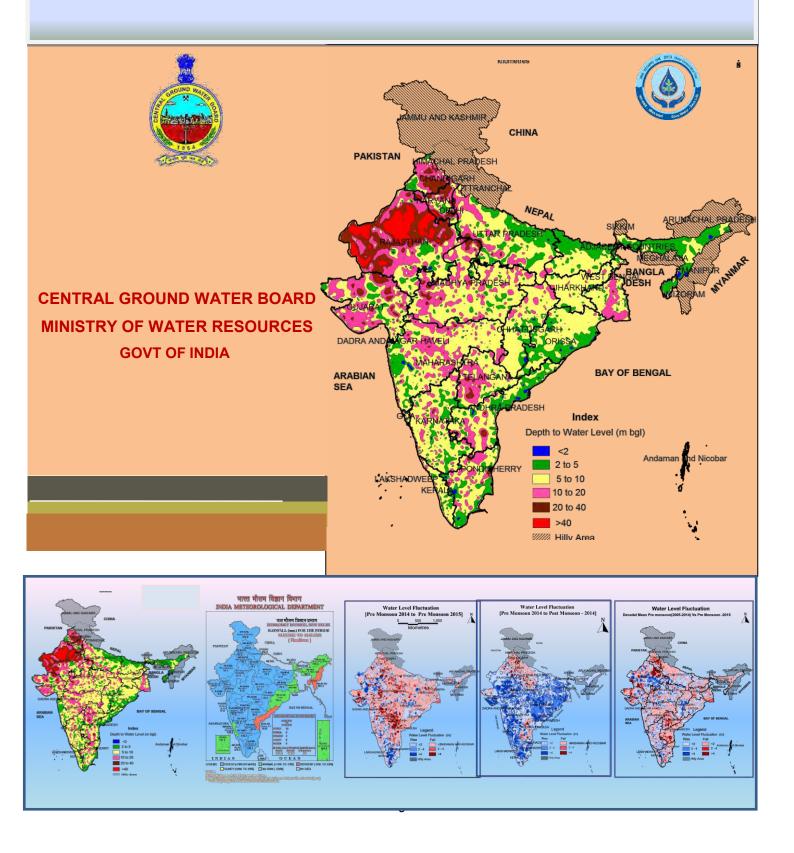
GROUND WATER SCENARIO IN INDIA

PRE MONSOON, 2015



GROUND WATER LEVEL SCENARIO IN INDIA (PREMONSOON - 2015)

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1.0 Introduction

Ground Water Regime Monitoring Report is prepared by Central Ground Water Board depicting changes in ground water regime of the Country in different seasons. It is an effort to obtain information on ground water levels through representative sampling of water level. Ground water regime monitoring is one of the key activities of CGWB. The primary objective of establishing the ground water monitoring network stations is to record the response of ground water regime to the natural and anthropogenic stresses of recharge and discharge parameters with reference to geology, climate, physiography, land use pattern and hydrologic characteristics.

Ground water levels are being monitored throughout the Country four times in a year by Central Ground Water Board through a network of **22339** monitoring wells during the months of **January**, Premonsoon (**March/April/ May**), **August** and Postmonsoon (**November**).

Premonsoon water level data is collected from the monitoring stations during the months of March/April/May, depending on the time period for onset of Monsoon. Premonsoon water level data is collected in the month of March in the North Eastern States since the onset of Monsoon is normally observed in April. Similarly in Odisha, West Bengal and Kerala, premonsoon monitoring is carried out during the month of April as monsoon appears early in May. In the remaining states of the country, monitoring is done during the month of May. Ground Water Samples are also collected during the Premonsoon monitoring period for Water Quality analysis.

The ground water regime monitoring was started in the year 1969 by Central Ground Water Board. At present CGWB has a network of **22339** ground water observation wells, out of which **16190** observation wells are dugwells and **6149** are piezometers. The water level / piezometric head data collected from these observations were entered into the National database and are analysed for obtaining background information of ground water regime and changes on regional scale. The Groundwater level data has been collected from all the states except for the states of Mizoram & Sikkim and UT of Lakshadweep. GW monitoring wells of CGWB do not exist in **Mizoram, Sikkim and Lakshdweep**, whereas, monitoring could not be carried out in **Manipur** during Premonsoon 2015 due to Insurgency problem.

Water level data of Premonsoon 2015 has been analysed to illustrate spatial distribution of water level and its categorization under different ranges. The Premonsoon data has been compared with the previous year Premonsoon data (annual fluctuation) and mean of last 10 years Premonsoon monitoring data (decadal fluctuation); the analytical results are represented through tables and maps along with suitable explanations. This data is used for assessment of ground water resources and establishing changes in the regime consequent to various development and management activities.

2.0 Rainfall Pattern

Water level / Piezometric heads are resultant of all input/ output from the aquifer. Apart from draft of ground water for various purposes, quantum of rainfall and its component being recharged to the ground water is major controlling factor of the depth to water levels and it's

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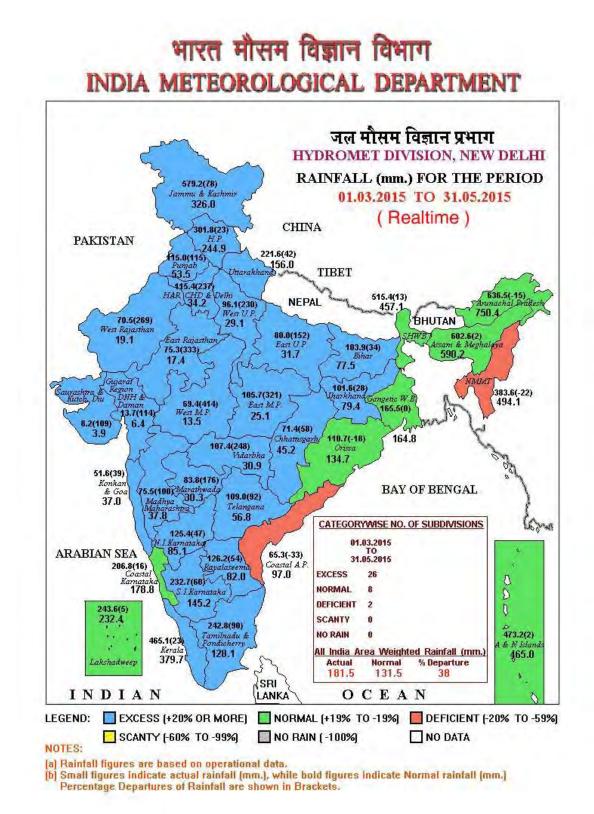
annual, seasonal or decadal fluctuations. Thus, study of rainfall pattern is very important for understanding spatial and temporal variations in water levels. As per the Climatic bulletins of IMD for monsoon period of 2014, the rainfall pattern has been studied and discussed below.

For the country as a whole, cumulative rainfall during the year's monsoon has been 12% below the Long Period Average (LPA).

Regions	Actual Rainfall (mm)	Normal Rainfall (mm)	% Departure from LPA
Country as a whole	777.5	886.9	-12%
Northwest India	483.1	615.0	-21%
Central India	879.7	974.2	-10%
South Peninsula	665.4	715.7	-7%
East & northeast India	1267.7	1437.8	-12%

Out of 36 meteorological subdivisions, the rainfall has been excess over 1, normal over 23, deficient over 12 sub-divisions and no sub-division under scanty rainfall. Haryana, Chandigarh & Delhi, Punjab and West Uttar Pradesh received deficient rainfall by more the 50% of LPA. In area-wise distribution, 3% area of the country received excess, 67% normal and remaining 30% area received deficient rainfall.

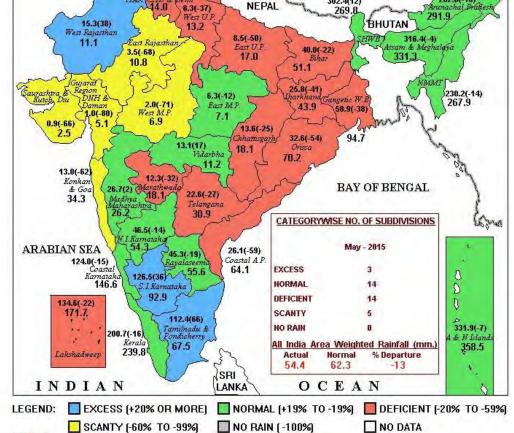
Plate I



Source: www.imd.gov.in

Plate-II



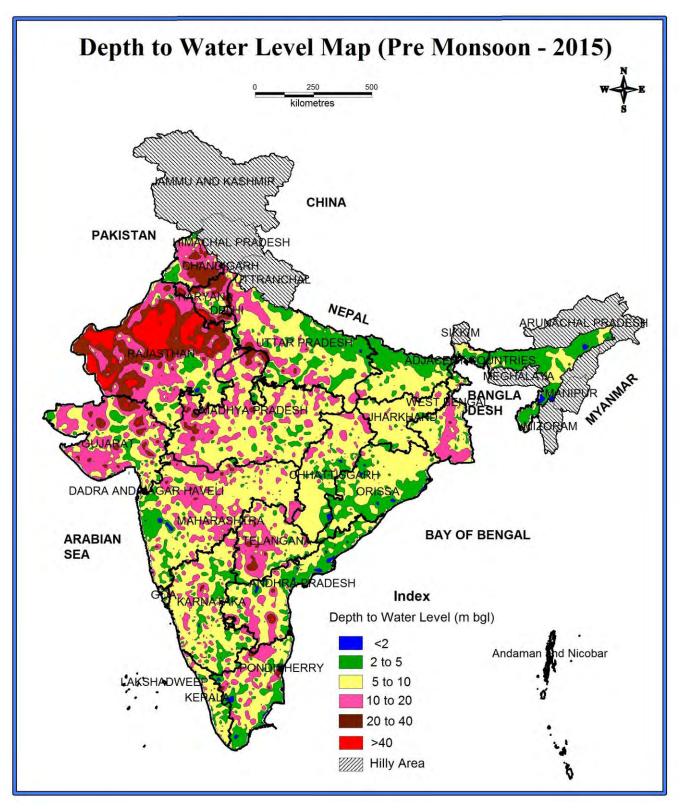


NOTES:

(a) Rainfall figures are based on operational data.

- [b] Small figures indicate actual rainfall (mm.), while bold figures indicate Normal rainfall (mm.)
 - Percentage Departures of Rainfall are shown in Brackets.

Plate-III



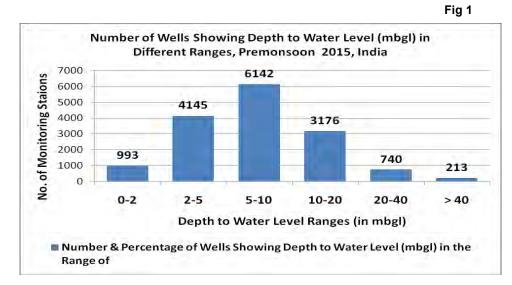
Source: National Data Centre, CGWB, Faridabad

3.0 Ground Water Level Scenario in India

3.1 Ground Water Level Scenario - Premonsoon 2015

The ground water level data for Premonsoon 2015 indicate that out of the total 15410 wells analysed, 993 (6%) wells are showing water level less than 2 m bgl (metres below ground level), 4145 (27%) wells are showing water level in the depth range of 2-5 m bgl, 6142 (40%) wells are showing water level in the depth range of 5-10 m bgl, 3176 (21%) wells are showing water level in the depth range of 10-20 m bgl, 740 (5%) wells are showing water level in the depth range of 20-40 m bgl and the remaining 213 (1%) wells are showing water level more than 40 m bgl. The distribution of number of wells under different depth ranges is presented in the histogram (**Fig-1**) and statistical distribution is given in **Annexure-I**. The maximum depth to water level of 113.20 m bgl is observed in Rajasthan whereas the minimum is less than 1 m bgl.

The depth to water level map of Premonsoon 2015 (Plate III) for the country indicates that in general depth to water level ranges from 2 to 20 m bgl as observed at about more than 85% of the monitoring stations. In Sub-Himalayan area and parts of Uttar Pradesh, Bihar, Chhattisgarh, Odisha, almost whole of Assam and few areas in Maharashtra, coastal Tamil Nadu, Andhra Pradesh generally the depth to water level varies from 2-5 meter below ground level. Very shallow water level of less than 2 m bgl is observed locally, in the states of Assam, Andhra Pradesh, Himachal Pradesh, and Tamil Nadu. In major area of the Country, water level is observed to be in the range of 5 to 10 m, mostly in the states of Bihar, Chhatisgarh, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Odisha, Telangana, Uttar Pradesh and West Bengal. Water level in the range of 10-20 m bgl is mostly observed in the states of Delhi, Gujarat, Haryana, Madhya Pradesh, Maharashtra, Punjab, Rajasthan, Telangana and West Bengal. In major parts of north-western states depth to water level generally ranges from 10-40 m bgl. In the western parts of the country, deeper water level is recorded in the depth range of 20-40 m bgl and more than 40 m bgl. In parts Delhi and a major part of Rajasthan, water level of more than 40 m bgl is recorded. Along the eastern & western coast water level is generally upto 10 m bgl. Central part of West Bengal recorded water level in the range of 10-20 m bgl. In Central and eastern India water level generally varies between 5 m bol to 10 m bol, except in isolated pockets where water level more than 10 m bol has been observed. The peninsular part of country generally recorded a water level in the range of 10 to 20 m bgl depth range.



3.2 Water Level Fluctuation (Premonsoon 2015 to Premonsoon 2014)

The water level fluctuation of **Premonsoon 2015** with **Premonsoon 2014** shows that out of 13458 wells analysed, 5425 (40%) are showing rise and 7608 (57%) are showing fall in water level. Remaining 425 (3%) stations analysed do not show any change in water level. About 31% wells are showing rise in the water level in the range of less than 2 m. About 5% wells are showing rise in water level in 2-4 m range and 4 % wells showing rise in water level more than 4 m range. About 57% wells are showing decline in water level in less than 2 m range. About 57% wells are showing decline in water level in 2-4 m range. About 5% wells are showing decline in water level in 2-4 m range. About 5% wells are showing decline in water level in 2-4 m range. About 5% wells are showing decline in water level in 2-4 m range. About 5% wells are showing decline in water level in 2-4 m range. About 5% wells are showing decline in water level in 2-4 m range. About 5% wells are showing decline in water level in 2-4 m range. About 5% wells are showing decline in water level in 2-4 m range. About 5% wells are showing decline in water level in 2-4 m range. About 5% wells are showing decline in water level more than 4 m range (Fig-2 and Annexure-II). Majority of the wells showing rise/decline falls in the range of 0-2 m.

A comparison of depth to water level of Premonsoon 2015 to Premonsoon 2014 is presented in the form of water level fluctuation map (**Plate IV**) reveals that in general, there is fall in water level in almost the entire country, except in few states such as Assam, Karnataka, Kerala, Rajasthan and Tamil Nadu. Fall is mostly in the range of 0-2 m, although fall in the range of more than 2 m is also prevalent in all the states in small patches. Fall of more than 2 m is mainly seen in the central parts of the country, mostly in Maharashtra and Telangana



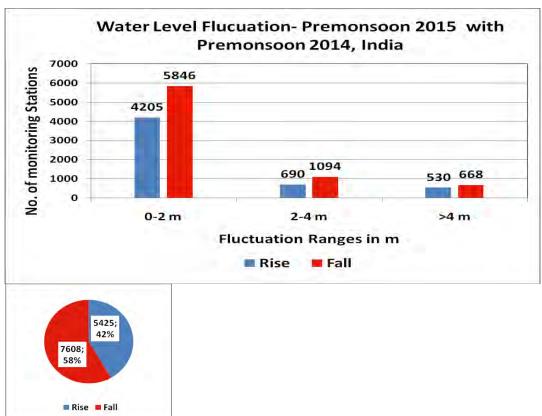
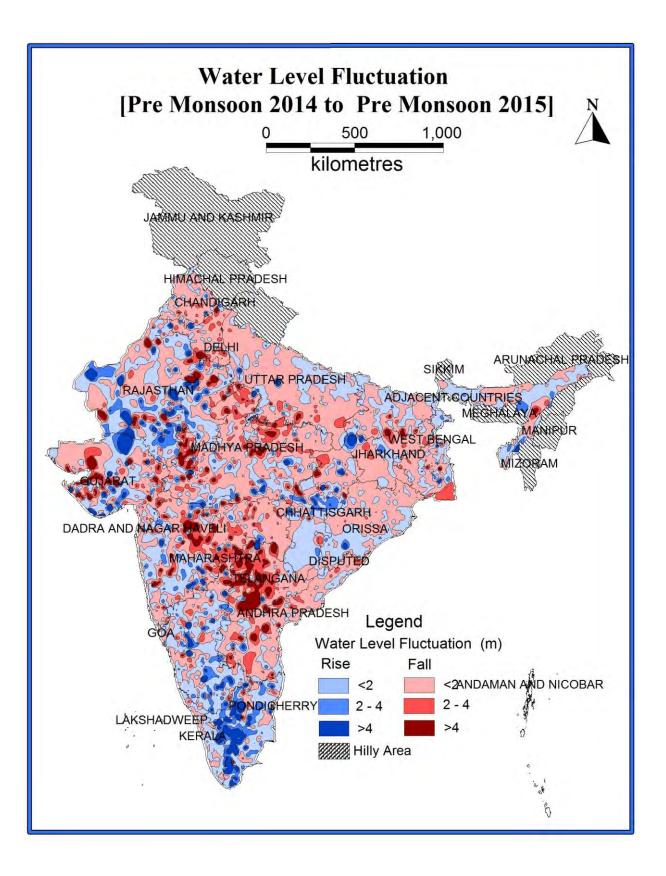
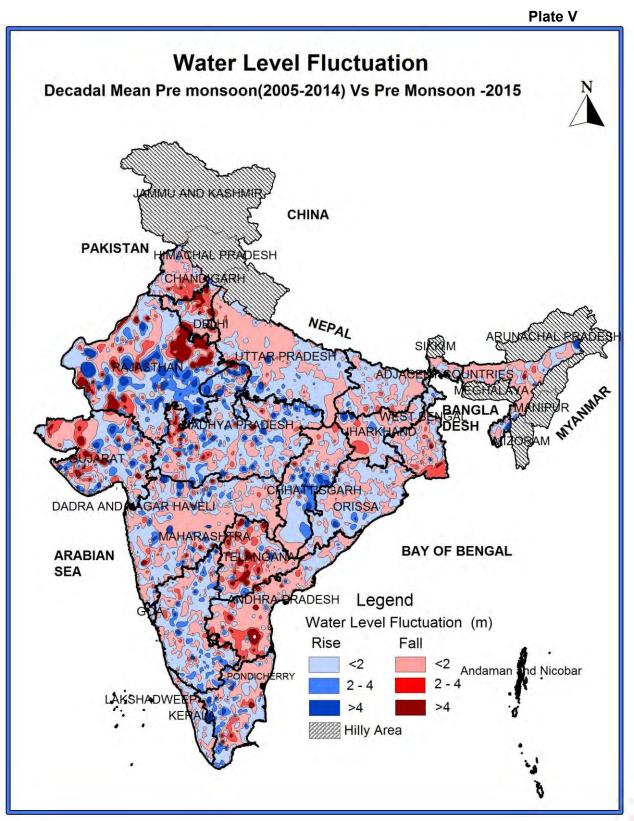


Plate IV





Source: National Data Centre, CGWB, Faridabad

3.3 Water Level Fluctuation (Premonsoon– 2015 with Mean of Premonsoon (2005 - 2014)

A comparison of depth to water level of Premonsoon 2015 with decadal mean of Premonsoon (2005-2014) indicate that 7431 (52%) of wells are showing rise in water level, out of which 39% wells are showing rise of less than 2 m (**Annexure-III**). About 8% wells are showing rise in water level in the range of 2-4 m and about 4% wells are showing rise in water level in the range of more than 4 m. 6799 (47%) wells are showing decline in water level, out of which 35% wells are showing decline in water in the range of 0-2 m. 8% wells are showing decline in water level of more than 4 m is mostly prominent in the states of Andhra Pradesh, Dadra & Nagar Haveli, Delhi, Gujarat, Haryana, Madhya Pradesh, Rajasthan, Telangana ,Tamil Nadu and Uttarakhand. Rise in water level of more than 4 m is observed mostly in the states of Arunachal Pradesh, Chandigarh, Chhattisgarh, Gujarat, Himachal Pradesh, Karnataka, Madhya Pradesh, Tamil Nadu, Rajasthan and Uttarakhand. Remaining 91 (1%) stations analysed do not show any change in water level.

The decadal water level fluctuation map of India for Premonsoon, 2015 with the mean of Premonsoon (2005- 2014) is shown in **Plate-V** and frequency distribution of fluctuation ranges is shown in **Fig. 3.** As observed in Plate-V, there is both rise and fall in water level in the country. Maximum fall is observed in and around parts of Andhra Pradesh, Assam, Chandigarh, Delhi, Punjab, Harynana, Jharkhand, Rajasthan, Gujarat and Telangana. A rise in water level is observed in almost all the states but occurs sporadically.

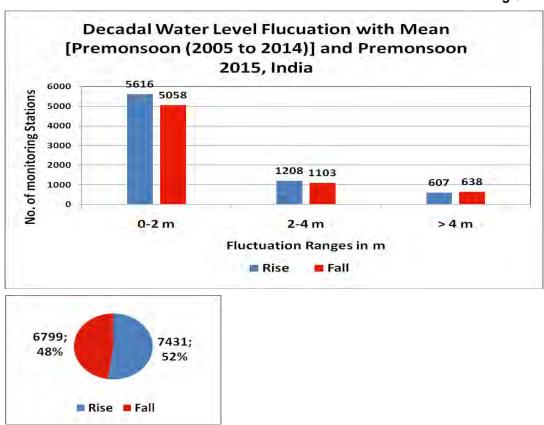


Fig 3

4.0 State-wise scenario of ground water level and comparison with previous year water level as well as change with respect to decadal average has been discussed in the following section.

4.01 Andaman & Nicobar Islands

Depth to Water Level – Premonsoon 2015

In general depth to water level scenario in the UT of Andaman & Nicobar Islands depicted a water level in the range of 0 to 5 m bgl with about more than 90% of the wells monitored falling in this range. Around 48% monitoring stations recorded water level between 0-2 m bgl. Another 45% wells recorded water level between 2-5 m bgl.

Water Level Fluctuation (Premonsoon 2015 to Premonsoon 2014)

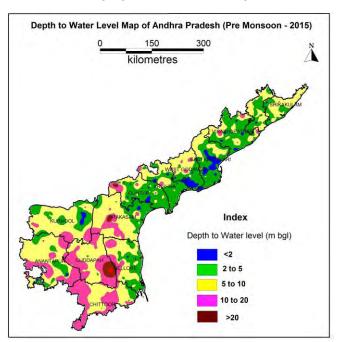
Water level of Premonsoon 2015 when compared to that of Premonsoon 2014 shows that there is rise in water level in the island. About 63 % of the wells analysed show a rise in water level. Out of this, 49 % of the wells showing rise in water level in less than 2 m range and 13% wells show rise in 2-4 m range. 37% wells analysed have shown fall in water level, maximum in the range of 0-2 m.

4.02 Andhra Pradesh

Depth to Water Level – Premonsoon 2015

In the state of Andhra Pradesh very shallow water level ranging between 0-2 m bgl was observed

in only 13% of the wells monitored. Shallow water level range is observed along the coastal tract, northeastern parts of the state. The depth to water level between 2-10 meters has been observed in almost 75 % wells in most parts of the state. Depth to water level ranging between 10-20 meters has been observed in 12% wells mainly in the southern parts. Water level of more than 20 m bgl has been observed in less than 1% well. The depth to water level in the state ranges upto 49.30 m bgl (in Prakasam district).



Fluctuation - Premonsoon 2015 to Premonsoon 2014

Water level data of Premonsoon 2015 was compared to Premonsoon 2014 and the analysis shows that about 66% of the wells analysed are showing fall in the water level and 28% wells are

showing rise in water level. 6 % wells show no change in water level. Out of 66% fall, 50% wells have shown a fall in 0-2 m range,11% of the wells have shown fall in the range of 2-4 m and another 5% of the wells show fall in the range of >4m. About 28% of the wells show rise and out of which, 25 % wells shows rise in 0-2 m range. Maximum rise in water level has been recorded as 6.70 m and maximum fall in water level has been recorded as 18.38 m in the State.

Fluctuation - Premonsoon 2015 to Premonsoon Decadal mean (2005-14)

The water level data of Premonsoon 2015 has been compared with decadal mean (Premonsoon 2005- 2014) to assess the rise/fall in water level during current year with respect to long term average of the corresponding period. About 36 % of analysed wells have shown a rise in water level. Out of this 32% of the wells have shown rise in the range of 0 to 2 m. About 62% wells have shown a fall in water level, out of which 47% wells have shown fall in the range of 0 to 2 m and 10 % wells have shown fall in 2- 4 m and 5% wells shows fall of more than 4 m.

4.03 Arunachal Pradesh

Depth to Water Level – Premonsoon 2015

In general depth to water level scenario in the state depicted water level in the range of 2 to 10 m bgl at about 80 % of the wells monitored.

Water Level Fluctuation (Premonsoon 2015 to Premonsoon 2014)

Water level of Premonsoon 2015 when compared to that of Premonsoon 2014 shows that there is dominantly rise in water level in the state. About 45 % of the wells analysed show a rise in water level and all in the range of 0-2 m whereas, 18% shows fall. All the wells 18 % wells showing decline lies in the 0-2 m range.

Fluctuation - Premonsoon 2015 to Premonsoon Decadal mean (2005-14)

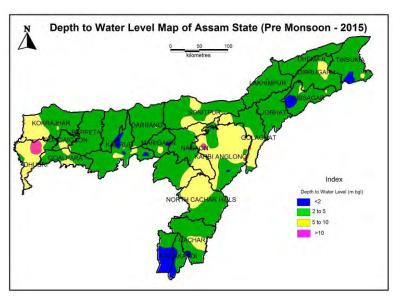
The water level data of Premonsoon 2015 has been compared with decadal mean (Premonsoon 2005-2014) and it is observed that 50% of the wells analysed show rise in water level whereas only another 50% shows fall in water level Both rise and decline are in the range of 0-2 m.

4.04 Assam

Depth to Water Level – Premonsoon 2015

In general depth to water level scenario in the state depicted a water level in the range of 2 to 10 m bgl at almost 85 % of the wells monitored. Only about 10 % wells recorded very shallow water level between 0-2 m bgl and only 2% wells show water level between 10-20 m bgl.

A shallow water level within 2 m bgl is recorded in pockets in the



districts of Hailakandi, Kamrup, Sibsagar and Tinsukia districts. The maximum depth to water level has been recorded as 15.53 m bgl in Karbi Anglong district.

Water Level Fluctuation (Premonsoon 2015 to Premonsoon 2014)

Water level of Premonsoon 2015 when compared to that of Premonsoon 2014 shows that there is both rise and fall in water level in the state. About 51 % of the wells analysed show a rise in water level. Out of this, 47 % of the wells showing rise in water level in less than 2 m range. A rise of 2-4 m is observed in only 4 % of the wells analyzed. Another 46 % of wells analysed have shown fall in water level and almost all wells in 0-2 m range.

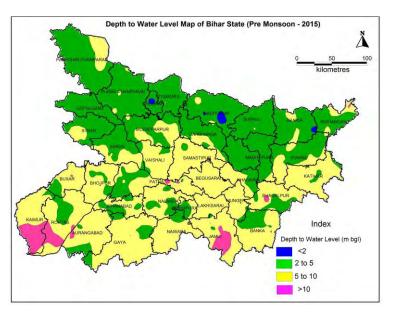
Fluctuation - Premonsoon 2015 to Premonsoon Decadal mean (2005-14)

The water level data of Premonsoon 2015 has been compared with decadal mean (Premonsoon 2005-2014) and it is observed that out of 187 wells analyzed 44 % show a rise in water level whereas 56% show a fall in water level. 39% wells show rise in the range of 0-2 m and all the 49% wells show fall in the range of 0-2 m.

4.05 Bihar

Depth to Water Level -Premonsoon 2015

During Premonsoon 2015 water level measurement, a total of 580 wells have been monitored. In general water level in the state varies from 2-10 m bgl. Only 2 % of the wells are showing water level in the range 0-2 m bgl, in minor pockets, mainly in the northern districts. 50 % of the wells are



showing water level in the range 2-5 m bgl and 47 % of the wells analysed are showing water level in the range of 5-10 m bgl. Less than 4% of the wells are showing water level in the range 10-20 m bgl. The maximum depth to water level has been recorded as 15.80 m bgl in Jamui district.

Water Level Fluctuation (Premonsoon 2015 to Premonsoon 2014)

Water level of Premonsoon 2015 when compared to that of Premonsoon 2014 shows that there is both rise and fall in water level in the state. About 41% of the wells analysed show a rise in water level. Out of this, 37% of the wells showing rise in water level in less than 2 m range. A rise of 2-4 m is observed in 4 % of the wells analyzed. About 56% of wells analysed have shown fall in water level, out of which 48% wells show decline in 0-2 m range.

Fluctuation - Premonsoon 2015 to Premonsoon Decadal mean (2005-14)

The water level data of Premonsoon 2015 has been compared with decadal mean (Premonsoon 2005 to 2014) and it indicates that out of 477 wells analyzed 53% wells show a rise in water level whereas 45% show a fall in water level. Out of 53% rise, about 48% wells show rise in the range of 0-2 m bgl, whereas, out of 45% fall, 40% wells show fall in 0-2 m range.

4.06 Chandigarh

Depth to Water Level – Premonsoon 2015

In general depth to water level scenario in the UT of Chandigarh depicted a water level in the range of 2 to 40 m bgl with about 100 % of the wells monitored falling in this range. Around 18% monitoring stations recorded water level between 2-5 m bgl. Another 18 % wells recorded water level between 5-10 m bgl, 36% wells show water level between 10-20 m bgl and 27% falls in the range of 20-40m. No wells show water level in more than 40 m range. The maximum depth to water level has been recorded as 23.07 m bgl.

Water Level Fluctuation (Premonsoon 2015 to Premonsoon 2014)

Water level of Premonsoon 2015 when compared to that of Premonsoon 2014 shows that there is predominantly fall in water level. About 82% of the wells analysed show a fall in water level. Out of this, 64 % of the wells showing fall in water level in less than 2 m range and 18% wells show fall in 2-4 m range. About 18% of wells analysed have shown rise in water level, out of which 9% shows rise in the range of 0-2 m. A rise of more than 4 m is observed in another 9% wells.

Fluctuation - Premonsoon 2015 to Premonsoon Decadal mean (2005-14)

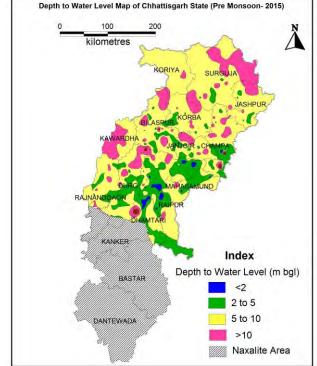
The water level data of Premonsoon 2015 has been compared with decadal mean (Premonsoon

2005-2014) and it shows that there is predominantly fall in water level in the UT. Only 27 % of the wells analysed show rise in water level and 73% shows decline in water level. Out of 73 % in the fall category, 55% wells fall in the 0-2 m range.

4.07 Chhattisgarh

Depth to Water Level – Premonsoon 2015

During Premonsoon 2015 water level measurement, a total of 567 wells have been monitored. Only about 4% of the wells monitored show water level in the range of 0-2 m bgl, 26 % wells shows water level in 2-5 m bgl and about 51 % wells falls under the category of 5- 10 m bgl. About 17% wells show water levels in the



range of 10-20 m bgl and 1% wells show water level more than 20 m bgl. The maximum water level measured is 49.40 m bgl in Raigarh District.

Water Level Fluctuation (Premonsoon 2015 to Premonsoon 2014)

Water level of Premonsoon 2015 when compared to that of Premonsoon 2014 shows that there is both rise and fall in water level in the entire state. About 45 % of the wells analysed show a rise in water level. Out of this, 28 % of the wells showing rise in water level in less than 2 m range. A rise of 2- 4 m is observed in 10 % wells. A rise of more than 4 m is observed in 7 % wells. 48 % wells show decline in water level, out of which 39% wells show decline in 0-2 m range. 7 % wells show no change in water level.

Fluctuation - Premonsoon 2015 to Premonsoon Decadal mean (2005-14)

When compared the decadal mean water level (Premonsoon 2005 to 2014) with Premonsoon 2015, about 58% of observation wells are showing a rise in water level. Out of 58% wells, 35 % of the wells are showing a rise upto 2 m, 13% wells show rise in 2-4 m range and 10 % wells show more than 4 m range. Fall of water level as compared to the decadal mean is observed in 41 % of the monitored wells. Almost 32% of the monitored wells are showing a fall in the range of 0-2 m.

4.08 Dadra & Nagar Haveli

Depth to Water Level – Premonsoon 2015

In general depth to water level scenario in the UT depicted water level in the range of 2 to 20 m bgl at about 100 % of the wells monitored.

Water Level Fluctuation (Premonsoon 2015 to Premonsoon 2014)

Water level of Premonsoon 2015 when compared to that of Premonsoon 2014 shows that there is dominantly fall in water level in the UT. About 70 % of the wells analysed show a fall in water level and most of the wells in the range of 0-2 m whereas, 30% shows rise. 20 % wells showing rise in the 0-2 m range.

Fluctuation - Premonsoon 2015 to Premonsoon Decadal mean (2005-14)

The water level data of Premonsoon 2015 has been compared with decadal mean (Premonsoon 2005-2014) and it is observed that 45% of the wells analysed show rise in water level whereas another 55% shows fall in water level. Out of 45 % wells showing rise, 27% show rise in 0-2 m range and 18% in 2-4 m range. In the decline category, out of 55% fall, 46 % in 0-2 m range and 9% wells in more than 4 m range.

4.09 Daman & Diu

Depth to Water Level – Premonsoon 2015

In general depth to water level scenario in the UT depicted water level in the range of 2 to 20 m bgl at about 100 % of the wells monitored.

Water Level Fluctuation (Premonsoon 2015 to Premonsoon 2014)

Water level of Premonsoon 2015 when compared to that of Premonsoon 2014 shows that there is dominantly fall in water level in the UT. All the wells analyzed show decline in water level, mostly in the 0-2 m range.

Fluctuation - Premonsoon 2015 to Premonsoon Decadal mean (2005-14)

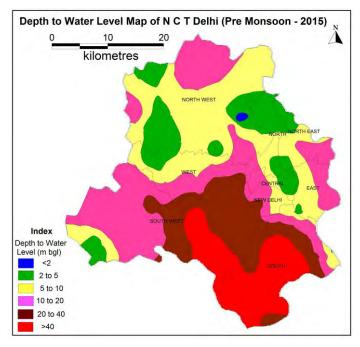
The water level data of Premonsoon 2015 has been compared with decadal mean (Premonsoon 2005-2014) and it is observed that 86% of the wells analysed show fall in water level whereas only 14% shows rise in water level. Out of 14 % wells showing rise, all the wells show rise in 0-

2 m range. In the decline category, out of 86% fall, 57 % in 0-2 m range and 29% wells in 2-4 m range.

4.10 Delhi

Depth to Water Level – Premonsoon 2015

The depth to water level recorded in the state of Delhi during Premonsoon 2015 ranges from 1.20 m bgl to 62.22 m bgl (South District). It is observed that only 3% of the wells have shown water level in the range of 0-2 m bgl. About 21% of the wells analysed have shown water level in the range of 2-5 m bgl, about 26% of the wells have shown water level in the range of 5-10 m bgl and another 26 % wells show water level in the range of 10-20 m bgl. Deeper water level in the range of 20-40 m bgl and more than 40 m bgl are shown by 15% & 9% of the wells analysed respectively. It is



observed that Southern parts of Delhi show deeper water levels of more than 20 m bgl and the south district has very deep water level of more than 40 m bgl.

Water Level Fluctuation (Premonsoon 2015 to Premonsoon 2014)

Water level of Premonsoon 2015 when compared to water level of Premonsoon 2014 in the state indicates that only about 13 % of the wells analysed have recorded a rise in water level, out of which 12% of analysed wells have recorded a rise in the range of 0 to 2 m. About 87% of the wells have shown fall in water level, out of which 73 % fall in the range of 0 to 2 m.

Fluctuation - Premonsoon 2015 to Premonsoon Decadal mean (2005-14)

The fluctuation analysis of water level during Premonsoon 2015, when compared with the Decadal means (Premonsoon 2005-2014) indicate that in general there is fall in water level. 37 % of analysed wells have shown rise in water level. Out of this, 32 % of the wells have shown rise in the range of 0-2 m. About 63% wells have shown a decline in water level. Out of this 38 % of the wells have shown decline in water level in the range of 0-2 m, 13% of the wells have shown decline in water level in the range of 2- 4 m, 12 % of the wells have shown decline in water level in the range of more than 4 m.

4.11 Goa

Depth to Water Level – Premonsoon 2015

The depth to water level recorded in the state of Goa during Premonsoon 2015 ranges from 1.72 m bgl to 19.39 m bgl in North Goa. It is observed that out of 41 monitored wells, 7% wells show less than 2 m bgl water level, another 46% wells show 2 to 5 m bgl water level, 34% wells show 5 to 10 m bgl water level and deeper water level of 10 to 20 m bgl is shown by 12 % wells.

Water Level Fluctuation (Premonsoon 2015 to Premonsoon 2014)

Water level of Premonsoon 2015 when compared to water level of Premonsoon 2014 in the state indicates fall in water level in the state. About 63 % of the wells analysed have recorded a fall in water level, out of which 55 % of the analysed wells have recorded a fall in the range of 0 to 2 m and 8 % in 2-4 m range.35 % wells shows rise in water level and out of which 28% wells show rise in 0-2 m range.

Fluctuation - Premonsoon 2015 to Premonsoon Decadal mean (2005-14)

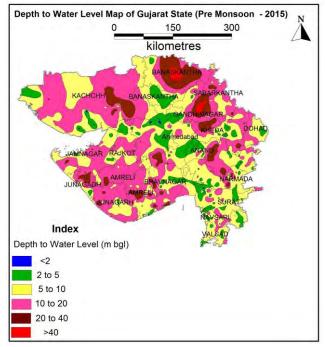
The fluctuation of water level during Premonsoon 2015 when compared with the Decadal mean (Premonsoon 2005-2014) indicates rise in water level in the state. About 59% of analysed wells have shown a rise in water level. Out of this 56 % of the wells have shown rise in the range of 0

to 2 m. About 41 % wells have shown a decline in water level and all the wells fall in the range of 0-2 m.

4.12 Gujarat

Depth to Water Level – Premonsoon 2015

The depth to water level recorded in the state of Gujarat during Premonsoon 2015 ranges up to 61.30 m bgl in Banaskantha district. The depth to water level for only 2 % of the wells analysed have shown water level in the range of 0-2 m bgl, 19 % of the wells have shown water level in the range of 2-5 m bgl. About 35 % of the wells analysed have shown water level in the range of 2-5 m bgl.



5-10 m bgl and 33 % of the wells have shown water level in the range of 10-20 m bgl. Deeper water level in the range of 20-40 m bgl and more than 40 m bgl are shown by about 11% of the wells analysed. Deeper water level of more than 40 m bgl is found in pockets in Banaskantha and Gandhinagar districts.

Water Level Fluctuation (Premonsoon 2015 to Premonsoon 2014)

Water level data of Premonsoon 2015 when compared to Premonsoon 2014 shows that in general there is fall in water level in the state. About 63 % of the wells analysed show fall in water level. Out of this, 40% wells have shown a fall in the range of 0-2 m. About 13% of the wells have shown fall in 2-4 m range and about 10 % wells have shown fall in water in more than 4 m. 32% of the total wells have shown a rise in water level, out of which 23% wells have shown a rise in 0-2 m range. 5% of the wells show no change in water level.

Fluctuation - Premonsoon 2015 to Premonsoon Decadal mean (2005-14)

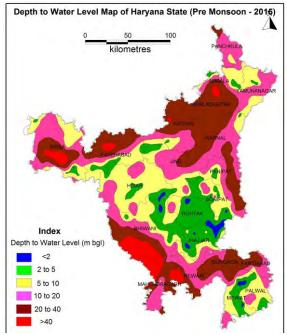
The water level data of Premonsoon 2015 has been compared with decadal mean (Premonsoon 2005 to 2014) to assess the rise/fall in water level of this year with respect to long term average of the corresponding period. 45% of monitoring wells shows rise in water level and 54 % wells are showing fall in water level. About 29% of wells show rise in 0-2 m range, 10% wells show

rise in the 2-4 m range and 6% wells are showing rise in the range of more than 4 m. 36 % of the wells have shown fall in water level in the range of 0-2 m.

4.13 Haryana

Depth to Water Level – Premonsoon 2015

During Premonsoon 2015, the depth to water level in the state of Haryana varies from 0.28 to 80.33 m bgl in Mahendragarh district. In Haryana, water level generally varies in the range of 2-40 m bgl in which maximum wells falls. Only about 6% of wells monitored have reported water level up to 2 m bgl. About 19% of the wells monitored falls within the range of 2-5 m bgl. Another 25 % of the wells monitored falls within the



range of 5-10 m bgl. Moderately deep water level i.e. 10-20 m bgl occurs in major parts of the State, observed in almost 30% of the monitored wells. Deep water level i.e. 20-40 m bgl is observed in 16% of the monitored wells. Very deep water levels more than 40 m bgl are also observed in almost 3% of the monitored wells. Deeper water levels of more than 20 m bgl are observed mostly along the northern and southern parts of Haryana.

Water Level Fluctuation (Premonsoon 2015 to Premonsoon 2014)

The water level data of Premonsoon 2015 when compared with Premonsoon 2014 indicates that there is rise in water level in only about 27 % of the wells monitored, out of which 25 % of the wells monitored show rise in the range between 0-2 m. Decline in water level has been recorded in the entire state , at 72% of the wells. Fall in range of 0-2 m has been recorded in 56% wells. Rise and fall is mainly restricted to 0-2 m.

Fluctuation - Premonsoon 2015 to Premonsoon Decadal mean (2005-14)

The fluctuation of water level during Premonsoon 2015 when compared with the average water level of past decade (Decadal mean Premonsoon 2005-2014) indicates in general there is both rise and decline in water level in the entire state. About 41% of monitored wells have shown rise in water level. The rise of 0-2 m has been observed in about 35 % of the wells analysed. About 59% of wells analysed have shown fall in water level. Fall in the range of 0-2 m has been recorded in 32% of monitored wells, 15% wells show fall in water level in 2-4 m range and 13% wells show decline in more than 4 m range.

4.14 Himachal Pradesh

Depth to Water Level – Premonsoon 2015

The depth to water level in the state of Himachal Pradesh during Premonsoon 2015 varies from 0.34 m bgl to 29.25 m bgl in Solan district. About 57% of the wells show water level of less than 5 m bgl. Out of these almost 14 % of the wells are showing water level in the range of 0-2 m bgl, another 43 % of the wells show water level in the range of 2-5 m bgl. About 15% of the wells are showing water level in the range of 5 -10 m bgl while 23% of the wells are showing water level in the range of 10-20 m bgl. Deep water levels of more than 20 m are observed only at 6% monitoring stations.

Water Level Fluctuation (Premonsoon 2015 to Premonsoon 2014)

The water level data of Premonsoon 2015 when compared with Premonsoon 2014 indicates that there is both rise and fall in water level in the entire state. About 45% of the wells monitored show rise in water level, out of which 40 % of the wells monitored show rise in the range between 0-2 m. Decline in water level has been recorded in 54% of the wells. Fall in range of 0-2 m has been recorded in 41% wells.

Fluctuation - Premonsoon 2015 to Premonsoon Decadal mean (2005-14)

The water level data of Premonsoon 2015 has been compared with decadal mean (Premonsoon 2005 to 2014) to assess the rise/fall in water level of this year with respect to long term average of the corresponding period. About 66% of monitoring wells show rise in water level and rest 34% wells show fall in water level. Out of 66% wells in the rise category, about 48% of the monitored wells show rise in the 0-2 m range, 8% wells show rise in 2-4 m range and 9% wells showing rise in more than 4 m range. 34 % of the wells have shown decline in water level, out of which 29% falls in the range of 0-2 m.

4.15 Jammu & Kashmir

Depth to Water Level – Premonsoon 2015

It is observed that out of the total 222 wells monitored, water level mainly varies from 0-10 m bgl in which more than 90% of the wells fall. About 31 % wells have less than 2 m bgl water level, mainly in outer plain areas. About 45% of the wells analysed have shown water level in the range of 2-5 m bgl. About 16% wells have shown water level in the range of 5-10 m bgl. About 5% wells have 10 to 20 m bgl water level and the remaining 4 % wells have more than 20 m bgl water level. The depth to water level recorded in the state ranges from 0.01 to 32.10 m bgl in Jammu district.

Water Level Fluctuation (Premonsoon 2015 to Premonsoon 2014)

The water level data of Premonsoon 2015 when compared with Premonsoon 2014 indicates that there is rise in water level in about 73 % of the wells monitored, out of which 64 % of the wells monitored show rise in the range between 0-2 m. Decline in water level has been recorded in 26% of the wells, out of which 23% shows decline in 0-2 m range. Rise and decline of water level in mainly restricted upto 2 m.

Fluctuation - Premonsoon 2015 to Premonsoon Decadal mean (2005-14)

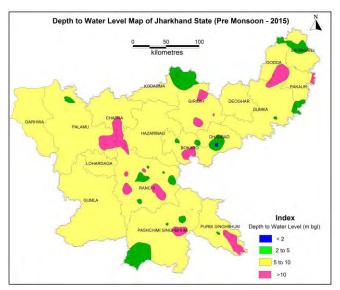
The fluctuation analyses of water level of Premonsoon 2015 with the decadal mean (Premonsoon 2005-2014) indicates that there is rise in water level in the entire state and about 87% of analysed wells have shown a rise in water level. Out of this 61% of the wells have shown rise in

the range of 0 to 2 m. About 33% wells have shown a decline in water level, out of which 32% of the wells have shown fall in the range of 0 to 2 m.

4.16 Jharkhand

Depth to Water Level – Premonsoon 2015

Water Level in the state varies generally in the range of 5-10 m bgl. Out of total 151 wells analysed, less than 1% well have shown depth to water level in the range of 0 to 2 m. Water level in about 15 % of the wells was



found between 2 to 5 m bgl and about 69% of the wells analysed are showing water level in the range of 5-10 m bgl. Deeper water levels of 10-20 m are observed in about 15 % wells. The water level ranges from 1.20 m bgl to 13.80 m bgl in Purbi Singhbhum District.

Water Level Fluctuation (Premonsoon 2015 to Premonsoon 2014)

The water level data of Premonsoon 2015 when compared with Premonsoon 2014 indicates that there is fall in water level in the entire state and 70 % of the wells monitored shows fall, out of which 60 % of the wells monitored show fall in the range of 0-2 m, another 8 % in the range of 2-4 m. Rise in water level has been recorded in only 30% of the wells, out of which 25% shows decline in 0-2 m range.

Fluctuation - Premonsoon 2015 to Premonsoon Decadal mean (2005-14)

The water level data of Premonsoon 2015 has been compared with decadal mean (Premonsoon 2005- 2014 to assess the rise/fall in water level during current year with respect to long term average of the corresponding period. About 47% of analysed wells have shown a rise in water level. Out of this 36% of the wells have shown rise in the range of 0 to 2 m, 8% wells have shown rise in the range of 2 to 4 m. About 53% wells have shown a fall in water level, out of which 46% wells have shown fall in the range of 0 to 2 m.

4.17 Karnataka

Depth to Water Level – Premonsoon 2015

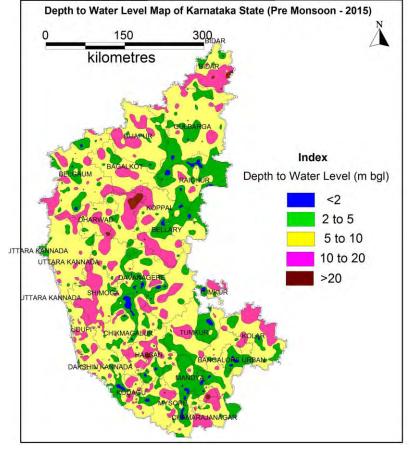
The analysis of 1442 wells show that only 10% wells have less than 2 m bgl water level, 27%

wells show 2 to 5 m bgl water level and 40% wells show 5 to 10 m bgl water level. Moderately deeper water level of 10 to 20 m bgl is seen at 21% wells and more than 20 m bgl is observed in 1% wells.

The depth to water level recorded in the state during Premonsoon 2015 ranges from 0.05 m bgl to 30.00 m bgl in Hassan District.

WaterLevelFluctuation(Premonsoon2015toPremonsoon 2014)

The water level data of Premonsoon 2015 when compared with Premonsoon 2014 indicates that there is rise in water level in



the state and 52 % of the wells monitored show rise, out of which 36 % of the wells monitored show rise in the range of 0-2 m, 9% in 2-4 m and 7% in more than 4 m. Decline in water level

has been recorded in 39% of the wells, out of which 31% shows decline in 0-2 m range. 9% wells show no change in water level.

Fluctuation - Premonsoon 2015 to Premonsoon Decadal mean (2005-14)

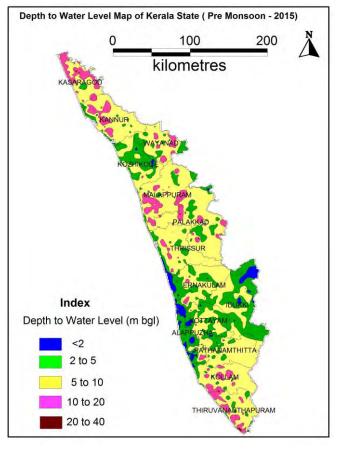
The fluctuation of water level during Premonsoon 2015 when compared with the average water

level of past decade (Decadal mean Premonsoon 2005 -2014) indicates that about 61% of the wells analysed show a rise in water level and 37% wells show fall. 2% well shows no change in water level. A rise of 0-2 m is recorded in 42% of analysed wells. A rise in the range of 2-4 m and more than 4 m is recorded in 13 % & 6 % of wells for each range respectively. In the fall category, a fall of 0-2 m is prominent and is recorded in 28% of analysed wells.

4.18 Kerala

Depth to Water Level – Premonsoon 2015

During Premonsoon 2015, it is observed that in the state of Kerala, only 8% of the wells have less than 2 m bgl water level, mainly in coastal areas. About 29% of the wells analysed have shown water level in the range of 2-5 m bgl and 46%



wells have shown water level in the range of 5-10 m bgl, 16% wells have shown 10 to 20 m bgl water level. Less than 1% well show water level in 20-40 m bgl.

The depth to water level recorded in the state of Kerala during Premonsoon 2015 ranges from 0.30 to 55.90 m bgl (Thiruvananthapuram District).

Water Level Fluctuation (Premonsoon 2015 to Premonsoon 2014)

The water level data of Premonsoon 2015 when compared with Premonsoon 2014 indicates that there is both rise and fall in water level in the state. About 59 % of the wells monitored shows rise, out of which 54% of the wells monitored show rise in the range of 0-2 m. Decline in water level has been recorded in 40% of the wells, out of which 36% shows decline in 0-2 m range.

Fluctuation - Premonsoon 2015 to Premonsoon Decadal mean (2005-14)

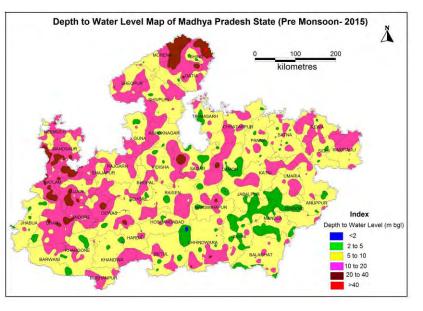
The fluctuation of water level during Premonsoon 2015 when compared with the decadal mean (Premonsoon 2005 -2014) indicates that there is both rise and fall in water level in the state. About 60% of analysed wells have shown a rise in water level, of which 55% of the wells rise in

the range of 0 to 2 m. About 40% wells have shown a fall in water level out of which 36% wells shows fall in the range of 0-2 m. Rise and fall is mainly restricted to 0-2 m only.

4.19 Madhya Pradesh

Depth to Water Level – Premonsoon 2015

The depth to water level during Premonsoon 2015 in Madhya Pradesh varies from 1.05 to 49.57 m bgl in Indore district. In general the depth to water level ranges from 5 m to 20 m bgl in most parts of Madhya Pradesh. Only 1 % monitoring wells are showing water level in 0-2 m bgl range. About 15 % of monitoring wells are showing water level in 2-5 m bgl range. Depth to water level ranging



between 5-10 m bgl was observed in majority of the wells, in 46% wells and about 32% wells show water level ranging more than 10 m bgl to 20 m bgl. Water levels of more than 20 m bgl are observed at 5% wells in northernmost parts of the state.

Water Level Fluctuation (Premonsoon 2015 to Premonsoon 2014)

The water level data of Premonsoon 2015 when compared with Premonsoon 2014 indicates that there is rise in water level in only 29% of the wells monitored, out of which 22% of the wells monitored show rise in the range of 0-2 m. Decline in water level has been recorded in 68% of the wells, out of which 46% shows decline in 0-2 m range, 12% in 2-4 m range and 10% in more than 4 m range.

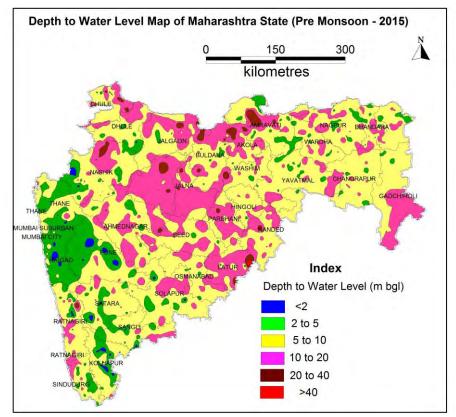
Fluctuation - Premonsoon 2015 to Premonsoon Decadal mean (2005-14)

The fluctuation of water level during Premonsoon 2015 when compared with the Decadal mean (Premonsoon 2005 -2014) indicates that about 52% of analysed wells have shown a rise in water level, of which 38% of the wells show rise in the range of 0 to 2 m. About 10% wells have shown a rise in water level in the range of 2-4 m and 4% wells have shown a rise in water level in the range of 2-4 m and 4% wells have shown a rise in water level in the range of 0 to 2 m. About 10% wells have shown a rise in the range of 0 to 2 m. About 10% wells have shown a rise in water level in the range of 2-4 m and 4% wells have shown a rise in water level in the range of more than 4 m. About 48% wells have shown a decline in water level, out of which 34% falls in the range of 0-2 m.

4.20 Maharashtra

Depth to Water Level Premonsoon 2015

During Premonsoon 2015, in the state of Maharashtra, water level less than 2 m bgl are observed in about only 3% wells. Depth to water level of 2 to 5 m bgl is observed in about 19% wells. Maximum wells show depth to water level in the range of 5-10 m bgl in 50% wells whereas about 26% of the wells analysed show water level in the range of 10-20 m bgl and only 2% of the wells analysed show water level in the range of 20-40 m bgl or more. The



depth to water level during Premonsoon 2015 in the state varies from 0.30 m bgl to 58.12 m bgl in Latur district.

Water Level Fluctuation (Premonsoon 2015 to Premonsoon 2014)

The water level data of Premonsoon 2015 when compared with Premonsoon 2014 indicates that there is rise in water level in only 33% of the wells monitored, out of which 25% of the wells monitored show rise in the range of 0-2 m. Maximum number of wells, 65% wells show decline in water level, out of which 45% shows fall in 0-2 m range, 11% in 2-4 m range and 9 % in more than 4 m range.

Fluctuation - Premonsoon 2015 to Premonsoon Decadal mean (2005-14)

The fluctuations of water level during Premonsoon 2015 when compared with the Decadal mean (Premonsoon 2005-2014) show that about 52% of analysed wells have shown a rise in water level, out of which, 38% of the wells show rise in the range of 0 to 2 m and 10% wells have shown rise in the range of 2-4 m. About 48% wells have shown a decline in water level, out of which, 34% fall in the range of 0-2 m and 9% in 2-4 m range.

4.21 Meghalaya

Depth to Water Level – Premonsoon 2015

In general depth to water level scenario in the state depicted a water level in the range of 0 to 10 m bgl. About 12% monitoring stations recorded water level within 2 m bgl and maximum number

of wells, 76%, recorded water level between 2-5 m bgl. Another 12 % wells shows water level in 5-10m bgl. Water level varies upto 7.32 m bgl.

Water Level Fluctuation (Premonsoon 2015 to Premonsoon 2014)

Water level data of Premonsoon 2015 was compared to Premonsoon 2014 and the analysis shows that 60% of the wells show rise in water level and 40 % show decline in water level, maximum wells falls in the 0-2 m range.

Fluctuation - Premonsoon 2015 to Premonsoon Decadal mean (2005-14)

The fluctuations of water level during Premonsoon 2015 when compared with the Decadal mean (Premonsoon 2005-2014) show that only 24% of analysed wells have shown a rise in water level, and 76% wells show fall. Out of 24% of the wells showing rise, all the wells falls in the range of 0 to 2 m. About 59% wells have shown a decline in water level in the range of 0-2 m.

4.22 Nagaland

Depth to Water Level – Premonsoon 2015

In general depth to water level scenario in the state depicted a water level in the range of 2 to 10 m bgl. About 20% monitoring stations show water level in 2-5 m bgl, whereas 60% wells analysed lies in 5-10 m bgl range. Another 20 % wells show more than 10 m bgl.

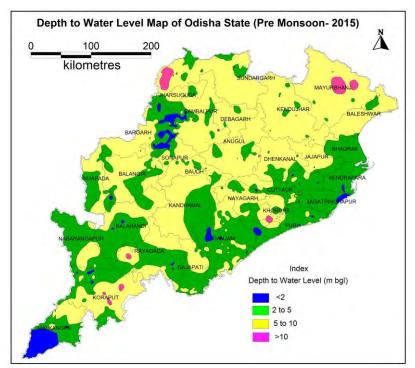
Water Level Fluctuation (Premonsoon 2015 to Premonsoon 2014)

Water level data of Premonsoon 2015 was compared to Premonsoon 2014 and the analysis shows that 60% of the wells show rise in water level and 40 % show decline in water level.

4.23 Odisha

Depth to Water Level -Premonsoon 2015

During Premonsoon 2015, it is observed that in 10% of the wells, water level ranges in 0-2 m bgl. About 38% of the wells analysed have shown water level in the range of 2-5 m bgl. Majority of the wells, (51%) show depth to water level range of 5-10 m bgl. The depth to water level recorded in the state of Odisha during Premonsoon 2014



ranges from 0.30 to 14.50 m bgl in Mayurbhanj district.

Water Level Fluctuation (Premonsoon 2015 to Premonsoon 2014)

The water level data of Premonsoon 2015 when compared with Premonsoon 2014 indicates that there is rise in water level in the state in only 37% of the wells monitored, out of which 35% of the wells monitored show rise in the range of 0-2 m. Decline in water level has been recorded in only 60% of the well and almost all the wells lies in 0-2 m range.

Fluctuation - Premonsoon 2015 to Premonsoon Decadal mean (2005-14)

The fluctuation of water level during Premonsoon 2015 when compared with the Decadal mean (Premonsoon 2004-2013) indicates that there is both rise and fall in water level in the state. About 53% of analysed wells have shown a rise in water level and 46% wells have shown a fall in water level. 1 % well shows no change in water level. Out of the wells showing rise, 47% is in the category of 0-2 m and similarly in the decline category 43 % wells lies in the 0-2 m range.

4.24 Pondicherry

Depth to Water Level – Premonsoon 2015

During Premonsoon 2015, a total of 4 wells have been monitored. 75% of the wells show water level in 2-5 m bgl range and another 25 % in 5-10 m bgl.

Water Level Fluctuation (Premonsoon 2015 to Premonsoon 2014)

The water level data of Premonsoon 2015 when compared with Premonsoon 2014 indicates that there is rise in water level in only 25% of the wells monitored and all the wells monitored show rise in the range of 0-2 m. Decline in water level has been recorded in 75% of the wells and all the wells lies in the range of 0-2 m.

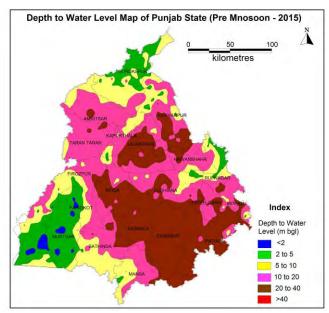
Fluctuation - Premonsoon 2015 to Premonsoon Decadal mean (2005-14)

When compared the decadal mean water level (Premonsoon 2005 to 2014) with Premonsoon 2015, 50% of observation wells are showing rise in water level whereas 50% wells show fall in water level and all in 0-2 m range.

4.25 Punjab

Depth to Water Level – Premonsoon 2015

During Premonsoon 2015, in Punjab, it is observed that water level mainly ranges between 5-40 m bgl. In only 2% of the wells, water level ranges in 0-2 m depth range.



About 14% of the wells analysed have shown water level in the range of 2-5 m bgl, 22% fall in the range of 5-10 m bgl and a majority of wells i.e. 35% of the wells show water level in the

range of 10-20 m bgl. Similarly, 27 % wells have shown water level in the range of 20-40 m bgl. Deeper water level is mostly recorded in districts of Moga, Sangrur, Barnala, Patiala, Jalandhar. The depth to water level recorded in the state during Premonsoon 2015 ranges from 0.51 to 39.20 m bgl (Patiala District)

Water Level Fluctuation (Premonsoon 2015 to Premonsoon 2014)

The water level data of Premonsoon 2015 when compared with Premonsoon 2014 indicates that there is rise in water level in only 20% of the wells monitored, out of which 18 % of the wells monitored show rise in the range of 0-2 m. Decline in water level has been recorded in 77% of the wells, out of which 65 % falls in the range of 0-2 m and 11% in 2-4 m range.

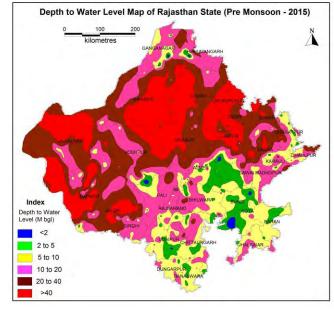
Fluctuation - Premonsoon 2015 to Premonsoon Decadal mean (2005-14)

The fluctuation of water level during Premonsoon 2015 with respect to average water level of past decade (Decadal mean Premonsoon 2005-2014) indicates decline in water level in major parts of Punjab State. Only about 28% of the wells have shown rise, of which 25% wells show water level rise in the range of 0-2 m, 2% of wells reported rise between 2 and 4 m. Fall in water level is observed in 70% of the wells. Out of this, 53% of the wells analysed is showing fall in the range of 0-2 m, 15% of the wells showing fall of 2-4 m and 3% falls in more than 4 m range. 2 % wells show no change in water level.

4.26 Rajasthan

Depth to Water Level – Premonsoon 2015

During Premonsoon 2015, it is observed that water level in the state ranges from 5 to more than 40 m bgl. Only 3% wells in Rajasthan have shown water level in the range of 0-2 m bgl, 11% of the wells have shown water level in the range of 2-5 m bgl. About 23% of the wells analysed have shown water level in the range of 5-10 m bgl, 25% of the wells have shown water level in the range of 10-20 m bgl. Deeper water level in the range of 20-40 m bgl is observed at 18% of the wells analysed and very deeper water level of more than 40 m bgl is observed at 19% of the wells analysed.



Water Level Fluctuation (Premonsoon 2015 to Premonsoon 2014)

Comparison of water level of Premonsoon 2015 with Premonsoon 2014 in the state indicates that about 52% of the wells analysed have recorded a rise in water level, out of which 33% of analysed wells have recorded a rise in the range of 0 to 2 m, 9% of analysed wells have shown rise in the range of 2 to 4 m and 10% of the wells have shown rise in more than 4 m range. 47% of the wells have shown fall in water level, out of which, 33% have recorded fall in the range of 0 to 2 m range , 8 % in 2-4 m range and 5 % in more than 4 m range. 1 % well shows no change in water level.

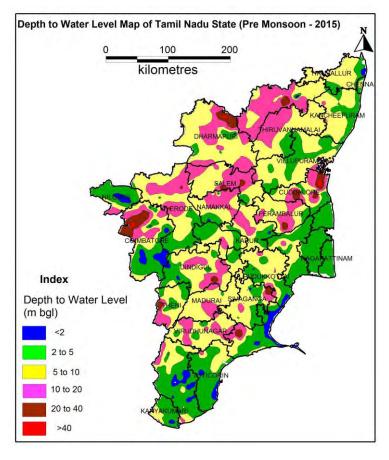
Fluctuation - Premonsoon 2015 to Premonsoon Decadal mean (2005-14)

The fluctuation of water level during Premonsoon 2015 with respect to Decadal means (Premonsoon 2005-2014) indicates that there is both rise and fall in water level in the state. About 59% of analysed wells show rise in water level. Out of this, 35% of the wells have shown rise in the range of 0-2 m, 13% of analysed wells have shown rise in the range of 2-4 m and another 11% of the wells have shown rise of more than 4 m range. About 41 % of the wells have shown a decline in water level. Out of this 20% of the wells have shown fall in the range of 0-2 m while 8% of the wells have shown fall in the range of 2-4 m and 13% of wells analysed have shown fall of more than 4 m. Majority of the wells shows fall of more than 4 m.

4.27 Tamil Nadu

Depth to Water Level Premonsoon 2015

The depth to water level during Premonsoon 2015 varies from 0.01 to 55.18 m bgl. It is observed that about 18% wells show water level in the range of 0-2 m bgl, 34 % of the wells have shown water level in the range of 2-5 m bgl. About 28% of the wells analysed have shown water level in the range of 5-10 m bgl, 18% of the wells have shown water level in the range of 10-20 m bgl. Deeper water level in the range of 20-40 m bgl is shown by only 2% of the wells analysed and water level more than 40 m bgl is shown by less than 1% of



the wells analysed. Along the coastal areas water level varies from 2 to 5 m bgl, whereas towards west the water deepens to 10 m bgl or more.

Water Level Fluctuation (Premonsoon 2015 to Premonsoon 2014)

Comparison of water level of Premonsoon 2015 with Premonsoon 2014 in the state indicates that there is rise in water level in the state. About 75% of the wells analysed have recorded a rise in water level, out of which 34% of analysed wells have recorded a rise in the range of 0 to 2 m, 19% of analysed wells have shown rise in the range of 2 to 4 m and another 23% of the wells have shown rise more than 4 m. About 24% of the wells have shown fall in water level, out of this, 17% have recorded fall in the range of 0 to 2 m. 1% well show no change in water level.

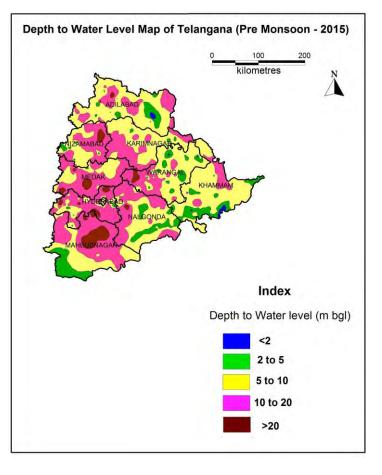
Fluctuation - Premonsoon 2015 to Premonsoon Decadal mean (2005-14)

The water level during Premonsoon 2015 when compared with the Decadal mean (Premonsoon 2005 -2014) indicates that there is in both rise and fall in water level in the entire state. About 57% of analysed wells have shown rise in water level. Out of this, 34% of the wells have shown rise in the range of 0-2 m, 14% of analysed wells have shown rise in the range of 2 - 4 m and 8% of the wells have shown rise of more than 4 m. About 43% of the wells have shown a fall in water level, out of which 25% of the wells have shown fall in the range of 0-2 m.

4.28 Telangana

Depth to Water Level – Premonsoon 2015

Depth to water level in Telangana during Premonsoon 2015 ranges from 0.33 to 46.10 m bgl in Medak district. In general depth to water level scenario in the state depicted a water level in the range of 2 to 20 m bgl. Only about 2% monitoring stations recorded water level within 2 m bgl and around 15% wells recorded water level between 2-5 m bgl. Majority of the wells, ie about 42% wells recorded water level between 5-10 m bgl whereas 35% wells recorded water level between 10-20 m bgl. Only 5% show water level more than 20 m bgl. Water levels of more than 10 m bgl are



observed in the western and central parts of the state whereas water levels of less than 2 m bgl are seen in small patches only.

Water Level Fluctuation (Premonsoon 2015 to Premonsoon 2014)

Comparison of water level of Premonsoon 2015 with Premonsoon 2014 in the state indicates that there is decline in water level in the entire state. Only about 12% of the wells analysed have recorded a rise in water level, out of which 9% of analysed wells have recorded a rise in the range of 0 to 2 m. About 85% of the wells have shown fall in water level, out of this, 36% have recorded fall in the range of 0 to 2 m, 26% in 2-4 m range whereas 23 % in more than 4 m range. 3% well show no change in water level.

Fluctuation - Premonsoon 2015 to Premonsoon Decadal mean (2005-14)

The water level during Premonsoon 2015 when compared with the Decadal mean (Premonsoon 2005 -2014) indicates that there is in general fall in water level in the entire state. About 71% of analysed wells have shown decline in water level. Out of this, 37% of the wells have shown decline in the range of 0-2 m, 19% of analysed wells have shown fall in the range of 2 - 4 m and 15% of the wells have shown fall of more than 4 m. Remaining 28% of the wells have shown a rise in water level, out of which 20% of the wells have shown rise in the range of 0-2 m. 1% well show no change in water level.

4.29 Tripura

Depth to Water Level – Premonsoon 2015

In general depth to water level scenario in the state depicted a water level in the range of 0 to 10 m bgl at all the 100 % wells monitored. Around 14% monitoring stations recorded water level within 2 m bgl and around 61 % wells recorded water level between 2-5 m bgl. 25 % wells recorded water level between 5-10 m bgl.

Water Level Fluctuation (Premonsoon 2015 to Premonsoon 2014)

The comparison of Premonsoon 2015 water level with Premonsoon 2014 reveals that there is both rise and fall in water level in the state. It is observed 44% wells show rise in water level, out of which31% show rise in 0-2 m range. 50% show decline in water level and all the wells fall in 0-2 m range.

Fluctuation - Premonsoon 2015 to Premonsoon Decadal mean (2005-14)

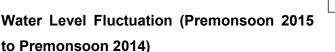
The water level data of Premonsoon 2015 has been compared with decadal mean (Premonsoon 2005-2014) and it is observed that 54% show a rise in water level whereas 46% show a fall in water level. Both rise and fall is mostly in the range of 0-2 m.

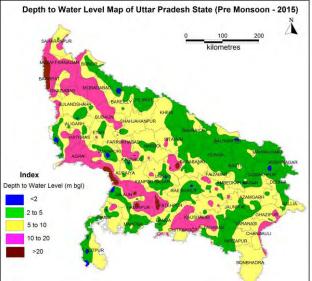
4.30 Uttar Pradesh

Depth to Water Level - Premonsoon - 2015

During Premonsoon 2015, in Uttar Pradesh shallow water level ranging between 0 and 2 m bgl were observed at only 4% of the wells monitored mostly seen as small patches. Water level

ranging between 2 and 5 m bgl was observed at 34% of wells, covering the entire eastern, central and northern part of the state. The depth to water level between 5 and 10 m bgl has been observed in 40 % wells and depth to water level between 10 and 20 meters is observed at 19% of wells. Deeper water levels of more than 20 m bgl are observed at 3% wells along western boundary of the state. The depth to water level in the state ranges upto 37.10 m bgl in Etawah district.





The comparison of Premonsoon 2015 water level with Premonsoon 2014 reveals that rise in water level is observed in almost 31% of the wells analysed and fall is observed at majority of the wells, ie. 68% wells. The rise in water level in the range of 0-2 m has been observed in 27% well. The fall in water level in the range of 0-2 m has been observed at 61 % wells. 1% shows no change in water level. Rise and fall is restricted to mostly 0-2 m range.

Fluctuation - Premonsoon 2015 to Premonsoon Decadal mean (2005-14)

The fluctuation of water level during Premonsoon 2015 when compared with the Decadal mean (Premonsoon 2005-2014), indicates that there is in general both rise and fall in water level in the state. About 50% of analysed wells have shown rise in water level. Out of this 43% of the wells have shown rise in the range of 0-2 m. Another 50% of the wells have shown a fall in water level. Out of this 46% of the wells have shown fall in the range of 0-2 m. Both rise and fall is in the range of 0-2 m range.

4.31 Uttarakhand

Depth to Water Level – Premonsoon 2015

Uttarakhand state is mainly covered by hilly/ mountainous areas. About 85% of the area is hilly and has no appreciable ground water potential whereas about 15% of the state is plain where ground water is developed. During Premonsoon 2015, depth to water level in the state from from 2-20 m bgl. Depth to water level in the range 2-5 m bgl in 43% of the wells analysed, 22% of the wells show water level in the range of 5-10 m bgl and 32% in the range of 10-20 m bgl. Deeper water level of 20-40 m bgl is observed in 20-40 m bgl.

Water Level Fluctuation (Premonsoon 2015 to Premonsoon 2014)

The comparison of Premonsoon 2015 water level with Premonsoon 2014 reveals that there is both rise and fall in water level in the state. 41% of the wells analysed shows rise in water level, and fall is observed at 59% wells. The rise in water level in the range of 0-2 m has been observed in 33% wells. The fall in water level in the range of 0-2 m has been observed at all the 37 % wells.

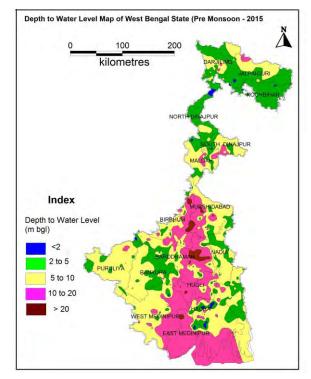
Fluctuation - Premonsoon 2015 to Premonsoon Decadal mean (2005-14)

The comparison of Premonsoon 2015 water level with decadal mean of (Premonsoon 2005 - 2014) reveals that about only 30% of the analysed wells have shown rise in water level. Out of this, rise in water level in the range of 0-2 m has been observed at 22% of wells. About 70% of the analysed wells have shown decline in water level and out of these 57% wells fall in the range of 0-2 m. Rise and fall is mostly restricted to 0-2 m range.

4.32 West Bengal

Depth to Water Level – Premonsoon 2015

During Premonsoon, 2015, depth to water level in the state of West Bengal ranges from 2-20 m bgl. Depth to water level varies in the range of 0-2 m bgl at only 5% of wells analysed, 2-5 m bgl at 30 % of wells analysed, 5-10 m bgl at 39% of wells analysed and 10-20 m bgl at 23% of wells analysed. Only 2 % wells are showing water level of more than 20 m bgl. In general water level varies upto 26.45 m bgl in Bardhamann district. Areas showing water levels of more than 10 m bgl are observed mainly in the central parts of the state. In the northern part of the state water level varies from 2 to 5 m bgl.



Water Level Fluctuation (Premonsoon 2015 to Premonsoon 2014)

Water level data of Premonsoon 2015 was compared to Premonsoon 2014 and the analysis shows that there is both rise and fall in water level in the entire state. About 49% of the wells shows rise and another 50% wells shows fall in water level. 1% well shows no change in water level. 41% wells have shown a rise in the range of 0-2 m whereas 38% of the wells have shown fall in the range of 2-4 m.

Fluctuation - Premonsoon 2015 to Premonsoon Decadal mean (2005-14)

When compared the decadal mean water level (Premonsoon 2005 to 2014) with water level of Premonsoon 2015, there is both rise and fall in water level in the state. About 53% of the analysed wells have shown rise in water level. Out of this, rise in the range of 0-2 m has been

observed at 44% of wells. About 47% of the analysed wells have shown fall in water level, out of which 34% shows rise in the range of 0-2 m. This indicates rise and fall in water level is restricted to 0-2 m range.

State-wise Depth to water Level and Distribution of Percentage of Wells for the Period of Premonsoon-2015

S. No.	Name of State	No. of wells Analysed		Water Level nbgl)	Numl	oer & Per	centage	e of Wel	ls Show	ving Dep	th to W	ater Lev	vel (m	bgl) in t	he Rar	nge of
			(()-2	2	-5	5-	·10	10	-20	20	0-40	>	40
			Min	Max	No	%	No	%	No	%	No	%	No	%	No	%
1	Andaman & Nicobar Island	86	0.05	11.1	41	47.67	39	45.35	5	5.81	1	1.16	0	0.00	0	0.00
2	Andhra Pradesh	787	0.02	49.30	105	13.34	323	41.04	260	33.04	93	11.82	4	0.51	2	0.25
3	Arunachal Pradesh	13	1.83	10.88	1	7.69	5	38.46	5	38.46	2	15.38	0	0.00	0	0.00
4	Assam	191	0.70	15.53	20	10.47	122	63.87	45	23.56	4	2.09	0	0.00	0	0.00
5	Bihar	580	1.00	15.80	9	1.55	291	50.17	259	44.66	21	3.62	0	0.00	0	0.00
6	Chandigarh	11	3.07	23.07	0	0.00	2	18.18	2	18.18	4	36.36	3	27.27	0	0.00
7	Chhattisgarh	567	0.00	49.40	25	4.41	148	26.10	288	50.79	98	17.28	7	1.23	1	0.18
8	Dadra & Nagar Haveli	12	3.10	14.25	0	0.00	2	16.67	6	50.00	4	33.33	0	0.00	0	0.00
9	Daman & Diu	7	4.13	10.15	0	0.00	2	28.57	4	57.14	1	14.29	0	0.00	0	0.00
10	Delhi	114	1.20	62.22	3	2.63	24	21.05	30	26.32	30	26.32	17	14.91	10	8.77
11	Goa	41	1.72	19.39	3	7.32	19	46.34	14	34.15	5	12.20	0	0.00	0	0.00
12	Gujarat	794	0.24	61.30	18	2.27	151	19.02	273	34.38	262	33.00	85	10.71	5	0.63
13	Haryana	325	0.28	80.33	20	6.15	62	19.08	82	25.23	97	29.85	53	16.31	11	3.38
14	Himachal Pradesh	87	0.34	29.25	12	13.79	37	42.53	13	14.94	20	22.99	5	5.75	0	0.00
15	Jammu & Kashmir	222	0.01	31.52	69	31.08	99	44.59	36	16.22	10	4.50	8	3.60	0	0.00
16	Jharkhand	151	1.20	13.80	1	0.66	23	15.23	104	68.87	23	15.23	0	0.00	0	0.00
17	Karnataka	1442	0.05	30.00	150	10.40	393	27.25	580	40.22	302	20.94	17	1.18	0	0.00
18	Kerala	1417	0.30	55.90	118	8.33	407	28.72	648	45.73	230	16.23	13	0.92	1	0.07

19	Madhya Pradesh	1362	1.05	49.57	20	1.47	200	14.68	629	46.18	438	32.16	61	4.48	13	0.95
20	Maharashtra	1534	0.30	58.12	46	3.00	290	18.90	762	49.67	402	26.21	31	2.02	3	0.20
21	Meghalaya	17	1.09	7.32	2	11.76	13	76.47	2	11.76	0	0.00	0	0.00	0	0.00
22	Nagaland	10	3.87	23.17	0	0.00	2	20.00	6	60.00	1	10.00	1	10.00	0	0.00
23	Orissa	1254	0.30	14.50	128	10.21	475	37.88	633	50.48	18	1.44	0	0.00	0	0.00
24	Pondicherry	4	2.37	5.78	0	0.00	3	75.00	1	25.00	0	0.00	0	0.00	0	0.00
25	Punjab	686	0.51	39.20	17	2.48	99	14.43	150	21.87	237	34.55	183	26.68	0	0.00
26	Rajasthan	827	0.08	113.20	27	3.26	95	11.49	189	22.85	210	25.39	147	17.78	159	19.23
27	Tamil Nadu	593	0.00	70.38	65	10.96	174	29.34	216	36.42	107	18.04	25	4.22	6	1.01
28	Telangana	563	0.33	46.10	13	2.31	87	15.45	235	41.74	198	35.17	28	4.97	2	0.36
29	Tripura	28	0.48	7.13	4	14.29	17	60.71	7	25.00	0	0.00	0	0.00	0	0.00
30	Uttar Pradesh	754	0.00	37.10	31	4.11	259	34.35	298	39.52	144	19.10	22	2.92	0	0.00
31	Uttaranchal	37	2.14	22.69	0	0.00	16	43.24	8	21.62	12	32.43	1	2.70	0	0.00
32	West Bengal	894	0.20	26.45	45	5.03	266	29.75	352	39.37	202	22.60	29	3.24	0	0.00
	Total	15410			993	6.44	4145	26.90	6142	39.86	3176	20.61	740	4.80	213	1.38

NOTE : In the States/UT s of Sikkim, Mizoram and Lakshwadeep, no GW monitoring wells exist.

Monitoring not carried out in Manipur during Premonsoon 2015 due to insurgency problem

State-wise Annual Fluctuation & Frequency Distribution of Different Ranges from Premonsoon 2015 to Premonsoon 2014

S. No.	Name of State	No. of wells Analys		Rang	ge in m				R	lise					Fal	11				Tota	al		We	
		ed	R	ise		Fall	0-	2 m	2-	4 m	>4	ł m	0-2	2 m	2-	4 m	>4	m	Ri	ise	Fa	ill	show no chai)
			Min	Max	Min	Max	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%
1	Andaman & Nicobar Islands	86	0.02	4.20	0.05	2.71	42	48.84	11	12.79	1	1.16	30	34.88	2	2.33	0	0.0 0	54	63	32	37	0	0
2	Andhra Pradesh	699	0.01	6.70	0.01	18.38	175	25.04	15	2.15	7	1.00	352	50.36	76	10.87	33	4.7 2	197	28	461	66	41	6
3	Arunachal Pradesh	11	0.21	0.87	0.40	0.71	5	45.45	0	0.00	0	0.00	2	18.18	0	0.00	0	0.0 0	5	45	2	18	4	3 6
4	Assam	140	0.01	3.00	0.02	8.26	66	47.14	5	3.57	1	0.71	57	40.71	4	2.86	4	2.8 6	72	51	65	46	3	2
5	Bihar	437	0.02	4.15	0.01	9.08	160	36.61	19	4.35	2	0.46	209	47.83	22	5.03	12	2.7 5	181	41	243	56	13	3
6	Chandigarh	11	0.92	10.69	0.13	2.54	1	9.09	0	0.00	1	9.09	7	63.64	2	18.18	0	0.0 0	2	18	9	82	0	0
7	Chhattisgarh	462	0.01	13.37	0.01	13.02	129	27.92	48	10.39	31	6.71	178	38.53	26	5.63	18	3.9 0	208	45	222	48	32	7
8	Dadra & Nagar Haveli	10	0.01	2.49	0.14	6.35	2	20.00	1	10.00	0	0.00	6	60.00	0	0.00	1	10. 00	3	30	7	70	0	0

Annexure-II

9	Daman & Diu	7			0.06	2.81	0	0.00	0	0.00	0	0.00	5	71.43	1	14.29	0	0.0 0	0	0	6	86	1	1 4
10	Delhi	112	0.02	8.82	0.01	3.55	13	11.61	0	0.00	1	0.89	82	73.21	15	13.39	0	0.0 0	14	13	97	87	1	1
11	Goa	40	0.08	2.72	0.02	2.62	11	27.50	3	7.50	0	0.00	22	55.00	3	7.50	0	0.0 0	14	35	25	63	1	3
12	Gujarat	729	0.01	12.16	0.01	19.06	168	23.05	35	4.80	32	4.39	294	40.33	91	12.48	73	10. 01	235	32	458	63	36	5
13	Haryana	265	0.02	10.45	0.01	8.55	66	24.91	2	0.75	3	1.13	149	56.23	31	11.70	11	4.1 5	71	27	191	72	3	1
14	Himachal Pradesh	85	0.02	13.90	0.02	11.78	34	40.00	2	2.35	2	2.35	35	41.18	6	7.06	5	5.8 8	38	45	46	54	1	1
15	Jammu & Kashmir	222	0.01	22.65	0.01	10.75	141	63.51	18	8.11	3	1.35	50	22.52	5	2.25	2	0.9 0	162	73	57	26	3	1
16	Jharkhand	138	0.01	9.56	0.03	5.97	34	24.64	6	4.35	2	1.45	83	60.14	11	7.97	2	1.4 5	42	30	96	70	0	0
17	Karnataka	1344	0.01	25.25	0.01	16.50	484	36.01	117	8.71	95	7.07	419	31.18	59	4.39	45	3.3 5	696	52	523	39	125	9
18	Kerala	1073	0.01	10.36	0.01	7.62	579	53.96	39	3.63	20	1.86	385	35.88	32	2.98	7	0.6 5	638	59	424	40	11	1
19	Madhya Pradesh	1289	0.01	18.18	0.01	7.62	279	21.64	52	4.03	48	3.72	597	46.31	153	11.87	129	10. 01	379	29	879	68	31	2
20	Maharashtra	1239	0.01	14.80	0.01	25.15	312	25.18	64	5.17	34	2.74	555	44.79	140	11.30	108	8.7 2	410	33	803	65	26	2
21	Meghalaya	10	0.06	1.59	0.05	2.29	6	60.00	0	0.00	0	0.00	3	30.00	1	10.00	0	0.0 0	6	60	4	40	0	0

22	Nagaland	5	0.39	2.87	1.02	5.87	2	40.00	1	20.00	0	0.00	1	20.00	0	0.00	1	20. 00	3	60	2	40	0	0
23	Orissa	1161	0.02	9.2	0.01	6.49	408	35.14	16	1.38	7	0.60	664	57.19	33	2.84	3	0.2 6	431	37	700	60	30	3
24	Pondicherry	4	0.39	0.39	0.04	0.70	1	25.00	0	0.00	0	0.00	3	75.00	0	0.00	0	0.0 0	1	25	3	75	0	0
25	Punjab	598	0.01	23.30	0.01	24.95	105	17.56	5	0.84	9	1.51	390	65.22	65	10.87	5	0.8 4	119	20	460	77	19	3
26	Rajasthan	681	0.02	21.71	0.02	25.80	223	32.75	64	9.40	67	9.84	228	33.48	53	7.78	37	5.4 3	354	52	318	47	9	1
27	Tamil Nadu	518	0.01	16.79	0.01	14.27	175	33.78	99	19.11	117	22.59	88	16.99	19	3.67	15	2.9 0	391	75	122	24	5	1
28	Telangana	510	0.01	19.23	0.02	25.75	44	8.63	9	1.76	10	1.96	183	35.88	133	26.08	118	23. 14	63	12	434	85	13	3
29	Tripura	16	0.02	5.70	0.03	0.54	5	31.25	1	6.25	1	6.25	8	50.00	0	0.00	0	0.0 0	7	44	8	50	1	6
30	Uttar Pradesh	718	0.01	7.64	0.01	7.07	197	27.44	18	2.51	6	0.84	441	61.42	42	5.85	7	0.9 7	221	31	490	68	7	1
31	Uttarakhand	27	0.02	2.19	0.03	8.05	9	33.33	2	7.41	0	0.00	10	37.04	3	11.11	3	11. 11	11	41	16	59	0	0
32	West Bengal	811	0.01	18.27	0.01	16.05	329	40.57	38	4.69	30	3.70	310	38.22	66	8.14	29	3.5 8	397	49	405	50	9	1
	TOTAL	13458					4205	31	690	5.13	530	3.94	5846	43.44	109 4	8.13	668	4.9 6	5425	40	760 8	57	425	3

Annexure-III

State - wise Fluctuation & Frequency Distribution of Different Ranges from Premonsoon 2015 to Decadal Mean [Premonsoon(2005 to 2014)]

S. No.	Name of State	No. of wells		Ran	ge in m				Rise						Fall								Wel	
		Analyse d	Ri	se	Fa	all	0-2	2 m	2-4 r	n	>4 ı	n	0-2	m	2-4	m	>4 ı	m	Ris	е	Fa	II	ng i chai e	ng
			Min	Max	Min	Max	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%
1	Andhra Pradesh	731	0.01	4.92	0.01	20.55	233	31.9	26	3.6	5	0.7	343	46.9	75	10.3	38	5.2	264	36	456	62	11	2
2	Arunachal Pradesh	12	0.22	12.1 5	0.3	2.67	4	33.3	1	8.3	1	8.3	5	41.7	1	8.3	0	0.0	6	50	6	50	0	0
3	Assam	187	0.01	10.9 7	0	12.3	72	38.5	8	4.3	3	1.6	92	49.2	7	3.7	5	2.7	83	44	104	56	0	0
4	Bihar	477	0.01	4.62	0.01	6.5	228	47.8	25	5.2	2	0.4	192	40.3	17	3.6	8	1.7	255	53	217	45	5	1
5	Chandigarh	11	0.05	9.55	0.05	2.65	2	18.2	0	0.0	1	9.1	6	54.5	2	18.2	0	0.0	3	27	8	73	0	0
6	Chhattisgar h	560	0	12.4 2	0.01	12.04	194	34.6	73	13.0	55	9.8	178	31.8	35	6.3	18	3.2	322	58	231	41	7	1

7	Dadra & Nagar Haveli	11	0.01	2.49	0.14	6.27	3	27.3	2	18.2	0	0.0	5	45.5	0	0.0	1	9.1	5	45	6	55	0	0
8	Daman & Diu	7	1.33	1.33	0.04	2.61	1	14.3	0	0.0	0	0.0	4	57.1	2	28.6	0	0.0	1	14	6	86	0	0
9	Delhi	114	0.04	3.76	0.24	10.1	36	31.6	6	5.3	0	0.0	43	37.7	15	13.2	14	12. 3	42	37	72	63	0	0
10	Goa	41	0.06	2.06	0.08	1.84	23	56.1	1	2.4	0	0.0	17	41.5	0	0.0	0	0.0	24	59	17	41	0	0
11	Gujarat	769	0	18.4 1	0	13.1	221	28.7	79	10.3	49	6.4	275	35.8	70	9.1	69	9.0	349	45	414	54	6	1
12	Haryana	313	0	8.21	0.01	35.24	110	35.1	13	4.2	5	1.6	100	31.9	45	14.4	40	12. 8	128	41	185	59	0	0
13	Himachal Pradesh	87	0.01	12.6 6	0.03	8.2	42	48.3	7	8.0	8	9.2	25	28.7	4	4.6	1	1.1	57	66	30	34	0	0
14	Jammu & Kashmir	224	0.02	12.0 1	0.01	3.04	146	65.2	41	18.3	8	3.6	26	11.6	3	1.3	0	0.0	195	87	29	13	0	0
15	Jharkhand	147	0.01	7.01	0.05	5.97	53	36.1	11	7.5	5	3.4	67	45.6	8	5.4	3	2.0	69	47	78	53	0	0
16	Karnataka	1369	0	17.1 9	0.01	12.27	571	41.7	179	13.1	85	6.2	385	28.1	83	6.1	43	3.1	835	61	511	37	23	2
17	Kerala	1151	0.01	9.02	0.01	7.62	630	54.7	41	3.6	15	1.3	415	36.1	41	3.6	5	0.4	686	60	461	40	4	0
18	Madhya Pradesh	1303	0.01	18.4 2	0.01	23.36	495	38.0	163	12.5	106	8.1	389	29.9	83	6.4	65	5.0	764	59	537	41	2	0
19	Maharasht ra	1400	0.01	19.9 7	0.01	23.66	530	37.9	146	10.4	53	3.8	478	34.1	122	8.7	67	4.8	729	52	667	48	4	0

20	Meghalaya	17	0.18	0.82	0.26	2.18	4	23.5	0	0.0	0	0.0	10	58.8	3	17.6	0	0.0	4	24	13	76	0	0
21	Odhisha	1189	0	9.32	0	5.25	554	46.6	63	5.3	11	0.9	508	42.7	39	3.3	3	0.3	628	53	550	46	11	1
22	Pondicherr y	4	0.04	0.22	0.26	1.06	2	50.0	0	0.0	0	0.0	2	50.0	0	0.0	0	0.0	2	50	2	50	0	0
23	Punjab	615	0	23.3	0.01	24.95	153	24.9	11	1.8	7	1.1	324	52.7	92	15.0	16	2.6	171	28	432	70	12	2
24	Rajasthan	779	0.01	16.5 6	0.01	31.35	274	35.2	99	12.7	86	11. 0	155	19.9	65	8.3	100	12. 8	459	59	320	41	0	0
25	Tamil Nadu	583	0	20.8 5	0.01	17.27	200	34.3	83	14.2	48	8.2	147	25.2	71	12.2	34	5.8	331	57	252	43	0	0
26	Telangana	521	0.02	10.2 1	0.02	24.61	104	20.0	26	5.0	16	3.1	192	36.9	101	19.4	78	15. 0	146	28	371	71	4	1
27	Tripura	28	0	3.11	0	2.11	13	46.4	1	3.6	1	3.6	12	42.9	1	3.6	0	0.0	15	54	13	46	0	0
28	Uttar Pradesh	749	0	10.7 9	0	6.1	322	43.0	43	5.7	10	1.3	342	45.7	26	3.5	4	0.5	375	50	372	50	2	0
29	Uttarakhan d	37	0.05	5.25	0.01	4.83	8	21.6	1	2.7	2	5.4	21	56.8	3	8.1	2	5.4	11	30	26	70	0	0
30	West Bengal	885	0.01	17.3 6	0.01	16.23	388	43.8	59	6.7	25	2.8	300	33.9	89	10.1	24	2.7	472	53	413	47	0	0
	Total	14321					5616	39.2	1208	8.4	607	4.2	5058	35.3	1103	7.7	638	4.5	7431	52	679 9	47	91	1 0 0