

GOVERNMENT OF INDIA
MINISTRY OF WATER RESOURCES,
RIVER DEVELOPMENT & GANGA REJUVENATION
LOK SABHA
UNSTARRED QUESTION NO. †1797
ANSWERED ON 28.12.2017

CONSTRUCTION OF NEW RESERVOIRS

†1797. SHRI RAKESH SINGH

Will the Minister of WATER RESOURCES, RIVER DEVELOPMENT AND GANGA REJUVENATION be pleased to state:

- (a) whether the ground water level has been receding day by day in the country and if so, the details thereof;
- (b) whether water level of major reservoirs has also fallen in the country during the last three years and if so, the details thereof;
- (c) whether the Government proposes to construct new reservoirs in the country and has taken steps to improve the ground water level also; and
- (d) if so, the details thereof; and
- (e) whether any success has been achieved by the Government through these corrective measures and if so, the details thereof?

ANSWER

THE MINISTER OF STATE FOR WATER RESOURCES, RIVER DEVELOPMENT AND GANGA REJUVENATION & PARLIAMENTARY AFFAIRS

(SHRI ARJUN RAM MEGHWAL)

- (a) Central Ground Water Board (CGWB) carries out ground water monitoring, four times a year, on regional scale through a network of observation wells in the Country. Comparison and analysis of Pre-monsoon (2017) water level data collected by CGWB with the decadal average (2007-2016) indicates decline in ground water level in about 61% of the wells. Details are given at **Annexure - I**.
- (b) Central Water Commission is monitoring live storage status of 91 reservoirs of the country on weekly basis. The details of water level and live storage status of reservoirs for the year 2015 to 2017 is given at **Annexure - II**.
- (c) to (e) It is to mention that in India, water resources projects are owned, constructed, maintained and operated by the respective State/UT Governments. Government of India supplements the efforts of the State/UT Governments by providing technical and financial assistance through various schemes and programmes after due appraisal of DPRs of the proposals received from States/UTs.

Ground Water Resource Assessment of the country is being periodically carried out jointly by CGWB and State Governments. The total annual replenishable ground water resource in 2011 was 433 billion cubic meter (BCM) and as per latest assessment (2013), the annual replenishable ground water resource of the country is 447 BCM.

During assessment year 2013, out of 6584 assessment units in the country, 1034 (15.7%) assessment units are categorized as “Over-Exploited”, whereas during assessment year 2011, the respective figures were 6607 and 1071 (16.2%).

Besides, other steps taken by the Central Government for conservation of ground water are available at the following URL http://mowr.gov.in/writereaddata/GW_Depletion.pdf

ANNEXURE - I

Annexure referred in reply to Lok Sabha Unstarred Question No.1797 to be answered on 28.12.2017 regarding ‘Construction of New Reservoirs’

State-wise Decadal Water Level Fluctuation with Mean [Pre-monsoon (2007 to 2016] and Pre-monsoon 2017

| S. No. | Name of State | No. of wells Analysed | Rise | | Fall | | Wells showing no change | |
|--------------|----------------------|--------------------------|-------------|-------------|-------------|-------------|----------------------------|------------|
| | | | No. | % | No. | % | No. | % |
| 1 | Andhra Pradesh | 751 | 184 | 25 | 563 | 75 | 4 | 0.5 |
| 2 | Arunachal Pradesh | 12 | 9 | 75 | 3 | 25 | 0 | 0.0 |
| 3 | Assam | 164 | 71 | 43 | 92 | 56 | 1 | 0.6 |
| 4 | Bihar | 625 | 362 | 58 | 258 | 41 | 5 | 0.8 |
| 5 | Chandigarh | 10 | 1 | 10 | 9 | 90 | 0 | 0.0 |
| 6 | Chhattisgarh | 566 | 219 | 39 | 346 | 61 | 1 | 0.2 |
| 7 | Dadra & Nagar Haveli | 16 | 6 | 38 | 10 | 63 | 0 | 0.0 |
| 8 | Daman & Diu | 11 | 7 | 64 | 4 | 36 | 0 | 0.0 |
| 9 | Delhi | 94 | 33 | 35 | 61 | 65 | 0 | 0.0 |
| 10 | Goa | 65 | 50 | 77 | 15 | 23 | 0 | 0.0 |
| 11 | Gujarat | 799 | 301 | 38 | 473 | 59 | 25 | 3.1 |
| 12 | Haryana | 302 | 95 | 31 | 207 | 69 | 0 | 0.0 |
| 13 | Himachal Pradesh | 90 | 33 | 37 | 57 | 63 | 0 | 0.0 |
| 14 | Jammu & Kashmir | 226 | 75 | 33 | 151 | 67 | 0 | 0.0 |
| 15 | Jharkhand | 218 | 90 | 41 | 128 | 59 | 0 | 0.0 |
| 16 | Karnataka | 1421 | 423 | 30 | 985 | 69 | 13 | 0.9 |
| 17 | Kerala | 1366 | 405 | 30 | 957 | 70 | 4 | 0.3 |
| 18 | Madhya Pradesh | 1318 | 660 | 50 | 658 | 50 | 0 | 0.0 |
| 19 | Maharashtra | 1562 | 667 | 43 | 887 | 57 | 8 | 0.5 |
| 20 | Meghalaya | 20 | 6 | 30 | 14 | 70 | 0 | 0.0 |
| 21 | Odisha | 1283 | 506 | 39 | 773 | 60 | 4 | 0.3 |
| 22 | Puducherry | 5 | 0 | 0 | 5 | 100 | 0 | 0.0 |
| 23 | Punjab | 234 | 36 | 15 | 198 | 85 | 0 | 0.0 |
| 24 | Rajasthan | 859 | 431 | 50 | 428 | 50 | 0 | 0.0 |
| 25 | Tamil Nadu | 536 | 71 | 13 | 465 | 87 | 0 | 0.0 |
| 26 | Telangana | 586 | 315 | 54 | 267 | 46 | 4 | 0.7 |
| 27 | Tripura | 26 | 18 | 69 | 8 | 31 | 0 | 0.0 |
| 28 | Uttar Pradesh | 637 | 187 | 29 | 450 | 71 | 0 | 0.0 |
| 29 | Uttarakhand | 46 | 21 | 46 | 24 | 52 | 1 | 2.2 |
| 30 | West Bengal | 617 | 327 | 53 | 289 | 47 | 1 | 0.2 |
| Total | | 14465 | 5609 | 38.8 | 8785 | 60.7 | 71 | 0.5 |

ANNEXURE - II

Annexure referred in reply to Lok Sabha Unstarred Question No.1797 to be answered on 28.12.2017 regarding 'Construction of New Reservoirs'

Live Storage in Billion Cubic Meter (BCM) at the beginning and end of monsoon for the year 2015-2017.

| SI. No | Name of Reservoirs | States | Live storage Cap at FRL | 01.06.2015 | 01.06.2016 | 01.06.2017 | 30.09.2015 | 30.09.2016 | 30.09.2017 |
|-----------|-------------------------|---------|----------------------------------|------------|------------|------------|------------|------------|------------|
| 1 | SRISAILAM | (AP/TG) | 8.288 | 0 | 0.433 | 0.433 | 1.724 | 5.69 | 4.250 |
| 2 | NAGARJUNA SAGAR | (AP/TG) | 6.841 | 0.215 | 0 | 0 | 0.043 | 0.984 | 0.396 |
| 3 | SOMASILA | (A.P) | 1.994 | 0.301 | 0.615 | 0.217 | 0.297 | 0.833 | 0.557 |
| 4 | SRIRAMSAGAR | (TG) | 2.3 | 0.326 | 0.132 | 0.255 | 0.228 | 2.3 | 1.105 |
| 5 | LOWER MANAIR | (TG) | 0.621 | 0.124 | 0.07 | 0.214 | 0.114 | 0.621 | 0.203 |
| 6 | TENUGHAT | (JHAR) | 0.821 | 0.33 | 0.263 | 0.356 | 0.427 | 0.422 | 0.425 |
| 7 | MAITHON | (JHAR) | 0.471 | 0.077 | 0.04 | 0.115 | 0.274 | 0.471 | 0.471 |
| 8 | PANCHET HILL | (JHAR) | 0.184 | 0.074 | 0.008 | 0.082 | 0.108 | 0.184 | 0.184 |
| 9 | KONAR | (JHAR) | 0.176 | 0.072 | 0.045 | 0.032 | 0.149 | 0.176 | 0.132 |
| 10 | TILAIYA | (JHAR) | 0.142 | 0.04 | 0.019 | 0.035 | 0.149 | 0.142 | 0.123 |
| 11 | UKAI | (GUJ) | 6.615 | 1.176 | 0.6 | 2.111 | 5.142 | 5.671 | 3.457 |
| 12 | SABARMATI(DHAROI) | (GUJ) | 0.735 | 0.087 | 0.163 | 0.164 | 0.666 | 0.714 | 0.735 |
| 13 | KADANA | (GUJ) | 1.472 | 0.837 | 0.296 | 0.771 | 0.921 | 1.119 | 1.186 |
| 14 | SHETRUNJI | (GUJ) | 0.300 | 0.031 | 0.3 | 0.042 | 0.3 | 0.16 | 0.182 |
| 15 | BHADAR | (GUJ) | 0.188 | 0.023 | 0.134 | 0.001 | 0.163 | 0.012 | 0.179 |
| 16 | DAMANAGANGA | (GUJ) | 0.502 | 0.067 | 0.069 | 0.064 | 0.483 | 0.475 | 0.470 |
| 17 | DANTIWADA | (GUJ) | 0.399 | 0.009 | 0.399 | 0.002 | 0.343 | 0.127 | 0.387 |
| 18 | PANAM | (GUJ) | 0.697 | 0.317 | 0.122 | 0.212 | 0.364 | 0.424 | 0.556 |
| 19 | SARDAR SAROVAR | (GUJ) | 1.566 | 0.955 | 1.215 | 1.134 | 1.412 | 1.502 | 1.566 |
| 20 | KARJAN | (GUJ) | 0.523 | 0.151 | 0.072 | 0.136 | 0.356 | 0.275 | 0.485 |
| 21 | GOBIND SAGAR(BHAKRA) | (H.P) | 6.229 | 2.66 | 1.755 | 1.389 | 5.906 | 4.554 | 5.457 |
| 22 | PONG DAM | (H.P) | 6.157 | 2.259 | 0.476 | 0.807 | 5.319 | 4.296 | 5.183 |
| 23 | KRISHNARAJA SAGRA | (KAR) | 1.163 | 0.137 | 0.148 | 0.059 | 1.996 | 0.316 | 0.748 |
| 24 | TUNGABHADRA | (KAR) | 3.276 | 1.538 | 0.342 | 0.027 | 0.53 | 1.263 | 2.035 |
| 25 | GHATAPRABHA | (KAR) | 1.391 | 0.076 | 0.033 | 0.046 | 1.181 | 1.143 | 1.153 |
| 26 | BHADRA | (KAR) | 1.785 | 0.472 | 0.117 | 0.006 | 2.195 | 0.929 | 1.181 |
| 27 | LINGANAMAKKI | (KAR) | 4.294 | 0.647 | 0.78 | 0.387 | 0.52 | 2.493 | 2.567 |
| 28 | NARAYANPUR | (KAR) | 0.863 | 0.19 | 0.061 | 0.122 | 0.261 | 0.738 | 0.707 |
| 29 | MALAPRABHA(RENUKA) | (KAR) | 0.972 | 0.07 | 0.014 | 0.021 | 0.243 | 0.353 | 0.342 |
| 30 | KABINI(Sancherla Tank) | (KAR) | 0.444 | 0.174 | 0 | 0 | 1.782 | 0.24 | 0.399 |
| 31 | HEMAVATHY | (KAR) | 0.927 | 0.144 | 0.092 | 0.037 | 0.053 | 0.196 | 0.314 |
| 32 | HARANGI | (KAR) | 0.220 | 0.03 | 0.018 | 0.034 | 1.657 | 0.177 | 0.215 |
| 33 | SUPA | (KAR) | 4.120 | 1.432 | 0.866 | 1.172 | 0.086 | 2.352 | 2.423 |
| 34 | VANIVILAS SAGAR | (KAR) | 0.802 | 0.045 | 0.05 | 0.018 | 0.216 | 0.04 | 0.013 |
| 35 | ALMATTI | (KAR) | 3.105 | 0.179 | 0.036 | 0 | 0.052 | 3.105 | 3.105 |
| 36 | GERUSOPPA | (KAR) | 0.130 | 0.104 | 0.11 | 0.108 | 0.136 | 0.102 | 0.111 |
| 37 | KALLADA(PARAPPAR) | (KRL) | 0.507 | 0.125 | 0.203 | 0.05 | 2.055 | 0.162 | 0.374 |
| 38 | IDAMALAYAR | (KRL) | 1.018 | 0.205 | 0.172 | 0.174 | 2.968 | 0.586 | 0.749 |
| 39 | IDUKKI | (KRL) | 1.460 | 0.491 | 0.289 | 0.161 | 3.43 | 0.682 | 0.879 |
| 40 | KAKKI | (KRL) | 0.447 | 0.1 | 0.13 | 0.059 | 8.603 | 0.277 | 0.307 |
| 41 | PERIYAR | (KRL) | 0.173 | 0.059 | 0.014 | 0.006 | 1.871 | 0.021 | 0.092 |
| 42 | MALAMPUZHA | (KRL) | 0.224 | 0.047 | 0.015 | 0.018 | 0.487 | 0.092 | 0.137 |
| 43 | GANDHI SAGAR | (M.P.) | 6.827 | 2.755 | 2.7 | 3.828 | 0.147 | 6.438 | 4.739 |
| 44 | TAWA | (M.P.) | 1.944 | 0.567 | 0.119 | 0.439 | 1.971 | 1.944 | 1.485 |
| 45 | BARGI | (M.P.) | 3.180 | 0.612 | 0.955 | 0.814 | 0.062 | 3.18 | 2.786 |
| 46 | BANSAGAR | (M.P.) | 5.166 | 3.142 | 1.836 | 2.751 | 0.161 | 5.166 | 3.947 |
| 47 | INDIRA SAGAR | (M.P.) | 9.745 | 1.443 | 1.303 | 1.994 | 0.314 | 9.697 | 3.621 |
| 48 | BARNA | (M.P.) | 0.456 | 0.104 | 0.022 | 0.129 | 0.116 | 0.433 | 0.279 |
| 49 | MINIMATA BANGOI | (CHH.) | 3.046 | 2.183 | 0.85 | 1.767 | 0.06 | 2.232 | 2.135 |
| 50 | MAHANADI | (CHH.) | 0.767 | 0.074 | 0.179 | 0.102 | 0.018 | 0.757 | 0.321 |
| 51 | JAYAKWADI(PAITHON) | (MAH) | 2.171 | 0.075 | 0 | 0.414 | 0.236 | 1.559 | 2.171 |
| 52 | KOYANA | (MAH) | 2.652 | 0.661 | 0.106 | 0.234 | 0.246 | 2.652 | 2.652 |
| 53 | BHIMA(UJJANI) | (MAH) | 1.517 | -0.367 | 0 | 0 | 0.892 | 1.494 | 1.517 |
| 54 | ISAPUR | (MAH) | 0.965 | 0.145 | 0.022 | 0.043 | 0.564 | 0.388 | 0.140 |

| | | | | | | | | | |
|----|-------------------|--------|----------------|---------------|--------------|---------------|--------------|----------------|----------------|
| 55 | MULA | (MAH) | 0.609 | 0.042 | 0.036 | 0.014 | 0.761 | 0.608 | 0.607 |
| 56 | YELDARI | (MAH) | 0.809 | 0.038 | 0 | 0.005 | 0.177 | 0.135 | 0.095 |
| 57 | GIRNA | (MAH) | 0.524 | 0.042 | 0 | 0.128 | 0.504 | 0.408 | 0.343 |
| 58 | KHADAKVASLA | (MAH) | 0.056 | 0.042 | 0.024 | 0.02 | 0.078 | 0.055 | 0.056 |
| 59 | UPPER VAITARNA | (MAH.) | 0.331 | 0.068 | 0.097 | 0.098 | 0.229 | 0.331 | 0.331 |
| 60 | UPPER TAPI | (MAH.) | 0.255 | 0.154 | 0 | 0.023 | 0.24 | 0.223 | 0.249 |
| 61 | PENCH (TOTALADOH) | (MAH.) | 1.091 | 0.13 | 0.106 | 0.054 | 0.861 | 0.657 | 0.429 |
| 62 | UPPER WARDHA | (MAH.) | 0.564 | 0.17 | 0.119 | 0.204 | 1.36 | 0.564 | 0.564 |
| 63 | BHATSA | (MAH.) | 0.942 | 0.281 | 0.299 | 0.349 | 1.701 | 0.941 | 0.937 |
| 64 | DHOM | (MAH.) | 0.331 | 0.115 | 0.08 | 0.053 | 0.122 | 0.329 | 0.313 |
| 65 | DUDHGANGA | (MAH.) | 0.664 | 0.168 | 0 | 0.098 | 1.109 | 0.664 | 0.664 |
| 66 | MANIKDOH (KUKADI) | (MAH.) | 0.288 | 0.023 | 0.018 | 0.008 | 0.271 | 0.206 | 0.232 |
| 67 | BHANDARDARA | (MAH.) | 0.304 | 0.03 | 0.004 | 0.051 | 0.043 | 0.304 | 0.304 |
| 68 | HIRAKUD | (ODI) | 5.378 | 1.082 | 0.918 | 1.182 | 0.272 | 4.519 | 4.823 |
| 69 | BALIMELA | (ODI) | 2.676 | 1.317 | 0.968 | 0.657 | 0.082 | 2.065 | 1.052 |
| 70 | SALANADI | (ODI) | 0.558 | 0.211 | 0.172 | 0.161 | 0.097 | 0.31 | 0.227 |
| 71 | RENGALI | (ODI) | 3.432 | 1.546 | 0.448 | 0.999 | 0.531 | 3.14 | 3.261 |
| 72 | MACHKUND(JALPUT) | (ODI) | 0.893 | 0.279 | 0.275 | 0.14 | 2.073 | 0.786 | 0.792 |
| 73 | UPPER KOLAB | (ODI) | 0.935 | 0.396 | 0.208 | 0.247 | 1.628 | 0.758 | 0.471 |
| 74 | UPPER INDRAVATI | (ODI) | 1.456 | 0.425 | 0.389 | 0.346 | 2.315 | 1.147 | 0.840 |
| 75 | THEIN | (PUN) | 2.344 | 1.841 | 0.842 | 1.36 | 0.255 | 1.599 | 1.660 |
| 76 | MAHI BAJAJ SAGAR | (RAJ) | 1.711 | 0.512 | 1.341 | 0.563 | 0.266 | 1.711 | 1.711 |
| 77 | JHAKAM | (RAJ) | 0.132 | 0.024 | 0.132 | 0.036 | 0.132 | 0.132 | 0.132 |
| 78 | RANA PRATAP Sagar | (RAJ) | 1.436 | 0.294 | 0.457 | 0.374 | 1.436 | 1.403 | 0.799 |
| 79 | LOWER BHAWANI | (TN) | 0.792 | 0.235 | 0.056 | 0.074 | 0.402 | 0.147 | 0.467 |
| 80 | METTUR(STANLEY) | (TN) | 2.647 | 0.967 | 0.433 | 0.146 | 1.879 | 1.174 | 1.581 |
| 81 | VAIGAI | (TN) | 0.172 | 0.042 | 0.012 | 0.007 | 0.091 | 0.007 | 0.044 |
| 82 | PARAMBIKULAM | (TN) | 0.380 | 0.062 | 0.033 | 0.02 | 0.377 | 0.139 | 0.190 |
| 83 | ALIYAR | (TN) | 0.095 | 0.077 | 0.036 | 0.022 | 0.095 | 0.007 | 0.040 |
| 84 | SHOLAYAR | (TN) | 0.143 | 0.016 | 0 | 0 | 0.144 | 0.058 | 0.111 |
| 85 | GUMTI | (TRP) | 0.312 | 0.017 | 0.146 | 0.162 | 0.203 | 0.258 | 0.301 |
| 86 | MATATILA | (UP) | 0.707 | 0.404 | 0.07 | 0.067 | 0.641 | 0.641 | 0.641 |
| 87 | RIHAND | (UP) | 5.649 | 0.829 | 0.918 | 1.744 | 2.517 | 4.544 | 3.717 |
| 88 | RAMGANGA | (UTT) | 2.196 | 1.329 | 1.42 | 0 | 1.882 | 1.179 | 1.307 |
| 89 | TEHRI | (UTT) | 2.615 | 0.232 | 0.042 | 0.061 | 2.394 | 2.386 | 2.402 |
| 90 | MAYURAKSHI | (WB) | 0.480 | 0.072 | 0.073 | 0.109 | 0.252 | 0.407 | 0.429 |
| 91 | KANGSABATI | (WB) | 0.914 | 0.191 | 0.18 | 0.233 | 0.843 | 0.81 | 0.644 |
| | TOTAL | Total | 157.799 | 41.493 | 29.16 | 33.407 | 88.26 | 117.111 | 104.099 |
| | PERCENTAGE | | | 26 | 18 | 21 | 56 | 74 | 66 |