#### **GOVERNMENT OF INDIA**

#### MINISTRY OF JAL SHAKTI

#### DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION

#### **RAJYA SABHA**

#### **UNSTARRED QUESTION NO. 244**

ANSWERED ON 05.02.2024

#### GROUNDWATER LEVEL IN HARYANA

#### 244. SHRI KARTIKEYA SHARMA

Will the Minister of JAL SHAKTI be pleased to state:

- (a) whether Government has surveyed the groundwater level/groundwater table in the country and if so, the details thereof;
- (b) the measures taken/proposed to be taken by Government to increase the existing groundwater level;
- (c) whether Government has formed a committee to monitor the groundwater level; and
- (d) if so, the details of the groundwater level and the status during the last five years especially mentioning the critical areas of Haryana, district-wise?

#### **ANSWER**

#### THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI BISHWESWAR TUDU)

- (a) Central Ground Water Board (CGWB) regularly monitors groundwater levels throughout the country on a regional scale, four times every year through its network of Monitoring Wells. The details of state-wise Ground water post-Monsoon levels measured for the Month of November 2023 are given in **Annexure-I**. During November 2023, about 60.2% of the wells monitored in the country have registered the water levels between 0-5 mbgl (metres below ground level).
- **(b)** Water being a State subject, the issues related to development, regulation and management of ground water is primarily the responsibility of the state governments. The Central Government provides technical support and financial assistance through its institutions and various centrally sponsored schemes.

Some of the important measures taken by the Central Government for improving the ground water situation in the country are listed below: -

- i. Government of India is implementing Jal Shakti Abhiyan (JSA) in the country in which special emphasis is being given for rainwater harvesting / groundwater recharge. First JSA was launched in 2019 in water stressed blocks of 256 districts. JSA is being continued in the year 2023-24 as well.
- ii. Hon'ble Prime Minister has launched Amrit Sarovar Mission on 24<sup>th</sup> April 2022. The Mission is aimed at developing and rejuvenating 75 water bodies in each district of the country as a part of celebration of Azadi ka Amrit Mahotsav.

- iii. Ministry of Jal Shakti (MoJS) has launched Atal Bhujal Yojana in 8213 water stressed Gram Panchayats of 7 states, which is a community led scheme for participatory ground water management focussing on demand side management of ground water. Under this scheme, inter alia, states are incentivized for adopting water efficient water use agricultural practices like switching over to drips/sprinklers, crop diversification to less water incentive crops, mulching etc.
- iv. MoJS has also issued advisories to States/UTs to review their free/subsidized electricity policy to farmers, bring suitable water pricing policy and may work further towards crop rotation/diversification/other initiatives to reduce over-dependence on groundwater.
- v. MoJS is promoting conjunctive use of surface water and groundwater and to reduce overdependence on groundwater, surface water based Major and Medium irrigation projects have been taken up in the country under PMKSY-AIBP scheme in collaboration with States/UTs.
- vi. Bureau of Water Use Efficiency (BWUE) has been set up under MoJS to plan and execute nation-wide program for promotion of efficient use of water in irrigation, domestic water supply, municipal and/or industrial uses in the country.
- vii. National Aquifer Mapping and Management Programme (NAQUIM) is being implemented with the objectives to delineate and characterize the aquifers geometry and develop plans for sustainable ground water management. Aquifer mapping and management program has been completed by 31.03.2023 and has covered about 25 lakh sq.km of mappable area of the country. Further, aquifer maps and management plans are being shared with the States for suitable demand side and supply side interventions.
- viii. The Central Government finances the construction of water harvesting and water conservation structures across the country through the Mahatma Gandhi National Employment Guarantee Scheme (MNREGS) and Pradhan Mantri Krishi Sinchayee Yojana- Watershed Development Component (PMKSY-WDC).
- ix. In addition, a number of States have done notable work in the field of water conservation/harvesting such as 'Mukhyamantri Jal Swavlamban Abhiyan' in Rajasthan, 'JalyuktShibar' in Maharashtra, 'Sujalam Sufalam Abhiyan' in Gujarat, 'Mission Kakatiya' in Telangana, NeeruChettu' in Andhra Pradesh, Jal Jeevan Hariyali in Bihar, 'Jal Hi Jeevan' in Haryana, and Kudimaramath scheme in Tamil Nadu etc.
- (c) Ground water levels throughout the country are regularly monitored by Central Ground Water Board (CGWB), an organization under this Ministry.
- (d) The details of ground water levels for the state of Haryana measured in the period of last 5 years (2019-2023) are shown in **Annexure-II**. Further, the district-wise details are provided in **Annexure-III**. From these ground water level measurements, it is seen that in the state of Haryana, the general range of water level lies within 10 to 40 mbgl and deeper water levels in the range above 40 mbgl have been recorded mainly in districts like Kurukshetra, Mahendragarh & Charkhi Dadri in last five years.

ANNEXURE REFERRED TO IN REPLY TO PART (a) OF RAJYA SABHA UNSTARRED QUESTION NO. 244 TO BE ANSWERED ON 05.02.2024 REGARDING "GROUNDWATER LEVEL IN HARYANA"

State-wise Depth to water Level and Distribution of Percentage of Wells for the Period of November, 2023

|         |  | No of    | No./Po | ercenta | ge of V | Vells S |      | ing De <sub>l</sub><br>Range |      | Wate | r Levo | el (mbg | l) in t | he   |
|---------|--|----------|--------|---------|---------|---------|------|------------------------------|------|------|--------|---------|---------|------|
| Sr. No. | State Name                                 | well     | 0 to   | 2       | 2 to    | n 5     |      | to 10                        | 10 t | o 20 | 20     | to 40   | >       | 40   |
|         |  | analysed | No.    | %       | No.     | %       | No.  | %                            | No.  | %    | No.    | %       | No.     | %    |
| 1.      | Andhra Pradesh                             | 809      | 109    | 13.5    | 382     | 47.2    | 241  | 29.8                         | 54   | 6.7  | 16     | 2.0     | 7       | 0.9  |
| 2.      | Arunachal Pradesh                          |          | 12     | 42.9    | 8       | 28.6    | 7    | 25.0                         | 1    | 3.6  | 0      | 0.0     | 0       | 0.0  |
| 3.      | Assam                                      | 318      | 125    | 39.3    | 156     | 49.1    | 30   | 9.4                          | 6    | 1.9  | 1      | 0.3     | 0       | 0.0  |
|         | Bihar                                      | 784      | 116    | 14.8    | 525     | 67.0    | 139  | 17.7                         | 4    | 0.5  | 0      | 0.0     | 0       | 0.0  |
| 5.      | Chhattisgarh                               | 1046     | 172    | 16.4    | 628     | 60.0    | 228  | 21.8                         | 16   | 1.5  | 2      | 0.2     | 0       | 0.0  |
|         | Goa  | 82       | 17     | 20.7    | 38      | 46.3    | 21   | 25.6                         | 6    | 7.3  | 0      | 0.0     | 0       | 0.0  |
| 7.      | Gujarat                                    | 753      | 105    | 13.9    | 305     | 40.5    | 215  | 28.6                         | 96   | 12.7 | 26     | 3.5     | 6       | 0.8  |
| 8.      | Haryana                                    | 985      | 71     | 7.2     | 160     | 16.2    | 154  | 15.6                         | 198  | 20.1 | 253    | 25.7    | 149     | 15.1 |
|         | Himachal Pradesh                           | 171      | 30     | 17.5    | 69      | 40.4    | 30   | 17.5                         | 26   | 15.2 | 12     | 7.0     | 4       | 2.3  |
| 10.     | Jharkhand                                  | 396      | 51     | 12.9    | 216     | 54.5    | 114  | 28.8                         | 8    | 2.0  | 7      | 1.8     | 0       | 0.0  |
| 11.     | Karnataka                                  | 1264     | 228    | 18.0    | 504     | 39.9    | 454  | 35.9                         | 75   | 5.9  | 3      | 0.2     | 0       | 0.0  |
| 12.     | Kerala                                     | 1377     | 323    | 23.5    | 477     | 34.6    | 485  | 35.2                         | 85   | 6.2  | 5      | 0.4     | 2       | 0.1  |
| 13.     | Madhya Pradesh                             | 1470     | 151    | 10.3    | 654     | 44.5    | 501  | 34.1                         | 147  | 10.0 | 12     | 0.8     | 5       | 0.3  |
| 14.     | Maharashtra                                | 1658     | 248    | 15.0    | 706     | 42.6    | 526  | 31.7                         | 141  | 8.5  | 32     | 1.9     | 5       | 0.3  |
| 15.     | Meghalaya                                  | 51       | 23     | 45.1    | 27      | 52.9    | 1    | 2.0                          | 0    | 0.0  | 0      | 0.0     | 0       | 0.0  |
| 16.     | Mizoram                                    | 2        | 2      | 100.0   | 0       | 0.0     | 0    | 0.0                          | 0    | 0.0  | 0      | 0.0     | 0       | 0.0  |
| 17.     | Nagaland                                   | 10       | 0      | 0.0     | 6       | 60.0    | 3    | 30.0                         | 1    | 10.0 | 0      | 0.0     | 0       | 0.0  |
| 18.     | Odisha                                     | 1370     | 528    | 38.5    | 694     | 50.7    | 142  | 10.4                         | 6    | 0.4  | 0      | 0.0     | 0       | 0.0  |
| 19.     | Punjab                                     | 283      | 29     | 10.2    | 55      | 19.4    | 34   | 12.0                         | 65   | 23.0 | 81     | 28.6    | 19      | 6.7  |
| 20.     | Rajasthan                                  | 1061     | 27     | 2.5     | 171     | 16.1    | 195  | 18.4                         | 234  | 22.1 | 194    | 18.3    | 240     | 22.6 |
| 21.     | Tamil Nadu                                 | 857      | 186    | 21.7    | 359     | 41.9    | 239  | 27.9                         | 60   | 7.0  | 11     | 1.3     | 2       | 0.2  |
| 22.     | Telangana                                  | 623      | 58     | 9.3     | 278     | 44.6    | 204  | 32.7                         | 72   | 11.6 | 9      | 1.4     | 2       | 0.3  |
| 23.     | Tripura                                    | 96       | 26     | 27.1    | 57      | 59.4    | 13   | 13.5                         | 0    | 0.0  | 0      | 0.0     | 0       | 0.0  |
| 24.     | Uttar Pradesh                              | 1092     | 179    | 16.4    | 481     | 44.0    | 265  | 24.3                         | 133  | 12.2 | 30     | 2.7     | 4       | 0.4  |
| 25.     | Uttarakhand                                | 171      | 17     | 9.9     | 48      | 28.1    | 35   | 20.5                         | 31   | 18.1 | 25     | 14.6    | 15      | 8.8  |
| 26.     | West Bengal                                | 736      | 224    | 30.4    | 413     | 56.1    | 85   | 11.5                         | 14   | 1.9  | 0      | 0.0     | 0       | 0.0  |
| ')'/    | Andaman and<br>Nicobar                     | 111      | 103    | 92.8    | 8       | 7.2     | 0    | 0.0                          | 0    | 0.0  | 0      | 0.0     | 0       | 0.0  |
| 28.     | Chandigarh                                 | 14       | 0      | 0.0     | 5       | 35.7    | 2    | 14.3                         | 2    | 14.3 | 4      | 28.6    | 1       | 7.1  |
| 29.     | Daman & Diu and<br>Dadra & Nagar<br>Haveli | 30       | 7      | 23.3    | 17      | 56.7    | 6    | 20.0                         | 0    | 0.0  | 0      | 0.0     | 0       | 0.0  |
| 30.     | Delhi                                      | 119      | 9      | 7.6     | 30      | 25.2    | 39   | 32.8                         | 26   | 21.8 | 11     | 9.2     | 4       | 3.4  |
| 4 1     | Jammu and<br>Kashmir                       | 385      | 96     | 24.9    | 173     | 44.9    | 59   | 15.3                         | 27   | 7.0  | 21     | 5.5     | 9       | 2.3  |
| 32.     | Puducherry                                 | 9        | 2      | 22.2    | 5       | 55.6    | 2    | 22.2                         | 0    | 0.0  | 0      | 0.0     | 0       | 0.0  |
|         | Total                                      | 18161    | 3274   | 18.0    | 7655    | 42.2    | 4469 | 24.6                         | 1534 | 8.4  | 755    | 4.2     | 474     | 2.6  |

### **ANNEXURE-II**

ANNEXURE REFERRED TO IN REPLY TO PART (d) OF RAJYA SABHA UNSTARRED QUESTION NO. 244 TO BE ANSWERED ON 05.02.2024 REGARDING "GROUNDWATER LEVEL IN HARYANA"

### Depth to Water Level Distribution and Percentage of Observation Wells for the period 2019-2023 for Haryana

| Year | No. of wells Analysed | Nu  | mber & | Perce | entage | of We | ells Showin | g Dept | h to Wa | ter Lev | el (mbgl | ) in the | Range of |
|------|-----------------------|-----|--------|-------|--------|-------|-------------|--------|---------|---------|----------|----------|----------|
|      |                       | 0-2 | %      | 2-5   | %      | 5-10  | %           | 10-20  | %       | 20-40   | %        | >40      | %        |
| 2019 | 288                   | 32  | 11.11  | 55    | 19.1   | 69    | 23.96       | 61     | 21.18   | 60      | 20.83    | 11       | 3.82     |
| 2020 | 315                   | 24  | 7.6    | 66    | 21.0   | 52    | 16.5        | 77     | 24.4    | 66      | 21.0     | 30       | 9.5      |
| 2021 | 183                   | 14  | 7.7    | 40    | 21.9   | 34    | 18.6        | 50     | 27.3    | 35      | 19.1     | 10       | 5.5      |
| 2022 | 945                   | 91  | 9.6    | 173   | 18.3   | 132   | 14.0        | 203    | 21.5    | 240     | 25.4     | 106      | 11.2     |
| 2023 | 985                   | 71  | 7.2    | 160   | 16.2   | 154   | 15.6        | 198    | 20.1    | 253     | 25.7     | 149      | 15.1     |

ANNEXURE REFERRED TO IN REPLY TO PART (d) OF RAJYA SABHA UNSTARRED QUESTION NO. 244 TO BE ANSWERED ON 05.02.2024 REGARDING "GROUNDWATER LEVEL IN HARYANA"

# District-Wise Depth to Water Level Distribution and Percentage of Observation Wells November 2019 in respect of Haryana

| S. No. | Name of District | No. of wells Number & Percentage of Wells Showing Depth to Water Level (mbgl) in the Range of |    |          |    |      |    |          |    |          |    |       |    |      |  |
|--------|------------------|---|----|----------|----|------|----|----------|----|----------|----|-------|----|------|--|
|        |                  |   |    |          |    |      | _  |          | _  | _        |    |       |    |      |  |
|        |                  | Analysed  | 0  | -2       |    | 2-5  |    | -10      |    | -20      |    | 20-40 | >4 |      |  |
|        |                  |   | No | <b>%</b> | No | %    | No | <b>%</b> | No | <b>%</b> | No | %     | No | %    |  |
| 1      | AMBALA           | 10  | 4  | 40.0     | 1  | 10.0 | 1  | 10.0     | 2  | 20.0     | 1  | 10.0  | 1  | 10.0 |  |
| 2      | BHIWANI          | 27  | 3  | 11.1     | 7  | 25.9 | 3  | 11.1     | 10 | 37.0     | 4  | 14.8  | 0  | 0.0  |  |
| 3      | FARIDABAD        | 5   | 0  | 0.0      | 0  | 0.0  | 1  | 20.0     | 0  | 0.0      | 4  | 80.0  | 0  | 0.0  |  |
| 4      | FATEHABAD        | 7   | 1  | 14.3     | 4  | 57.1 | 2  | 28.6     | 0  | 0.0      | 0  | 0.0   | 0  | 0.0  |  |
| 5      | GURGAON          | 7   | 0  | 0.0      | 0  | 0.0  | 1  | 14.3     | 2  | 28.6     | 3  | 42.9  | 1  | 14.3 |  |
| 6      | HISAR            | 30  | 3  | 10.0     | 5  | 16.7 | 13 | 43.3     | 9  | 30.0     | 0  | 0.0   | 0  | 0.0  |  |
| 7      | JHAJJAR          | 11  | 5  | 45.5     | 6  | 54.5 | 0  | 0.0      | 0  | 0.0      | 0  | 0.0   | 0  | 0.0  |  |
| 8      | JIND             | 15  | 0  | 0.0      | 3  | 20.0 | 4  | 26.7     | 3  | 20.0     | 5  | 33.3  | 0  | 0.0  |  |
| 9      | KAITHAL          | 14  | 0  | 0.0      | 0  | 0.0  | 3  | 21.4     | 2  | 14.3     | 5  | 35.7  | 4  | 28.6 |  |
| 10     | KARNAL           | 17  | 0  | 0.0      | 0  | 0.0  | 5  | 29.4     | 2  | 11.8     | 10 | 58.8  | 0  | 0.0  |  |
| 11     | KURUKSHETRA      | 9   | 0  | 0.0      | 0  | 0.0  | 0  | 0.0      | 1  | 11.1     | 6  | 66.7  | 2  | 22.2 |  |
| 12     | MAHENDRAGARH     | 4   | 0  | 0.0      | 0  | 0.0  | 1  | 25.0     | 0  | 0.0      | 1  | 25.0  | 2  | 50.0 |  |
| 13     | MEWAT            | 6   | 1  | 16.7     | 4  | 66.7 | 1  | 16.7     | 0  | 0.0      | 0  | 0.0   | 0  | 0.0  |  |
| 14     | PALWAL           | 17  | 0  | 0.0      | 3  | 17.6 | 9  | 52.9     | 3  | 17.6     | 2  | 11.8  | 0  | 0.0  |  |
| 15     | PANCHKULA        | 20  | 3  | 15.0     | 3  | 15.0 | 7  | 35.0     | 4  | 20.0     | 3  | 15.0  | 0  | 0.0  |  |
| 16     | PANIPAT          | 11  | 1  | 9.1      | 1  | 9.1  | 2  | 18.2     | 3  | 27.3     | 4  | 36.4  | 0  | 0.0  |  |
| 17     | REWARI           | 7   | 0  | 0.0      | 1  | 14.3 | 0  | 0.0      | 3  | 42.9     | 2  | 28.6  | 1  | 14.3 |  |
| 18     | ROHTAK           | 10  | 5  | 50.0     | 2  | 20.0 | 1  | 10.0     | 2  | 20.0     | 0  | 0.0   | 0  | 0.0  |  |
| 19     | SIRSA            | 25  | 0  | 0.0      | 4  | 16.0 | 6  | 24.0     | 13 | 52.0     | 2  | 8.0   | 0  | 0.0  |  |
| 20     | SONIPAT          | 23  | 5  | 21.7     | 6  | 26.1 | 5  | 21.7     | 0  | 0.0      | 7  | 30.4  | 0  | 0.0  |  |
| 21     | YAMUNANAGAR      | 13  | 1  | 7.7      | 5  | 38.5 | 4  | 30.8     | 2  | 15.4     | 1  | 7.7   | 0  | 0.0  |  |
|        | Total            | 288   | 32 | 11.1     | 55 | 19.1 | 69 | 24.0     | 61 | 21.2     | 60 | 20.8  | 11 | 3.8  |  |

### District-Wise Depth to Water Level Distribution of Percentage of Observation Wells November, 2020 in respect of Haryana

| S. No. | Name of District | No. of<br>wells | Numb | er & P | ercentag | ,    |    | Show<br>he Ran | _  | •        | h to | Water | Level | (mbgl) |
|--------|------------------|-----------------|------|--------|----------|------|----|----------------|----|----------|------|-------|-------|--------|
|        |                  | Analysed        | 0    | -2     | 2-5      | 5    | 5  | 5-10           | 10 | -20      | 2    | 0-40  | >4    | 40     |
|        |                  |                 | No   | %      | No       | %    | No | %              | No | <b>%</b> | No   | %     | No    | %      |
| 1      | AMBALA           | 11              | 3    | 27.3   | 3        | 27.3 | 2  | 18.2           | 1  | 9.1      | 2    | 18.2  | 0     | 0.0    |
| 2      | BHIWANI          | 35              | 1    | 2.9    | 11       | 31.4 | 5  | 14.3           | 13 | 37.1     | 5    | 14.3  | 0     | 0.0    |
| 3      | FARIDABAD        | 3               | 0    | 0.0    | 0        | 0.0  | 1  | 33.3           | 0  | 0.0      | 1    | 33.3  | 1     | 33.3   |
| 4      | FATEHABAD        | 7               | 0    | 0.0    | 4        | 57.1 | 2  | 28.6           | 0  | 0.0      | 0    | 0.0   | 1     | 14.3   |
| 5      | GURGAON          | 12              | 0    | 0.0    | 0        | 0.0  | 0  | 0.0            | 2  | 16.7     | 5    | 41.7  | 5     | 41.7   |
| 6      | HISAR            | 29              | 0    | 0.0    | 9        | 31.0 | 7  | 24.1           | 11 | 37.9     | 1    | 3.4   | 1     | 3.4    |
| 7      | JHAJJAR          | 12              | 6    | 50.0   | 5        | 41.7 | 1  | 8.3            | 0  | 0.0      | 0    | 0.0   | 0     | 0.0    |
| 8      | JIND             | 20              | 2    | 10.0   | 1        | 5.0  | 2  | 10.0           | 5  | 25.0     | 7    | 35.0  | 3     | 15.0   |
| 9      | KAITHAL          | 14              | 0    | 0.0    | 0        | 0.0  | 2  | 14.3           | 2  | 14.3     | 5    | 35.7  | 5     | 35.7   |
| 10     | KARNAL           | 16              | 0    | 0.0    | 1        | 6.3  | 3  | 18.8           | 2  | 12.5     | 9    | 56.3  | 1     | 6.3    |
| 11     | KURUKSHETRA      | 6               | 0    | 0.0    | 0        | 0.0  | 0  | 0.0            | 0  | 0.0      | 4    | 66.7  | 2     | 33.3   |
| 12     | MAHENDRAGARH     | 7               | 0    | 0.0    | 0        | 0.0  | 1  | 14.3           | 0  | 0.0      | 3    | 42.9  | 3     | 42.9   |
| 13     | MEWAT            | 8               | 1    | 12.5   | 3        | 37.5 | 2  | 25.0           | 1  | 12.5     | 0    | 0.0   | 1     | 12.5   |

| 14 | PALWAL      | 12  | 0  | 0.0  | 2  | 16.7 | 5  | 41.7 | 3  | 25.0 | 1  | 8.3  | 1  | 8.3  |
|----|-------------|-----|----|------|----|------|----|------|----|------|----|------|----|------|
| 15 | PANCHKULA   | 20  | 1  | 5.0  | 4  | 20.0 | 6  | 30.0 | 6  | 30.0 | 3  | 15.0 | 0  | 0.0  |
| 16 | PANIPAT     | 13  | 0  | 0.0  | 3  | 23.1 | 1  | 7.7  | 3  | 23.1 | 4  | 30.8 | 2  | 15.4 |
| 17 | REWARI      | 10  | 0  | 0.0  | 0  | 0.0  | 0  | 0.0  | 3  | 30.0 | 5  | 50.0 | 2  | 20.0 |
| 18 | ROHTAK      | 12  | 1  | 8.3  | 6  | 50.0 | 1  | 8.3  | 4  | 33.3 | 0  | 0.0  | 0  | 0.0  |
| 19 | SIRSA       | 28  | 1  | 3.6  | 5  | 17.9 | 4  | 14.3 | 14 | 50.0 | 2  | 7.1  | 2  | 7.1  |
| 20 | SONIPAT     | 26  | 7  | 26.9 | 6  | 23.1 | 4  | 15.4 | 2  | 7.7  | 7  | 26.9 | 0  | 0.0  |
| 21 | YAMUNANAGAR | 14  | 1  | 7.1  | 3  | 21.4 | 3  | 21.4 | 5  | 35.7 | 2  | 14.3 | 0  | 0.0  |
|    | Total       | 315 | 24 | 7.6  | 66 | 21.0 | 52 | 16.5 | 77 | 24.4 | 66 | 21.0 | 30 | 9.5  |

### District-Wise Depth to Water Level Distribution of Percentage of Observation Wells November, 2021 in respect of Haryana

| S. No. | Name of District |                  | vells in the Range of |      |     |      |    |      |    |      |    |      |    |      |  |  |
|--------|------------------|------------------|-----------------------|------|-----|------|----|------|----|------|----|------|----|------|--|--|
|        |                  | Wens<br>Analysed | 0-                    | -2   | 2-5 |      |    | 5-10 | 0  | )-20 | 20 | 0-40 | >4 | 40   |  |  |
|        |                  | ·                | No                    | %    | No  | %    | No | %    | No | %    | No | %    | No | %    |  |  |
| 1      | AMBALA           | 7                | 2                     | 28.6 | 0   | 0.0  | 1  | 14.3 | 2  | 28.6 | 1  | 14.3 | 1  | 14.3 |  |  |
| 2      | BHIWANI          | 17               | 2                     | 11.8 | 4   | 23.5 | 2  | 11.8 | 7  | 41.2 | 2  | 11.8 | 0  | 0.0  |  |  |
| 3      | FARIDABAD        | 3                | 0                     | 0.0  | 0   | 0.0  | 1  | 33.3 | 0  | 0.0  | 2  | 66.7 | 0  | 0.0  |  |  |
| 4      | FATEHABAD        | 5                | 1                     | 20.0 | 3   | 60.0 | 1  | 20.0 | 0  | 0.0  | 0  | 0.0  | 0  | 0.0  |  |  |
| 5      | GURGAON          | 5                | 0                     | 0.0  | 0   | 0.0  | 1  | 20.0 | 2  | 40.0 | 1  | 20.0 | 1  | 20.0 |  |  |
| 6      | HISAR            | 15               | 0                     | 0.0  | 4   | 26.7 | 3  | 20.0 | 8  | 53.3 | 0  | 0.0  | 0  | 0.0  |  |  |
| 7      | JHAJJAR          | 5                | 2                     | 40.0 | 3   | 60.0 | 0  | 0.0  | 0  | 0.0  | 0  | 0.0  | 0  | 0.0  |  |  |
| 8      | JIND             | 10               | 0                     | 0.0  | 3   | 30.0 | 3  | 30.0 | 1  | 10.0 | 3  | 30.0 | 0  | 0.0  |  |  |
| 9      | KAITHAL          | 9                | 0                     | 0.0  | 0   | 0.0  | 2  | 22.2 | 2  | 22.2 | 2  | 22.2 | 3  | 33.3 |  |  |
| 10     | KARNAL           | 8                | 0                     | 0.0  | 0   | 0.0  | 2  | 25.0 | 2  | 25.0 | 4  | 50.0 | 0  | 0.0  |  |  |
| 11     | KURUKSHETRA      | 5                | 0                     | 0.0  | 0   | 0.0  | 0  | 0.0  | 1  | 20.0 | 2  | 40.0 | 2  | 40.0 |  |  |
| 12     | MAHENDRAGARH     | 4                | 0                     | 0.0  | 0   | 0.0  | 1  | 25.0 | 0  | 0.0  | 1  | 25.0 | 2  | 50.0 |  |  |
| 13     | MEWAT            | 5                | 0                     | 0.0  | 4   | 80.0 | 1  | 20.0 | 0  | 0.0  | 0  | 0.0  | 0  | 0.0  |  |  |
| 14     | PALWAL           | 9                | 0                     | 0.0  | 2   | 22.2 | 4  | 44.4 | 2  | 22.2 | 1  | 11.1 | 0  | 0.0  |  |  |
| 15     | PANCHKULA        | 10               | 1                     | 10.0 | 2   | 20.0 | 3  | 30.0 | 3  | 30.0 | 1  | 10.0 | 0  | 0.0  |  |  |
| 16     | PANIPAT          | 8                | 1                     | 12.5 | 0   | 0.0  | 1  | 12.5 | 3  | 37.5 | 3  | 37.5 | 0  | 0.0  |  |  |
| 17     | REWARI           | 6                | 0                     | 0.0  | 1   | 16.7 | 0  | 0.0  | 2  | 33.3 | 2  | 33.3 | 1  | 16.7 |  |  |
| 18     | ROHTAK           | 7                | 2                     | 28.6 | 2   | 28.6 | 1  | 14.3 | 2  | 28.6 | 0  | 0.0  | 0  | 0.0  |  |  |
| 19     | SIRSA            | 19               | 0                     | 0.0  | 3   | 15.8 | 3  | 15.8 | 11 | 57.9 | 2  | 10.5 | 0  | 0.0  |  |  |
| 20     | SONIPAT          | 17               | 2                     | 11.8 | 5   | 29.4 | 3  | 17.6 | 0  | 0.0  | 7  | 41.2 | 0  | 0.0  |  |  |
| 21     | YAMUNANAGAR      | 9                | 1                     | 11.1 | 4   | 44.4 | 1  | 11.1 | 2  | 22.2 | 1  | 11.1 | 0  | 0.0  |  |  |
|        | Total            | 183              | 14                    | 7.7  | 40  | 21.9 | 34 | 18.6 | 50 | 27.3 | 35 | 19.1 | 10 | 5.5  |  |  |

## District-Wise Depth to Water Level Distribution of Percentage of Observation wells November, 2022 in respect of Haryana

| S.No. | Name of District | No. of wells | Numbe                                   | er & Pe                                 | ercentag | ge of W |    | Showi<br>e Ran |     | pth to | Wat | er Leve | el (ml | bgl) in    |  |
|-------|------------------|--------------|---|---|----------|---------|----|----------------|-----|--------|-----|---------|--------|------------|--|
|       |                  | Analys       | 0-2                                     | 2-5                                     | 5-1      | 0       |    | 10             | -20 |        | 20  | -40     | ^      | <b>-40</b> |  |
|       |                  | ed           | No                                      | No % No % No % No % No % No             |          |         |    |                |     |        |     |         |        |            |  |
| 1     | AMBALA           | 46           | 10                                      | 10 21.7 13 28.3 6 13.0 11 23.9 5 10.9 1 |          |         |    |                |     |        |     |         |        |            |  |
| 2     | BHIWANI          | 116          | 1                                       | 0.9                                     | 32       | 27.6    | 18 | 15.5           | 27  | 23.3   | 21  | 18.1    | 17     | 14.7       |  |
| 3     | CHARKHI DADRI    | 47           | 4                                       | 8.5                                     | 13       | 27.7    | 3  | 6.4            | 8   | 17.0   | 4   | 8.5     | 15     | 31.9       |  |
| 4     | FARIDABAD        | 16           | 0                                       | 0.0                                     | 3        | 18.8    | 0  | 0.0            | 5   | 31.3   | 8   | 50.0    | 0      | 0.0        |  |
| 5     | FATEHABAD        | 33           | 4                                       | 12.1                                    | 7        | 21.2    | 5  | 15.2           | 5   | 15.2   | 6   | 18.2    | 6      | 18.2       |  |
| 6     | GURGAON          | 28           | 0 0.0 2 7.1 3 10.7 4 14.3 16 57.1 3 10. |   |          |         |    |                |     |        |     |         | 10.7   |            |  |

| 7  | HISAR        | 55  | 9  | 16.4 | 15  | 27.3 | 15  | 27.3 | 14  | 25.5 | 2   | 3.6  | 0   | 0.0  |
|----|--------------|-----|----|------|-----|------|-----|------|-----|------|-----|------|-----|------|
| 8  | JHAJJAR      | 33  | 17 | 51.5 | 13  | 39.4 | 2   | 6.1  | 1   | 3.0  | 0   | 0.0  | 0   | 0.0  |
| 9  | JIND         | 51  | 6  | 11.8 | 8   | 15.7 | 4   | 7.8  | 11  | 21.6 | 18  | 35.3 | 4   | 7.8  |
| 10 | KAITHAL      | 32  | 0  | 0.0  | 3   | 9.4  | 3   | 9.4  | 11  | 34.4 | 10  | 31.3 | 5   | 15.6 |
| 11 | KARNAL       | 103 | 0  | 0.0  | 4   | 3.9  | 20  | 19.4 | 21  | 20.4 | 58  | 56.3 | 0   | 0.0  |
| 12 | KURUKSHETRA  | 73  | 0  | 0.0  | 0   | 0.0  | 0   | 0.0  | 1   | 1.4  | 28  | 38.4 | 44  | 60.3 |
| 13 | MAHENDRAGARH | 22  | 0  | 0.0  | 1   | 4.5  | 0   | 0.0  | 2   | 9.1  | 12  | 54.5 | 7   | 31.8 |
| 14 | MEWAT        | 16  | 1  | 6.3  | 6   | 37.5 | 2   | 12.5 | 4   | 25.0 | 3   | 18.8 | 0   | 0.0  |
| 15 | PALWAL       | 22  | 1  | 4.5  | 4   | 18.2 | 5   | 22.7 | 10  | 45.5 | 2   | 9.1  | 0   | 0.0  |
| 16 | PANCHKULA    | 33  | 0  | 0.0  | 6   | 18.2 | 10  | 30.3 | 7   | 21.2 | 10  | 30.3 | 0   | 0.0  |
| 17 | PANIPAT      | 28  | 1  | 3.6  | 6   | 21.4 | 2   | 7.1  | 7   | 25.0 | 10  | 35.7 | 2   | 7.1  |
| 18 | REWARI       | 26  | 0  | 0.0  | 0   | 0.0  | 7   | 26.9 | 11  | 42.3 | 7   | 26.9 | 1   | 3.8  |
| 19 | ROHTAK       | 29  | 20 | 69.0 | 6   | 20.7 | 1   | 3.4  | 2   | 6.9  | 0   | 0.0  | 0   | 0.0  |
| 20 | SIRSA        | 46  | 0  | 0.0  | 7   | 15.2 | 8   | 17.4 | 25  | 54.3 | 5   | 10.9 | 1   | 2.2  |
| 21 | SONIPAT      | 56  | 16 | 28.6 | 16  | 28.6 | 10  | 17.9 | 6   | 10.7 | 8   | 14.3 | 0   | 0.0  |
| 22 | YAMUNANAGAR  | 34  | 1  | 2.9  | 8   | 23.5 | 8   | 23.5 | 10  | 29.4 | 7   | 20.6 | 0   | 0.0  |
|    | Total        | 945 | 91 | 9.6  | 173 | 18.3 | 132 | 14.0 | 203 | 21.5 | 240 | 25.4 | 106 | 11.2 |

District-Wise Depth to Water Level Distribution of Percentage of Observation Wells November, 2023 in respect of Haryana

| Sr. | District Name | No of    | No./ | Perce | ntag | ge of v  | vells | shov     |     | depth to wa | ater l | evel (ml | ogl) in | the      |
|-----|---------------|----------|------|-------|------|----------|-------|----------|-----|-------------|--------|----------|---------|----------|
| No. | District Name | wells    | 0 to | 2     | 2    | to 5     | 5 t   | o 10     |     | 10 to 20    | 20     | to 40    | >       | 40       |
|     |               | analysed | No.  | %     | No.  | <b>%</b> | No.   | <b>%</b> | No. | %           | No.    | %        | No.     | <b>%</b> |
| 1   | AMBALA        | 39       | 11   | 28.2  | 4    | 10.3     | 4     | 10.3     | 9   | 23.1        | 5      | 12.8     | 6       | 15.4     |
| 2   | BHIWANI       | 119      | 3    | 2.5   | 28   | 23.5     | 22    | 18.5     | 25  | 21.0        | 17     | 14.3     | 24      | 20.2     |
| 3   | CHARKHI DADRI | 48       | 1    | 2.1   | 18   | 37.5     | 5     | 10.4     | 5   | 10.4        | 4      | 8.3      | 15      | 31.3     |
| 4   | FARIDABAD     | 16       | 0    | 0.0   | 3    | 18.8     | 1     | 6.3      | 5   | 31.3        | 7      | 43.8     | 0       | 0.0      |
| 5   | FATEHABAD     | 31       | 2    | 6.5   | 6    | 19.4     | 3     | 9.7      | 4   | 12.9        | 10     | 32.3     | 6       | 19.4     |
| 6   | GURGAON       | 36       | 0    | 0.0   | 5    | 13.9     | 4     | 11.1     | 4   | 11.1        | 16     | 44.4     | 7       | 19.4     |
| 7   | HISAR         | 51       | 3    | 5.9   | 21   | 41.2     | 14    | 27.5     | 13  | 25.5        | 0      | 0.0      | 0       | 0.0      |
| 8   | JHAJJAR       | 36       | 12   | 33.3  | 20   | 55.6     | 1     | 2.8      | 3   | 8.3         | 0      | 0.0      | 0       | 0.0      |
| 9   | JIND          | 60       | 3    | 5.0   | 7    | 11.7     | 4     | 6.7      | 12  | 20.0        | 29     | 48.3     | 5       | 8.3      |
| 10  | KAITHAL       | 44       | 1    | 2.3   | 0    | 0.0      | 7     | 15.9     | 13  | 29.5        | 11     | 25.0     | 12      | 27.3     |
| 11  | KARNAL        | 119      | 0    | 0.0   | 0    | 0.0      | 25    | 21.0     | 22  | 18.5        | 71     | 59.7     | 1       | 0.8      |
| 12  | KURUKSHETRA   | 79       | 0    | 0.0   | 0    | 0.0      | 0     | 0.0      | 2   | 2.5         | 24     | 30.4     | 53      | 67.1     |
| 13  | MAHENDRAGARH  | 31       | 0    | 0.0   | 1    | 3.2      | 0     | 0.0      | 3   | 9.7         | 14     | 45.2     | 13      | 41.9     |
| 14  | MEWAT         | 12       | 1    | 8.3   | 4    | 33.3     | 0     | 0.0      | 1   | 8.3         | 3      | 25.0     | 3       | 25.0     |
| 15  | PALWAL        | 19       | 1    | 5.3   | 2    | 10.5     | 6     | 31.6     | 10  | 52.6        | 0      | 0.0      | 0       | 0.0      |
| 16  | PANCHKULA     | 29       | 2    | 6.9   | 3    | 10.3     | 8     | 27.6     | 9   | 31.0        | 7      | 24.1     | 0       | 0.0      |
| 17  | PANIPAT       | 21       | 2    | 9.5   | 4    | 19.0     | 3     | 14.3     | 6   | 28.6        | 5      | 23.8     | 1       | 4.8      |
| 18  | REWARI        | 21       | 0    | 0.0   | 0    | 0.0      | 6     | 28.6     | 9   | 42.9        | 5      | 23.8     | 1       | 4.8      |
| 19  | ROHTAK        | 25       | 14   | 56.0  | 9    | 36.0     | 1     | 4.0      | 1   | 4.0         | 0      | 0.0      | 0       | 0.0      |
| 20  | SIRSA         | 46       | 1    | 2.2   | 8    | 17.4     | 11    | 23.9     | 19  | 41.3        | 6      | 13.0     | 1       | 2.2      |
| 21  | SONIPAT       | 74       | 14   | 18.9  | 11   | 14.9     | 20    | 27.0     | 13  | 17.6        | 15     | 20.3     | 1       | 1.4      |
| 22  | YAMUNANAGAR   | 29       | 0    | 0.0   | 6    | 20.7     | 9     | 31.0     | 10  | 34.5        | 4      | 13.8     | 0       | 0.0      |
|     | Total         | 985      | 71   | 7.2   | 160  | 16.2     | 154   | 15.6     | 198 | 20.1        | 253    | 25.7     | 149     | 15.1     |

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