of concerned States and also uploaded on the CWC's 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.

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 Governments for judicious use of available water.

State-wise details of live storage at Full Reservoir Level (FRL) of 146 important reservoirs monitored by CWC is given in **Annexure**.

(d) & (e) Natural Resource Management Division of Indian Council of Agricultural Research (ICAR) under Ministry of Agriculture and Farmers Welfare has informed that no systematic survey/study has been conducted to assess the impact of declining water levels on agricultural activities and produce. However, the Council has developed cost effective, location specific scientific technologies *viz.*, rainwater harvesting and recycling, conjunctive use of rain, surface and groundwater resources, smart and precision technologies for irrigation and farming practices, optimum irrigation scheduling, resource conservation technologies and efficient rainwater harvesting structures so that the harvested rain water can be used for supplemental/life saving irrigation in dry land/rain-fed situations including drought affected areas. Similarly, farmers are given advisories for adoption of modern agronomic practices like raised bed sowing, alternate furrow irrigation, sprinkler irrigation, drip irrigation, mulching, Direct Seeded Rice (DSR), System of Rice Intensification (SRI), laser land leveling, adoption of drought tolerant varieties, and diversifying cropping pattern with low irrigation requiring crops like pulses, oil seeds, maize and agro-forestry.

ANNEXURE

ANNEXURE REFERRED TO IN REPLY TO PART (a) to (c) OF UNSTARRED QUESTION NO. 1215 TO BE ANSWERED IN RAJYA SABHA ON 31.07.2023 REGARDING “DECLINING WATER LEVELS IN RESERVOIRS”.

(As on 20.07.2023)

S.NO	NAME OF RESERVOIR	(STATE)	FRL (MTS.)	LIVE CAP. AT FRL (BCM)
1	SRISAILAM	Andhra Pradesh/Telangana	269.75	6.013
2	NAGARJUNA SAGAR	Andhra Pradesh/Telangana	179.83	5.108
3	SOMASILA	Andhra Pradesh	100.58	1.994
4	YELERU	Andhra Pradesh	86.56	0.508
5	KANDALERU	Andhra Pradesh	85	1.792
6	DONKARAYI	Andhra Pradesh	316.08	0.376
7	SRIRAMSAGAR	Telangana	332.54	2.3
8	LOWER MANAIR	Telangana	280.42	0.621
9	NIZAM SAGAR	Telangana	428.24	0.482
10	SINGUR	Telangana	523.6	0.822
11	PRIYADARSHINI JURALA	Telangana	318.52	0.168
12	CHANDAN DAM	Bihar	152.39	0.136
13	TENUGHAT	Jharkhand	269.14	0.821
14	MAITHON	Jharkhand	146.3	0.471
15	PANCHET HILL	Jharkhand	124.97	0.184
16	KONAR	Jharkhand	425.81	0.176
17	TILAIYA	Jharkhand	368.81	0.142
18	GETALSUD	Jharkhand	590.06	0.218
19	UKAI	Gujarat	105.16	6.615
20	SABARMATI(DHAROI)	Gujarat	189.59	0.735
21	KADANA	Gujarat	127.7	1.472
22	SHETRUNJI	Gujarat	55.53	0.3
23	BHADAR	Gujarat	107.89	0.188
24	DAMANGANGA	Gujarat	79.86	0.502
25	DANTIWADA	Gujarat	184.1	0.399
26	PANAM	Gujarat	127.41	0.697
27	SARDAR SAROVAR	Gujarat	138.68	5.76
28	KARJAN	Gujarat	115.25	0.523
29	SUKHI(GUJ)	Gujarat	147.82	0.167
30	WATRAK	Gujarat	136.25	0.154
31	HATHMATI	Gujarat	180.74	0.153
32	MACHCHHU-I	Gujarat	135.33	0.071
33	MACHCHHU-II	Gujarat	57.3	0.091
34	UND-I	Gujarat	98	0.066
35	BRAHMANI(GUJ)	Gujarat	64.62	0.071
36	GOBIND SAGAR(BHAKRA)	Himachal Pradesh	512.06	6.229
37	PONG DAM(BEAS)	Himachal Pradesh	423.67	6.157
38	KOL DAM	Himachal Pradesh	642	0.089
39	KRISHNARAJA SAGARA	Karnataka	752.5	1.163
40	TUNGABHADRA	Karnataka	497.74	3.276
41	GHATAPRABHA(HIDKAL)	Karnataka	662.95	1.391
42	BHADRA	Karnataka	657.76	1.785
43	LINGANAMAKKI	Karnataka	554.43	4.294
44	NARAYANPUR	Karnataka	492.25	0.863
45	MALAPRABHA(RENUKA)	Karnataka	633.83	0.972

46	KABINI	Karnataka	696.66	0.444
47	HEMAVATHY	Karnataka	890.63	0.927
48	HARANGI	Karnataka	871.42	0.22
49	SUPA	Karnataka	564	4.12
50	VANI VILAS SAGAR	Karnataka	652.28	0.802
51	ALMATTI	Karnataka	519.6	3.105
52	GERUSOPPA	Karnataka	55	0.13
53	MANI DAM	Karnataka	594.36	0.884
54	TATTIHALLA	Karnataka	468.3	0.249
55	KALLADA(PARAPPAR)	Kerala	115.82	0.507
56	IDAMALAYAR	Kerala	169	1.018
57	IDUKKI	Kerala	732.43	1.46
58	KAKKI	Kerala	981.46	0.447
59	PERIYAR	Kerala	867.41	0.173
60	MALAMPUZHA	Kerala	115.06	0.224
61	GANDHI SAGAR	Madhya Pradesh	399.9	6.827
62	TAWA	Madhya Pradesh	355.4	1.944
63	BARGI	Madhya Pradesh	422.76	3.18
64	BANSAGAR	Madhya Pradesh	341.64	5.166
65	INDIRA SAGAR	Madhya Pradesh	262.13	9.745
66	BARNA DAM	Madhya Pradesh	348.55	0.456
67	OMKARESHWAR	Madhya Pradesh	196.6	0.299
68	SANJAY SAROVAR	Madhya Pradesh	519.38	0.508
69	RAJGHAT DAM	Madhya Pradesh	370.89	1.945
70	KOLAR DAM	Madhya Pradesh	462.2	0.27
71	ATAL SAGAR(MADIKHEDA)	Madhya Pradesh	346.25	0.835
72	MINIMATA BANGO	Chhattisgarh	359.66	3.046
73	MAHANADI	Chhattisgarh	348.7	0.767
74	DUDHAWA	Chhattisgarh	425.1	0.284
75	TANDULA	Chhattisgarh	332.2	0.312
76	JAYAKWADI(PAITHAN)	Maharashtra	463.91	2.171
77	KOYANA	Maharashtra	657.9	2.652
78	BHIMA(UJJANI)	Maharashtra	496.83	1.517
79	ISAPUR	Maharashtra	441	0.965
80	MULA	Maharashtra	552.3	0.609
81	YELDARI	Maharashtra	461.77	0.809
82	GIRNA	Maharashtra	398.07	0.524
83	KHADAKVASLA	Maharashtra	582.47	0.056
84	UPPER VAITARNA	Maharashtra	603.5	0.331
85	UPPER TAPI	Maharashtra	214	0.255
86	PENCH(TOTLADOH)	Maharashtra	490	1.091
87	UPPER WARDHA	Maharashtra	342.5	0.564
88	BHATSA	Maharashtra	142.07	0.942
89	DHOM	Maharashtra	747.7	0.331
90	DUDHGANGA	Maharashtra	646	0.664
91	MANIKDOH	Maharashtra	711.25	0.288
92	BHANDARDARA	Maharashtra	744.91	0.304
93	URMODI	Maharashtra	696	0.273
94	BHATGHAR	Maharashtra	623.28	0.673
95	NIRA DEOGHAR	Maharashtra	667.1	0.332
96	THOKARWADI	Maharashtra	667.14	0.353
97	KANHER	Maharashtra	690.78	0.272
98	MULSHI	Maharashtra	607.1	0.572
99	SURYA	Maharashtra	118.6	0.276
100	TILLARI	Maharashtra	113.2	0.447

101	DIMBHE DAM	Maharashtra	719.15	0.354
102	VEER DAM	Maharashtra	579.85	0.266
103	BARVI DAM	Maharashtra	72.6	0.339
104	CHASKAMAN	Maharashtra	649.53	0.215
105	PANSHET(TANAJISAGAR)	Maharashtra	636.27	0.302
106	BHAMA ASKHED	Maharashtra	671.5	0.217
107	DARNA DAM	Maharashtra	571.5	0.202
108	DOYANG HEP	Nagaland	333	0.535
109	HIRAKUD	Odisha	192.02	5.378
110	BALIMELA	Odisha	462.08	2.676
111	SALANADI	Odisha	82.3	0.558
112	RENGALI	Odisha	123.5	3.432
113	MACHKUND(JALAPUT)	Odisha	838.16	0.893
114	UPPER KOLAB	Odisha	858	0.935
115	UPPER INDRAVATI	Odisha	642	1.456
116	SAPUA	Odisha	168.5	0.006
117	HARIHARJHOR	Odisha	147.5	0.059
118	MANDIRA DAM	Odisha	210.31	0.309
119	THEIN DAM	Punjab	527.91	2.344
120	MAHI BAJAJ SAGAR	Rajasthan	280.75	1.711
121	JHAKAM	Rajasthan	359.5	0.132
122	RANA PRATAP SAGAR	Rajasthan	352.81	1.436
123	BISALPUR	Rajasthan	315.5	1.076
124	JAWAI DAM	Rajasthan	313.4	0.193
125	JAISAMAND	Rajasthan	295.54	0.296
126	LOWER BHAWANI	Tamil Nadu	278.89	0.792
127	METTUR(STANLEY)	Tamil Nadu	240.79	2.647
128	VAIGAI	Tamil Nadu	279.2	0.172
129	PARAMBIKULAM	Tamil Nadu	556.26	0.38
130	ALIYAR	Tamil Nadu	320.04	0.095
131	SHOLAYAR	Tamil Nadu	1002.79	0.143
132	SATHANUR	Tamil Nadu	222.2	0.207
133	GUMTI	Tripura	93.55	0.312
134	MATATILA	Uttar Pradesh	308.46	0.707
135	RIHAND	Uttar Pradesh	268.22	5.649
136	SHARDA SAGAR	Uttar Pradesh	190.5	0.33
137	SIRSI	Uttar Pradesh	217.93	0.19
138	MAUDAH	Uttar Pradesh	147.8	0.179
139	JIRGO	Uttar Pradesh	98.2	0.147
140	RANGAWAN	Uttar Pradesh	233.17	0.155
141	MEJA	Uttar Pradesh	178	0.299
142	RAMGANGA	Uttarakhand	365.3	2.196
143	TEHRI	Uttarakhand	830	2.615
144	NANAK SAGAR	Uttarakhand	215.19	0.176
145	MAYURAKSHI	West Bengal	121.31	0.48
146	KANGSABATI	West Bengal	134.14	0.914
TOTAL FOR 146 RESERVOIRS				178.185
