

GOVERNMENT OF INDIA  
MINISTRY OF JAL SHAKTI,  
DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION  
**LOK SABHA**  
**STARRED QUESTION NO. \*367**  
ANSWERED ON 19.03.2020

**GROUND WATER DEPLETION**

\*367.           SHRI FEROZE VARUN GANDHI  
                  MS. S. JOTHIMANI

Will the Minister of JAL SHAKTI be pleased to state:

- (a) the State-wise data on ground water depletion for the year 2019;
- (b) the details of levels of ground water at present, State-wise;
- (c) the measures being taken to conserve the ground water resources across the country;
- (d) the long term measures being taken by the Government to ensure rainwater harvesting and water conservation;
- (e) the measures taken by the Government to mitigate the drinking water crisis in Tamil Nadu;
- (f) the details of such programmes implemented in Karur district;
- (g) the details of the funds allocated for the Cauveri Integrated Drinking Water Plan and if no funds have been allocated, the reasons therefor; and
- (h) the status of implementation of the new Cauvery Water Scheme?

**ANSWER**

THE MINISTER OF JAL SHAKTI

(SHRI GAJENDRA SINGH SHEKHAWAT)

(a) to (h) A Statement is laid on the Table of the House.

\*\*\*\*\*

**STATEMENT REFERRED TO IN REPLY TO PARTs (a) TO (h) OF STARRED QUESTION NO.\*367 TO BE ANSWERED IN LOK SABHA ON 19.03.2020 REGARDING “GROUND WATER DEPLETION” ASKED BY SHRI FEROZE VARUN GANDHI AND MS. S. JOTHIMANI, M.P.**

(a) & (b) The Dynamic Ground Water Resources of the country are being periodically assessed jointly by Central Ground Water Board (CGWB) and State Governments. As per the 2017 assessment, out of the total 6881 assessment units (Block/ Taluks/ Mandals/ watersheds/ Firkas) in the country, 1186 units in 17 States/UTs have been categorized as ‘Over-exploited’ where the Annual Ground Water Extraction is more than Annual Extractable Ground Water Resource. 313 units have been categorized as ‘Critical’, 972 units as ‘Semi- critical’, 4310 units as ‘Safe’ and 100 units as ‘Saline’. Details are given in **Annexure-I**.

Further, CGWB is periodically monitoring the ground water levels throughout the Country on a regional scale, through a network of monitoring wells. In order to assess the decline in water level on a long-term basis, Pre-monsoon water level data collected by CGWB during Pre-monsoon 2019 has been compared with the decadal average (2009-2018). Analysis of water level data indicates that about 61% of the wells monitored have registered decline in ground water levels, mostly in the range of 0 – 2 m. The details are given at **Annexure-II**.

During the pre-monsoon period of 2019, the depth to water level in the country ranged from less than 2.0 metre to more than 40 metres below ground level (m bgl). In a major part of the country, water level is in the range of 5 to 10 m. The details are given at **Annexure-III**.

(c) & (d) Water being a State subject, initiatives on water management including conservation and water harvesting in the Country is primarily States’ responsibility. Further, to supplement the efforts of the State Governments, Government of India provides technical and financial assistance to encourage sustainable development and efficient management of water resources through various schemes and programmes.

Further, a number of States have done notable work in the field of water conservation/harvesting. Of these, mention can be made of ‘Mukhyamantri Jal Swavlamban Abhiyan’ in Rajasthan, ‘Jalyukt Shibar’ in Maharashtra, ‘Sujalam Sufalam Abhiyan’ in Gujarat, ‘Mission Kakatiya’ in Telangana, ‘Neeru Chettu’ in Andhra Pradesh, ‘Jal Jeevan Hariyali’ in Bihar, ‘Jal Hi Jeevan’ in Haryana among others.

Government of India launched Jal Shakti Abhiyan (JSA), a time bound campaign with a mission mode approach intended to improve water availability including ground water conditions in the water stressed

blocks of 256 districts in India. In this regard, teams of officers from Central Government along-with technical officers from Ministry of Jal Shakti were deputed to visit water stressed districts and to work in close collaboration with district level officials to undertake suitable interventions. Further, to promote water conservation and water resource management, five target interventions viz. water conservation & rainwater harvesting, renovation of traditional & other water-bodies/tanks, reuse and recharge of bore-wells, watershed development and intensive afforestation etc implemented.

In addition, Government of India has approved Atal Bhujal Yojana (Atal Jal), a Rs.6000 Crore Central Sector Scheme, for sustainable management of ground water resources with community participation. Atal Jal is being implemented in 78 water stressed districts of Seven States viz. Gujarat, Haryana, Karnataka, Madhya Pradesh, Maharashtra, Rajasthan and Uttar Pradesh.

Central Ground Water Authority (CGWA) has been constituted under Section 3(3) of the 'Environment (Protection) Act, 1986' for the purpose of regulation and control of ground water development and management in the Country. CGWA is regulating ground water withdrawal by industries / infrastructure/ mining projects in the country including in NCR region for which guidelines/ criteria have been framed, which are modified from time to time. The current guidelines, effective from 15.11.2015 are available on the website <http://cgwa-noc.gov.in>.

Further, CGWA had notified fresh guidelines for development and management of ground water resources in the country vide Gazette Notification SO 6140 (E) dated 12.12.2018. However, further fresh guidelines are being finalized.

As per information received from Ministry of Housing & Urban Affairs, the Model Building Bye Laws, 2016, has been issued for guidance of the States/UTs which has a chapter on 'Rainwater Harvesting'. The provisions of this chapter are applicable to all the buildings. 33 States / UTs have adopted the rainwater harvesting provisions. The implementation of the rainwater harvesting policy comes within the purview of the State Government/Urban Local Body / Urban Development Authority.

In order to regulate the Over-exploitation and consequent depletion of ground water, the Ministry has circulated a Model Bill to all the States/UTs to enable them to enact suitable ground water legislation for regulation of its development, which includes provision of rain water harvesting. So far, 15 States/UTs have adopted and implemented the ground water legislation on the lines of Model Bill.

Central Ground Water Board (CGWB) is implementing 'National Aquifer Mapping and Management Programme' (NAQUIM) for aquifer mapping in the country including in areas which have recorded a high depletion of ground water, in phases. Out of the total mappable area of nearly 25 lakh sq km, so far aquifer maps and management plans have been prepared for an area of nearly 11.80 lakh sq km spread over various parts of the country. The details are shared with concerned State Government for taking suitable interventions.

Central Government supports construction of water harvesting and conservation works primarily through Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) and Pradhan Mantri Krishi Sinchayee Yojana – Watershed Development Component (PMKSY-WDC).

The expenditure made on water related works taken up under MGNREGA during last three years and current year as uploaded by the States in the MIS after following due procedures of the Programme is as under:

| <b>Years</b>             | <b>Rs in Cr</b> |
|--------------------------|-----------------|
| 2016-17                  | 23278.9         |
| 2017-18                  | 19839.05        |
| 2018-19                  | 19673.65        |
| 2019-20(till 02.03.2020) | 16894.96        |

Funds released as Central share to States under PMKSY-WDC are as under:

| <b>Years</b>              | <b>Rs in Cr</b> |
|---------------------------|-----------------|
| 2016-17                   | 1494.92         |
| 2017-18                   | 1699.40         |
| 2018-19                   | 1791.49         |
| 2019-20 (till 28.02.2020) | 1302.98         |

Further, important measures taken by the Central Government for conservation, management of ground water and effective implementation of rain water harvesting in the country are at the following URL: [http://mowr.gov.in/sites/default/files/Steps\\_to\\_control\\_water\\_depletion\\_Jun2019.pdf](http://mowr.gov.in/sites/default/files/Steps_to_control_water_depletion_Jun2019.pdf).

(e) & (f) Drinking water is a State subject and Government of India supplements the efforts of States by providing financial and technical assistance to States/UTs including Tamil Nadu. It is the States that plan, design, approve, implement, operate and maintain water supply schemes.

To enable every rural households to have potable water at service level of 55 liter per capita per day (1pcd) through Functional Household Tap connection (FHTC) by 2024, Government of India, in partnership with States, has launched Jal Jeevan Mission (JJM) in the country including in Karur district of Tamil Nadu,. In the current financial year, an amount of Rs. 371.94 Crore has been released to the State of Tamil Nadu for the implementation of JJM.

In addition, Ministry of Housing and Urban Affairs, through “Atal Mission for Rejuvenation and Urban Transformation (AMRUT)”, supplements the efforts of the States/ Union Territories (UTs) in providing water supply, sewerage & septage management, storm water drainage etc in 500 cities/towns across India (covering about 22.50 Crore population) with a total outlay of Rs. 1,00,000 Crore including Central Assistance of Rs. 50000 Crore during FY 2015-2016 to FY 2019-2020. The total State Annual Action Plans (SAAPs) approved for the entire Mission period is Rs.77,640 Crore out of which Rs.39,011 Crore (50.25 %) has been allocated to water supply. Rs.2063.90 Crore has been released (against Central Assistance) to the State of Tamil Nadu for the implementation of AMRUT as on 16.03.2020.

As per information received, Tamil Nadu Water supply and Drainage Board (TWAD) under Government of Tamil Nadu maintains 556 Combined Water supply Schemes (CWSS) in Tamil Nadu with average water pumping as 1920 Million Litre per Day (MLD). Further, they supply water through 18 nos of CWSS in Karur district with earmarked water supply of 33.72 MLD benefitting 6,53,531 people.

(g) As per information provided by TWAD, no fund has been allocated for Cauveri Integrated Drinking Water Plan as they have not implemented the same.

(h) TWAD is implementing 11 nos of Water Supply Schemes with Cauvery as source. Details are given at **Annexure IV**.

Further, 13 schemes have been planned to be implemented as per details given at **Annexure V**.

\*\*\*\*\*

Annexure referred to in reply to part (a) & (b) of Starred Question No. \*367 to be answered in Lok Sabha on 19.03.2020 regarding "Ground Water Depletion".

**CATEGORIZATION OF BLOCKS/ MANDALS/ TALUKAS IN INDIA (2017)**

| S.No. | States / Union Territories | Total No. of Assessed Units | Safe        |           | Semi-Critical |           | Critical   |          | Over-Exploited |           | Saline     |          |
|-------|----------------------------|-----------------------------|-------------|-----------|---------------|-----------|------------|----------|----------------|-----------|------------|----------|
|       |                            |                             | Nos.        | %         | Nos.          | %         | Nos.       | %        | Nos.           | %         | Nos.       | %        |
|       | <b>States</b>              |                             |             |           |               |           |            |          |                |           |            |          |
| 1     | Andhra Pradesh             | 670                         | 501         | 75        | 60            | 9         | 24         | 4        | 45             | 7         | 40         | 6        |
| 2     | Arunachal Pradesh          | 11                          | 11          | 100       | 0             | 0         | 0          | 0        | 0              | 0         | 0          | 0        |
| 3     | Assam                      | 28                          | 28          | 100       | 0             | 0         | 0          | 0        | 0              | 0         | 0          | 0        |
| 4     | Bihar                      | 534                         | 432         | 81        | 72            | 13        | 18         | 3        | 12             | 2         | 0          | 0        |
| 5     | Chhattisgarh               | 146                         | 122         | 84        | 22            | 15        | 2          | 1        | 0              | 0         | 0          | 0        |
| 6     | Delhi                      | 34                          | 3           | 9         | 7             | 21        | 2          | 6        | 22             | 65        | 0          | 0        |
| 7     | Goa                        | 12                          | 12          | 100       | 0             | 0         | 0          | 0        | 0              | 0         | 0          | 0        |
| 8     | Gujarat                    | 248                         | 194         | 78        | 11            | 4         | 5          | 2        | 25             | 10        | 13         | 5        |
| 9     | Haryana                    | 128                         | 26          | 20        | 21            | 16        | 3          | 2        | 78             | 61        | 0          | 0        |
| 10    | Himachal Pradesh           | 8                           | 3           | 38        | 1             | 13        | 0          | 0        | 4              | 50        | 0          | 0        |
| 11    | Jammu & Kashmir            | 22                          | 22          | 100       | 0             | 0         | 0          | 0        | 0              | 0         | 0          | 0        |
| 12    | Jharkhand                  | 260                         | 245         | 94        | 10            | 4         | 2          | 1        | 3              | 1         | 0          | 0        |
| 13    | Karnataka                  | 176                         | 97          | 55        | 26            | 15        | 8          | 5        | 45             | 26        | 0          | 0        |
| 14    | Kerala                     | 152                         | 119         | 78        | 30            | 20        | 2          | 1        | 1              | 1         | 0          | 0        |
| 15    | Madhya Pradesh             | 313                         | 240         | 77        | 44            | 14        | 7          | 2        | 22             | 7         | 0          | 0        |
| 16    | Maharashtra                | 353                         | 271         | 77        | 61            | 17        | 9          | 3        | 11             | 3         | 1          | 0        |
| 17    | Manipur                    | 9                           | 9           | 100       | 0             | 0         | 0          | 0        | 0              | 0         | 0          | 0        |
| 18    | Meghalaya                  | 11                          | 11          | 100       | 0             | 0         | 0          | 0        | 0              | 0         | 0          | 0        |
| 19    | Mizoram                    | 26                          | 26          | 100       | 0             | 0         | 0          | 0        | 0              | 0         | 0          | 0        |
| 20    | Nagaland                   | 11                          | 11          | 100       | 0             | 0         | 0          | 0        | 0              | 0         | 0          | 0        |
| 21    | Odisha                     | 314                         | 303         | 96        | 5             | 2         | 0          | 0        | 0              | 0         | 6          | 2        |
| 22    | Punjab                     | 138                         | 22          | 16        | 5             | 4         | 2          | 1        | 109            | 79        | 0          | 0        |
| 23    | Rajasthan                  | 295                         | 45          | 15        | 29            | 10        | 33         | 11       | 185            | 63        | 3          | 1        |
| 24    | Sikkim                     | 4                           | 4           | 100       | 0             | 0         | 0          | 0        | 0              | 0         | 0          | 0        |
| 25    | Tamil Nadu                 | 1166                        | 427         | 37        | 163           | 14        | 79         | 7        | 462            | 40        | 35         | 3        |
| 26    | Telangana                  | 584                         | 278         | 48        | 169           | 29        | 67         | 11       | 70             | 12        | 0          | 0        |
| 27    | Tripura                    | 59                          | 59          | 100       | 0             | 0         | 0          | 0        | 0              | 0         | 0          | 0        |
| 28    | Uttar Pradesh*             | 830                         | 540         | 65        | 151           | 18        | 48         | 6        | 91             | 11        | 0          | 0        |
| 29    | Uttarakhand                | 18                          | 13          | 72        | 5             | 28        | 0          | 0        | 0              | 0         | 0          | 0        |
| 30    | West Bengal **             | 268                         | 191         | 71        | 76            | 28        | 1          | 0        | 0              | 0         | 0          | 0        |
|       | <b>Total States</b>        | <b>6828</b>                 | <b>4265</b> | <b>62</b> | <b>968</b>    | <b>14</b> | <b>312</b> | <b>5</b> | <b>1185</b>    | <b>17</b> | <b>98</b>  | <b>1</b> |
|       | <b>Union Territories</b>   |                             |             |           |               |           |            |          |                |           |            |          |
| 1     | Andaman & Nicobar          | 36                          | 35          | 97        | 0             | 0         | 0          | 0        | 0              | 0         | 1          | 3        |
| 2     | Chandigarh                 | 1                           | 0           | 0         | 1             | 100       | 0          | 0        | 0              | 0         | 0          | 0        |
| 3     | Dadra & Nagar Haveli       | 1                           | 1           | 100       | 0             | 0         | 0          | 0        | 0              | 0         | 0          | 0        |
| 4     | Daman & Diu                | 2                           | 1           | 50        | 0             | 0         | 1          | 50       | 0              | 0         | 0          | 0        |
| 5     | Lakshdweep                 | 9                           | 6           | 67        | 3             | 33        | 0          | 0        | 0              | 0         | 0          | 0        |
| 6     | Puducherry                 | 4                           | 2           | 50        | 0             | 0         | 0          | 0        | 1              | 25        | 1          | 25       |
|       | <b>Total UTs</b>           | <b>53</b>                   | <b>45</b>   | <b>85</b> | <b>4</b>      | <b>8</b>  | <b>1</b>   | <b>2</b> | <b>1</b>       | <b>2</b>  | <b>2</b>   | <b>4</b> |
|       | <b>Grand Total</b>         | <b>6881</b>                 | <b>4310</b> | <b>63</b> | <b>972</b>    | <b>14</b> | <b>313</b> | <b>5</b> | <b>1186</b>    | <b>17</b> | <b>100</b> | <b>1</b> |

**Note**

**Blocks-** Bihar, Chhattisgarh, Haryana, Jharkhand, Kerala, M.P., Manipur, Mizoram, Orissa, Punjab, Rajasthan, Tripura, Uttar Pradesh,

**Taluks** -Karnataka, Goa, Gujarat, Maharashtra

**Mandals-** Andhra Pradesh, Telangana

**Districts/Valley-** Arunachal Pradesh, Assam, Himachal Pradesh, Jammu & Kashmir, Meghalaya, Mizoram, Nagaland

**Islands** - Lakshadweep, Andaman & Nicobar Islands

**Firka-**Tamil Nadu

**Region** - Puducherry

**UT** - Chandigarh, Dadar & Nagar Haveli, Daman & Diu

**Tehsil-NCT** Delhi

**\*Uttar Pradesh:** There are total 820 block and 10 Cities

**\*\*The Ground Water resources assessment as on 2013 has been considered for the state of West Bengal**

**ANNEXURE-II**

Annexure referred to in reply to part (a) & (b) of Starred Question No. \*367 to be answered in Lok Sabha on 19.03.2020 regarding “Ground Water Depletion”.

**State-wise Decadal Water Level Fluctuation with Mean [Premonsoon (2009 to 2018) and Premonsoon 2019]**

| S. No. | Name of State        | No. of wells Analyzed | Range in m |       |      |       | Rise        |             |            |            |            |            | Fall        |             |             |             |             |            | Rise        |             | Fall        |             | Wells showing no change |            |
|--------|----------------------|-----------------------|------------|-------|------|-------|-------------|-------------|------------|------------|------------|------------|-------------|-------------|-------------|-------------|-------------|------------|-------------|-------------|-------------|-------------|-------------------------|------------|
|        |                      |                       | Rise       |       | Fall |       | 0-2 m       |             | 2-4 m      |            | >4 m       |            | 0-2 m       |             | 2-4 m       |             | >4 m        |            |             |             |             |             |                         |            |
|        |                      |                       | Min        | Max   | Min  | Max   | No          | %           | No         | %          | No         | %          | No          | %           | No          | %           | No          | %          | No          | %           | No          | %           | No                      | %          |
| 1      | Andhra Pradesh       | 714                   | 0.01       | 7.26  | 6    | 9.32  | 166         | 23.2        | 18         | 2.5        | 10         | 1.4        | 348         | 48.7        | 122         | 17.1        | 48          | 6.7        | 194         | 27          | 518         | 73          | 2                       | 0.3        |
| 2      | Arunachal Pradesh    | 18                    | 0.54       | 2.45  | 0.1  | 5.94  | 1           | 5.6         | 1          | 5.6        | 0          | 0.0        | 8           | 44.4        | 7           | 38.9        | 1           | 5.6        | 2           | 11          | 16          | 89          | 0                       | 0.0        |
| 3      | Assam                | 230                   | 0.01       | 7.1   | 0.01 | 4.53  | 89          | 38.7        | 17         | 7.4        | 5          | 2.2        | 112         | 48.7        | 5           | 2.2         | 2           | 0.9        | 111         | 48          | 119         | 52          | 0                       | 0.0        |
| 4      | Bihar                | 619                   | 0.01       | 5.34  | 0.01 | 11.65 | 172         | 27.8        | 20         | 3.2        | 3          | 0.5        | 349         | 56.4        | 46          | 7.4         | 24          | 3.9        | 195         | 32          | 419         | 68          | 5                       | 0.8        |
| 5      | Chandigarh           | 12                    | 0.01       | 2.47  | 0.24 | 5.49  | 2           | 16.7        | 2          | 16.7       | 0          | 0.0        | 4           | 33.3        | 3           | 25.0        | 1           | 8.3        | 4           | 33          | 8           | 67          | 0                       | 0.0        |
| 6      | Chhattisgarh         | 602                   | 0.01       | 14.65 | 0.01 | 15.34 | 143         | 23.8        | 58         | 9.6        | 36         | 6.0        | 253         | 42.0        | 71          | 11.8        | 28          | 4.7        | 237         | 39          | 352         | 58          | 13                      | 2.2        |
| 7      | Dadra & Nagar Haveli | 18                    | 0.08       | 2.39  | 0.06 | 8.75  | 1           | 5.6         | 1          | 5.6        | 0          | 0.0        | 9           | 50.0        | 4           | 22.2        | 3           | 16.7       | 2           | 11          | 16          | 89          | 0                       | 0.0        |
| 8      | Daman & Diu          | 11                    | 0.04       | 2.66  | 0.02 | 0.52  | 5           | 45.5        | 2          | 18.2       | 0          | 0.0        | 2           | 18.2        | 2           | 18.2        | 0           | 0.0        | 7           | 64          | 4           | 36          | 0                       | 0.0        |
| 9      | Delhi                | 73                    | 0          | 13.23 | 0.05 | 8.88  | 28          | 38.4        | 5          | 6.8        | 3          | 4.1        | 12          | 16.4        | 16          | 21.9        | 9           | 12.3       | 36          | 49          | 37          | 51          | 0                       | 0.0        |
| 10     | Goa                  | 64                    | 0.01       | 8.29  | 0    | 4.29  | 17          | 26.6        | 0          | 0.0        | 1          | 1.6        | 43          | 67.2        | 2           | 3.1         | 1           | 1.6        | 18          | 28          | 46          | 72          | 0                       | 0.0        |
| 11     | Gujarat              | 697                   | 0.01       | 12.36 | 0.02 | 18.96 | 169         | 24.2        | 59         | 8.5        | 32         | 4.6        | 284         | 40.7        | 77          | 11.0        | 76          | 10.9       | 260         | 37          | 437         | 63          | 0                       | 0.0        |
| 12     | Haryana              | 279                   | 0.01       | 8     | 0.02 | 19.12 | 79          | 28.3        | 9          | 3.2        | 6          | 2.2        | 106         | 38.0        | 37          | 13.3        | 41          | 14.7       | 94          | 34          | 184         | 66          | 1                       | 0.4        |
| 13     | Himachal Pradesh     | 101                   | 0.04       | 6.63  | 0.11 | 3.86  | 69          | 68.3        | 10         | 9.9        | 2          | 2.0        | 15          | 14.9        | 5           | 5.0         | 0           | 0.0        | 81          | 80          | 20          | 20          | 0                       | 0.0        |
| 14     | Jammu & Kashmir      | 204                   | 0.01       | 4.29  | 0    | 4.32  | 78          | 38.2        | 7          | 3.4        | 1          | 0.5        | 104         | 51.0        | 12          | 5.9         | 2           | 1.0        | 86          | 42          | 118         | 58          | 0                       | 0.0        |
| 15     | Jharkhand            | 271                   | 0.03       | 5.31  | 0.02 | 9.97  | 81          | 29.9        | 19         | 7.0        | 3          | 1.1        | 131         | 48.3        | 27          | 10.0        | 10          | 3.7        | 103         | 38          | 168         | 62          | 0                       | 0.0        |
| 16     | Karnataka            | 1098                  | 0.01       | 14.72 | 0.0  | 17.22 | 157         | 14.3        | 34         | 3.1        | 26         | 2.4        | 595         | 54.2        | 207         | 18.9        | 79          | 7.2        | 217         | 20          | 881         | 80          | 0                       | 0.0        |
| 17     | Kerala               | 1427                  | 0.0        | 7.01  | 0.0  | 10.09 | 623         | 43.7        | 31         | 2.2        | 7          | 0.5        | 701         | 49.1        | 48          | 3.4         | 13          | 0.9        | 661         | 46          | 762         | 53          | 4                       | 0.3        |
| 18     | Madhya Pradesh       | 1319                  | 0.01       | 17.72 | 0.01 | 18.91 | 451         | 34.2        | 121        | 9.2        | 75         | 5.7        | 475         | 36.0        | 114         | 8.6         | 83          | 6.3        | 647         | 49          | 672         | 51          | 0                       | 0.0        |
| 19     | Maharashtra          | 1645                  | 0.0        | 18.42 | 0.0  | 18.01 | 314         | 19.1        | 61         | 3.7        | 26         | 1.6        | 698         | 42.4        | 342         | 20.8        | 201         | 12.2       | 401         | 24          | 1241        | 75          | 3                       | 0.2        |
| 20     | Meghalaya            | 53                    | 0.01       | 6.2   | 0.09 | 1.21  | 37          | 69.8        | 1          | 1.9        | 1          | 1.9        | 14          | 26.4        | 0           | 0.0         | 0           | 0.0        | 39          | 74          | 14          | 26          | 0                       | 0.0        |
| 21     | Odisha               | 1064                  | 0.01       | 7.07  | 0.01 | 4.78  | 593         | 55.7        | 110        | 10.3       | 27         | 2.5        | 311         | 29.2        | 19          | 4.0         | 4           | 0.4        | 730         | 69          | 334         | 31          | 0                       | 0.0        |
| 22     | Pondicherry          | 6                     |            |       | 0.13 | 2.58  | 0           | 0.0         | 0          | 0.0        | 0          | 0.0        | 5           | 83.3        | 1           | 16.7        | 0           | 0.0        | 0           | 0           | 6           | 100         | 0                       | 0.0        |
| 23     | Punjab               | 245                   | 0.0        | 15.11 | 0.02 | 9.94  | 67          | 27.3        | 5          | 2.0        | 2          | 0.8        | 101         | 41.2        | 30          | 12.2        | 39          | 15.9       | 74          | 30          | 170         | 69          | 1                       | 0.4        |
| 24     | Rajasthan            | 893                   | 0.0        | 14    | 0.01 | 18.43 | 202         | 22.6        | 51         | 5.7        | 48         | 5.4        | 324         | 36.3        | 119         | 13.3        | 145         | 16.2       | 301         | 34          | 588         | 66          | 4                       | 0.4        |
| 25     | Tamil Nadu           | 612                   | 0.0        | 11.53 | 0.02 | 12.54 | 126         | 20.6        | 27         | 4.4        | 17         | 2.8        | 214         | 35.0        | 129         | 21.1        | 99          | 16.2       | 170         | 28          | 442         | 72          | 0                       | 0.0        |
| 26     | Telangana            | 557                   | 0.01       | 10.15 | 0.01 | 13.97 | 149         | 26.8        | 23         | 4.1        | 16         | 2.9        | 186         | 33.4        | 84          | 15.1        | 96          | 17.2       | 188         | 34          | 366         | 66          | 3                       | 0.5        |
| 27     | Tripura              | 75                    | 0.01       | 3.99  | 0.01 | 3.21  | 28          | 37.3        | 3          | 4.0        | 0          | 0.0        | 41          | 54.7        | 3           | 4.0         | 0           | 0.0        | 31          | 41          | 44          | 59          | 0                       | 0.0        |
| 28     | Uttar Pradesh        | 592                   | 0          | 12.94 | 0    | 13.07 | 144         | 24.3        | 14         | 2.4        | 4          | 0.7        | 354         | 59.8        | 58          | 9.8         | 17          | 2.9        | 162         | 27          | 429         | 72          | 1                       | 0.2        |
| 29     | Uttarakhand          | 42                    | 0.01       | 5.45  | 0.02 | 12.83 | 12          | 28.6        | 2          | 4.8        | 1          | 2.4        | 17          | 40.5        | 5           | 11.9        | 5           | 11.9       | 15          | 36          | 27          | 64          | 0                       | 0.0        |
| 30     | West Bengal          | 653                   | 0.01       | 12.09 | 0    | 16.09 | 278         | 42.6        | 71         | 10.9       | 22         | 3.4        | 194         | 29.7        | 54          | 8.3         | 31          | 4.7        | 371         | 57          | 279         | 43          | 3                       | 0.5        |
|        | <b>Total</b>         | <b>14194</b>          |            |       |      |       | <b>4281</b> | <b>30.2</b> | <b>782</b> | <b>5.5</b> | <b>374</b> | <b>2.6</b> | <b>6010</b> | <b>42.3</b> | <b>1649</b> | <b>11.6</b> | <b>1058</b> | <b>7.5</b> | <b>5437</b> | <b>38.3</b> | <b>8717</b> | <b>61.4</b> | <b>40</b>               | <b>0.3</b> |

Annexure referred to in reply to part (a) & (b) of Starred Question No. \*367 to be answered in Lok Sabha on 19.03.2020 regarding "Ground Water Depletion".

**State-wise Pre-monsoon 2019 Ground Water level in India**

| S. No.       | Name of State            | No. of wells Analysed | Depth to Water Level (mbgl) |               | Number & Percentage of Wells Showing Depth to Water Level (mbgl) in the Range of |            |             |             |             |             |             |             |            |            |            |            |
|--------------|--------------------------|-----------------------|-----------------------------|---------------|--|------------|-------------|-------------|-------------|-------------|-------------|-------------|------------|------------|------------|------------|
|              |                          |                       | Min                         | Max           | 0-2  |            | 2-5         |             | 5-10        |             | 10-20       |             | 20-40      |            | > 40       |            |
|              |                          |                       |                             |               | No   | %          | No          | %           | No          | %           | No          | %           | No         | %          | No         | %          |
| 1            | Andaman & Nicobar Island | 106                   | 0.04                        | 10            | 80   | 75.5       | 19          | 17.9        | 7           | 6.6         | 0           | 0.0         | 0          | 0.0        | 0          | 0.0        |
| 2            | Andhra Pradesh           | 721                   | 0.31                        | 60.00         | 54   | 7.5        | 266         | 36.9        | 268         | 37.2        | 118         | 16.4        | 10         | 1.4        | 5          | 0.7        |
| 3            | Arunachal Pradesh        | 18                    | 2.25                        | 4.82          | 10   | 55.6       | 3           | 16.7        | 4           | 22.2        | 1           | 5.6         | 0          | 0.0        | 0          | 0.0        |
| 4            | Assam                    | 237                   | 0.14                        | 17.39         | 42   | 17.7       | 141         | 59.5        | 46          | 19.4        | 8           | 3.4         | 0          | 0.0        | 0          | 0.0        |
| 5            | Bihar                    | 621                   | 0.74                        | 16.11         | 10   | 1.6        | 215         | 34.6        | 348         | 56.0        | 48          | 7.7         | 0          | 0.0        | 0          | 0.0        |
| 6            | Chandigarh               | 13                    | 3.02                        | 47.64         | 0  | 0.0        | 3           | 23.1        | 1           | 7.7         | 3           | 23.1        | 4          | 30.8       | 2          | 15.4       |
| 7            | Chhattisgarh             | 650                   | 0.60                        | 40.00         | 7  | 1.1        | 126         | 19.4        | 401         | 61.7        | 109         | 16.8        | 7          | 1.1        | 0          | 0.0        |
| 8            | Dadra & Nagar Haveli     | 18                    | 3.80                        | 19.90         | 0  | 0.0        | 3           | 16.7        | 6           | 33.3        | 9           | 50.0        | 0          | 0.0        | 0          | 0.0        |
| 9            | Daman & Diu              | 11                    | 1.83                        | 9.05          | 1  | 9.1        | 3           | 27.3        | 7           | 63.6        | 0           | 0.0         | 0          | 0.0        | 0          | 0.0        |
| 10           | Delhi                    | 73                    | 1.07                        | 62.64         | 4  | 5.5        | 12          | 16.4        | 18          | 24.7        | 20          | 27.4        | 13         | 17.8       | 6          | 8.2        |
| 11           | Goa                      | 64                    | 1.75                        | 14.95         | 3  | 4.7        | 28          | 43.8        | 24          | 37.5        | 9           | 14.1        | 0          | 0.0        | 0          | 0.0        |
| 12           | Gujarat                  | 699                   | 0.00                        | 59.90         | 9  | 1.3        | 110         | 15.7        | 239         | 34.2        | 243         | 34.8        | 92         | 13.2       | 6          | 0.9        |
| 13           | Haryana                  | 288                   | 0.48                        | 87.11         | 11   | 3.8        | 64          | 22.2        | 67          | 23.3        | 75          | 26.0        | 59         | 20.5       | 12         | 4.2        |
| 14           | Himachal Pradesh         | 101                   | 0.62                        | 28.70         | 15   | 14.9       | 39          | 38.6        | 21          | 20.8        | 20          | 19.8        | 6          | 5.9        | 0          | 0.0        |
| 15           | Jammu & Kashmir          | 204                   | 0.85                        | 38.70         | 28   | 13.7       | 102         | 50.0        | 51          | 25.0        | 15          | 7.4         | 8          | 3.9        | 0          | 0.0        |
| 16           | Jharkhand                | 278                   | 0.00                        | 16.25         | 5  | 1.8        | 35          | 12.6        | 179         | 64.4        | 59          | 21.2        | 0          | 0.0        | 0          | 0.0        |
| 17           | Karnataka                | 1102                  | 1.15                        | 27.30         | 33   | 3.0        | 235         | 21.3        | 510         | 46.3        | 318         | 28.9        | 6          | 0.5        | 0          | 0.0        |
| 18           | Kerala                   | 1441                  | 0.31                        | 55.23         | 88   | 6.1        | 411         | 28.5        | 633         | 43.9        | 283         | 19.6        | 25         | 1.7        | 1          | 0.1        |
| 19           | Madhya Pradesh           | 1319                  | 0.00                        | 49.62         | 16   | 1.2        | 171         | 13.0        | 606         | 45.9        | 462         | 35.0        | 60         | 4.5        | 4          | 0.3        |
| 20           | Maharashtra              | 1680                  | 0.01                        | 51.00         | 40   | 2.4        | 176         | 10.5        | 751         | 44.7        | 617         | 36.7        | 88         | 5.2        | 8          | 0.5        |
| 21           | Meghalaya                | 56                    | 0.51                        | 31.90         | 8  | 14.3       | 29          | 51.8        | 15          | 26.8        | 1           | 1.8         | 2          | 3.6        | 1          | 1.8        |
| 22           | Nagaland                 | 5                     | 1.15                        | 11.62         | 1  | 20.0       | 2           | 40.0        | 0           | 0.0         | 2           | 40.0        | 0          | 0.0        | 0          | 0.0        |
| 23           | Odisha                   | 1067                  | 0.00                        | 13.55         | 140  | 13.1       | 467         | 43.8        | 437         | 41.0        | 23          | 2.2         | 0          | 0.0        | 0          | 0.0        |
| 24           | Pondicherry              | 6                     | 2.51                        | 6.90          | 0  | 0.0        | 5           | 83.3        | 1           | 16.7        | 0           | 0.0         | 0          | 0.0        | 0          | 0.0        |
| 25           | Punjab                   | 251                   | 0.70                        | 43.43         | 6  | 2.4        | 45          | 17.9        | 56          | 22.3        | 76          | 30.3        | 64         | 25.5       | 4          | 1.6        |
| 26           | Rajasthan                | 922                   | 0.52                        | 128.15        | 13   | 1.4        | 75          | 8.1         | 201         | 21.8        | 263         | 28.5        | 195        | 21.1       | 175        | 19.0       |
| 27           | Tamil Nadu               | 630                   | 0.60                        | 103.40        | 26   | 4.1        | 119         | 18.9        | 267         | 42.4        | 177         | 28.1        | 32         | 5.1        | 9          | 1.4        |
| 28           | Telangana                | 560                   | 0.85                        | 99.50         | 7  | 1.3        | 83          | 14.8        | 202         | 36.1        | 189         | 33.8        | 66         | 11.8       | 13         | 2.3        |
| 29           | Tripura                  | 96                    | 0.45                        | 27.25         | 20   | 20.8       | 50          | 52.1        | 18          | 18.8        | 5           | 5.2         | 3          | 3.1        | 0          | 0.0        |
| 30           | Uttar Pradesh            | 593                   | 0.29                        | 44.20         | 9  | 1.5        | 174         | 29.3        | 272         | 45.9        | 113         | 19.1        | 23         | 3.9        | 2          | 0.3        |
| 31           | Uttarakhand              | 44                    | 1.98                        | 71.90         | 1  | 2.3        | 13          | 29.5        | 11          | 25.0        | 16          | 36.4        | 1          | 2.3        | 2          | 4.5        |
| 32           | West Bengal              | 681                   | 0.32                        | 36.82         | 64   | 9.4        | 209         | 30.7        | 266         | 39.1        | 120         | 17.6        | 22         | 3.2        | 0          | 0.0        |
| <b>Total</b> |                          | <b>14555</b>          | <b>0.00</b>                 | <b>128.15</b> | <b>751</b>   | <b>5.2</b> | <b>3433</b> | <b>23.6</b> | <b>5933</b> | <b>40.8</b> | <b>3402</b> | <b>23.4</b> | <b>786</b> | <b>5.4</b> | <b>250</b> | <b>1.7</b> |

**Annexure referred to in reply to part (h) of Starred Question No. \*367 to be answered in Lok Sabha on 19.03.2020 regarding “Ground Water Depletion”.**

**List of 11 Schemes being implemented by TWAD Board in Tamil Nadu**

| Sl No. | Details of Scheme  |
|--------|--|
| 1      | CWSS to 293 Habs in Trichy District.   |
| 2      | CWSS to Keeranur, Neikkarapatty Town panchayats and 253 Rural habitations in Dindigul District   |
| 3      | CWSS to Annur and Mooperipalayam TP in Coimbatore District. Bulk quantity to 155 Rural Habitations in Palladam and Tiruppur Unions in Tiruppur           |
| 4      | CWSS to Alampalayam TP, Pdaveedu TP including 669 Rural habitations in Pallipalayam and Tiruchengode Unions in Namakkal District and Sankari TP in Salem |
| 5      | CWSS to Perundurai and 7 other Town Panchayats including 547 wayside Rural Habitations in Erode and Tiruppur districts                                   |
| 6      | Augmentation of Water Supply to Tiruchengode Municipality in Namakkal district   |
| 7      | Augmentation of Water supply to Thiruchengode Municipality (IUDM)  |
| 8      | Water Supply Scheme to M/s MRF Limited Naranamangalam in Perambalur district   |
| 9      | Water Supply Scheme to Inam Karur Mpty. (KfW/ULB/CGF)  |
| 10     | Water Supply Scheme to Namakkal Municipality (TNSUDP – TNUDF/PSGF/ULB/IUDM)  |
| 11     | Water Supply Scheme to Musiri Town Panchayat   |

Annexure referred to in reply to part (h) of Starred Question No. \*367 to be answered in Lok Sabha on 19.03.2020 regarding "Ground Water Depletion".

### Status of Implementation of new Cauvery Water Schemes

| Sl. No | Name of scheme   | Project Cost (Rs.in Crore) | Population benefitted in Lakhs | Present Status  |
|--------|--|----------------------------|--------------------------------|---|
| 1      | Combined Water Supply Scheme to Ilampillai, Attayampatti, Panaramarathupatti, Mallur and Edanganasalai Town Panchayats and 778 Rural Habitations in Veerapandy, Panamarathupatti and Salem Unions in Salem District  | 762.00                     | 4.44                           | Administrative Sanction to be accorded by the Government of TamilNadu |
| 2      | Combined Water Supply Scheme to Rasipuram Municipality, Vennandur, Athanur, Pillanallur, Namagiripettai, Pattanam, Seerapalli, R.Pudupatty and Mallasamudram Town Panchayats and 823 rural habitations in Rasipuram, Vennandur, Namagiripettai and Puduchatram unions in Namakkal District | 865.00                     | 4.43                           | Detailed Project Report prepared.                                     |
| 3      | Combined Water Supply Scheme to 314 rural habitations in Aravakurichi and K.Paramathi unions of Karur District   | 310.87                     | 1.49                           | Detailed Project Report prepared.                                     |
| 4      | Combined Water Supply Scheme to 297 rural habitations in Modakurichi Union of Erode District   | 230.00                     | 1.13                           | Detailed Project Report under preparation                             |
| 5      | Combined Water Supply Scheme to 86 rural habitations in Kodumudi Union of Erode District   | 110.00                     | 0.31                           | Detailed Project Report under preparation                             |
| 6      | Combined Water Supply Scheme to 8 Town Panchayats, 2452 Rural habitations in 11 unions with Bulk Provision to 3 Municipalities in Sivagangai District  | 1752.73                    | 11.40                          | Administrative Sanction to be accorded by the Government of TamilNadu |
| 7      | CWSS to 472 rural habitations in Papanasam and Ammapettai Unions of Thanjavur District   | 275.00                     | 1.80                           | Detailed Project Report under preparation                             |
| 8      | CWSS to 134 Rural Habitations in Kumbakonam Union of Thanjavur District  | 91.13                      | 0.76                           | Administrative Sanction to be accorded by the Government of TamilNadu |
| 9      | CWSS to 124 rural habitations in Kumbakonam, Thiruvaidaimathur & Thirupanandal Unions & 2 hamlets in Muthur & Thiruvaidaimarudur Town Panchayats in Thanjavur District   | 45.00                      | 0.98                           | Detailed Project Report under preparation                             |
| 10     | CWSS to 200 habitations in Ialgudi & Pullambadi union of Trichy District   | 65.00                      | 1.26                           | Detailed Project Report under preparation                             |
| 11     | Creation of an Additional Source with Pump House to CWSS to 893 Habitations in Nagappattinam District  | 42.46                      | 7.03                           | Administrative Sanction to be accorded by the Government of TamilNadu |
| 12     | CWSS to 1032 habitations in Thiruvavur, Mannargudi, Kottur, Thiruthuraiipoondi, Nannilam and Koradachery in Six unions of Thiruvavur District  | 870.00                     | 3.45                           | Detailed Project Report Prepared and under Scrutiny.                  |
| 13     | CWSS to 2 Town Panchayats, 1154 Habitations in Vellore District, 9 Town Panchayats, 1673 Habitations in Ranipet District, 2090 Habitations in Thirupathur District, 4 Municipalities, 10 Town Panchayats and 4468 Habitations in Thiruvannamalai District with River Cauvery as source.    | 9000.00                    | 47.38                          | Detailed Project Report under preparation                             |

\*\*\*\*\*

