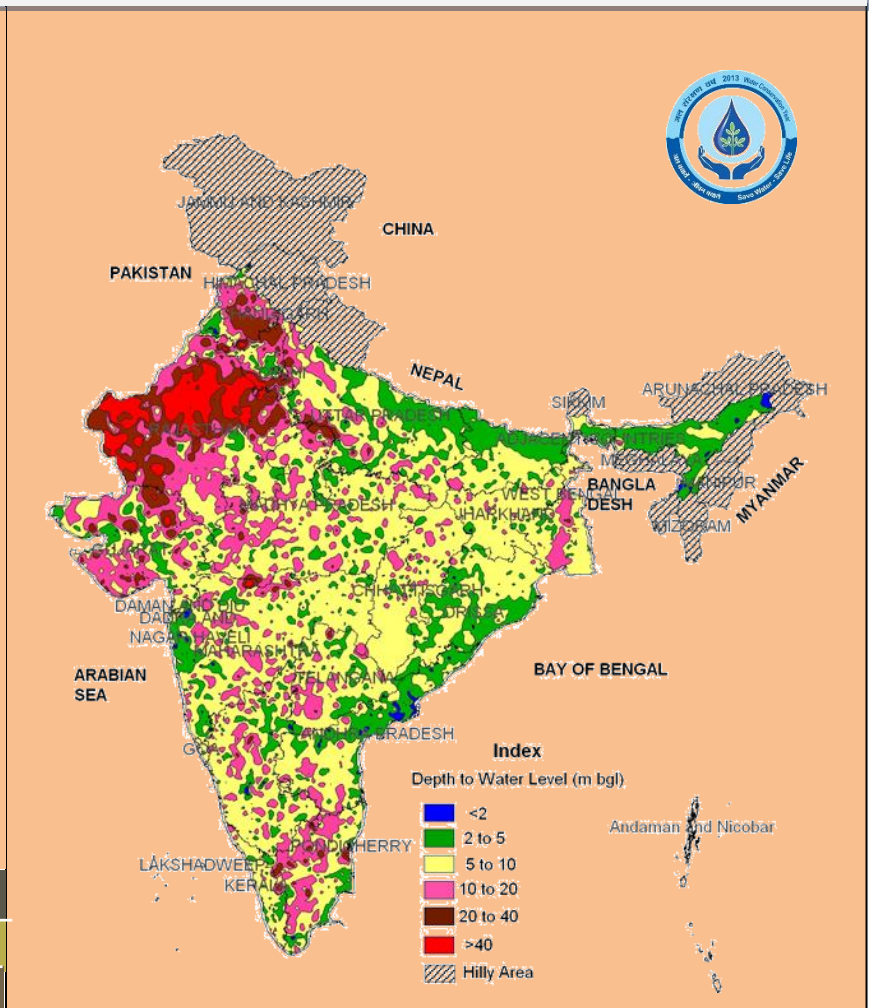
GROUND WATER SCENARIO IN INDIA

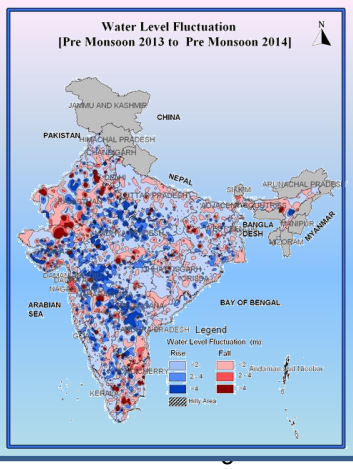
PREMONSOON, 2014

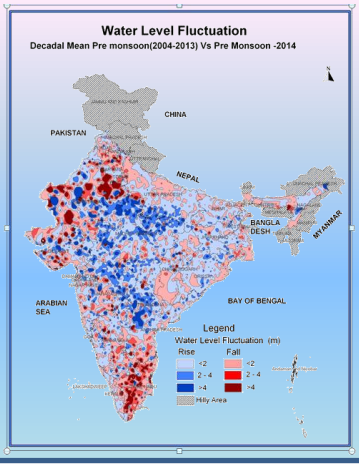
CENTRAL GROUND WATER BOARD

MINISTRY OF WATER RESOURCES

GOVT OF INDIA







GROUND WATER LEVEL SCENARIO IN INDIA
(PREMONSOON - 2014)

1.0 Introduction

Ground water regime monitoring is one of the key activities of CGWB to generate information on ground water level/ quality through representative sampling. 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 four times a year during Pre Monsoon (March/April/May), August, November and Premonsoon. The ground water regime monitoring was started in the year 1969 by Central Ground Water Board. At present CGWB has a network of 20698 ground water observation wells, out of which 14674 observation wells are dugwells and 6024 are piezometers, During Premonsoon 2014, **14957** observation wells have been monitored and analysed. An increase of ~2500 observation wells as compared to observation wells analysed during Premonsoon 2013 has been achieved as a part of an initiative of CGWB to expand the monitoring network in the entire country. 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 during the month of March/April/ May 2014. The Groundwater level data has been collected from all the states except for Mizoram, Manipur & Sikkim and UT of Lakshadweep where water level monitoring is not being carried out.

Water level data of Premonsoon 2014 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. Database thus generated forms the basis for planning the ground water development and management programme. This data is also used for assessment of ground water resources and establishing changes in the regime consequent to various development and management activities.

2.0 Rainfall Pattern

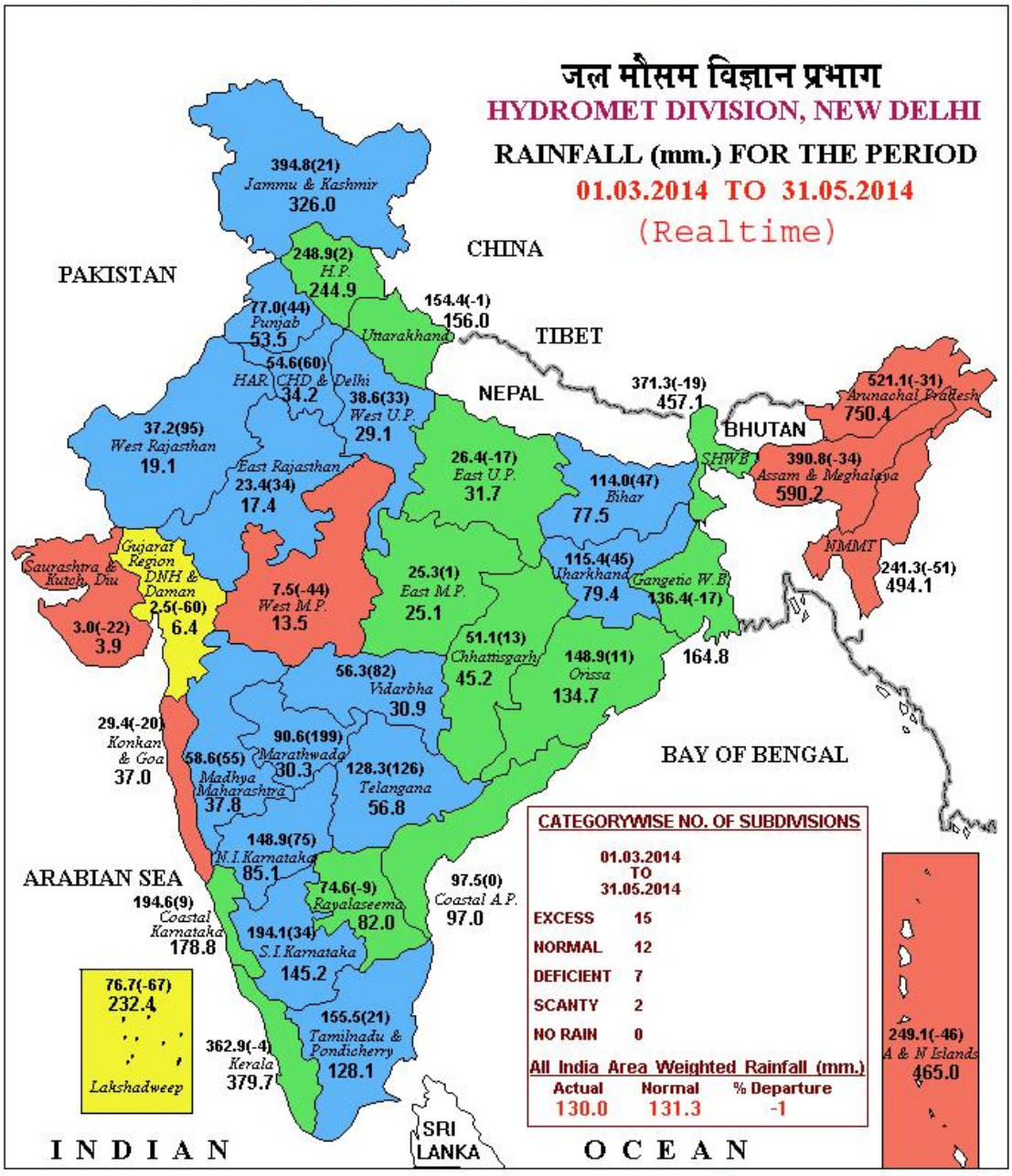
Water level / Piezometric heads are resultant of all input/ output from the aquifer. Apart from draft of ground water for various purposes, quantum of rainfall and its component being recharged to the ground water is major controlling factor of the depth to water levels and it's annual, seasonal or decadal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

Rainfall activity over the country during the season as a whole was near normal. It was above normal during March and May (116 % and 115 % of LPA respectively) and below normal during April (58% of LPA). Except for the meteorological subdivisions of extreme northeastern region, some subdivisions of western region and the Islands, most parts of the country received excess/normal rainfall. Jharkhand, Bihar, Haryana, Chandigarh, Delhi, Punjab, West Rajasthan, Madhya Maharashtra, Marathwada, Vidarbha, Telangana and North Interior Karnataka received about one and half times to two times of their respective normal rainfall.

During the season, out of 36 meteorological subdivisions, 15 received excess rainfall, 12 received normal rainfall, 7 received deficient rainfall and 2 received scanty rainfall. (Plate-I). Northern parts of the country, parts of south peninsula, eastern/ north eastern region of the country and Andaman & Nicobar Islands received more than 100 mm of rainfall. Parts of extreme northeastern region of the country, Jammu & Kashmir, Kerala and the Bay Islands received more than 400 mm of rainfall. Positive rainfall anomaly of the order of 50 to 100 mm was observed over parts of Jammu & Kashmir, Punjab, Himachal Pradesh, Uttarakhand, Haryana, Bihar, Jharkhand, Odisha, Chattisgarh, Madhya Maharashtra, Marathwada, Telangana, South Interior Karnataka, Kerala and Tamil Nadu. Negative rainfall anomaly of the order of 50 to 100 mm was observed over most parts of extreme northeastern region of the country and the Islands.

For the Pre-monsoon season 2014, rainfall for the country as a whole was 99% of its Long Period Average (LPA) value. During the season this year, the rainfall was deficient by 28% over the East & Northeast India, while over the other three homogeneous regions it was excess by about 20 %.

भारत मौसम विज्ञान विभाग
INDIA METEOROLOGICAL DEPARTMENT

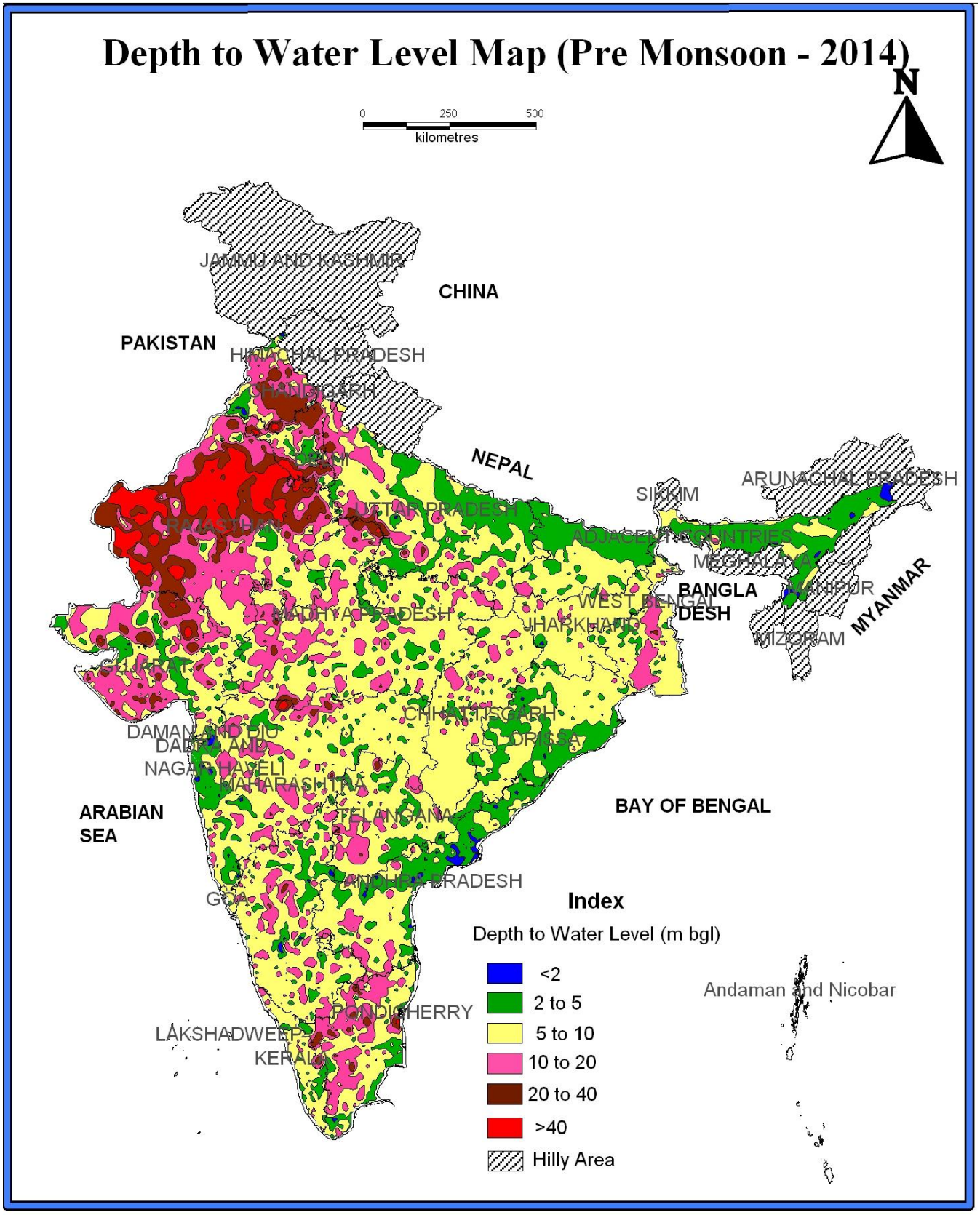


LEGEND: EXCESS (+20% OR MORE) | NORMAL (+19% TO -19%) | DEFICIENT (-20% TO -59%) | SCANTY (-60% TO -99%) | NO RAIN (-100%) | NO DATA

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.

Source: www.imd.gov.in



Source: National Data Centre, CGWB, Faridabad

3.0 Ground Water Level Scenario in India

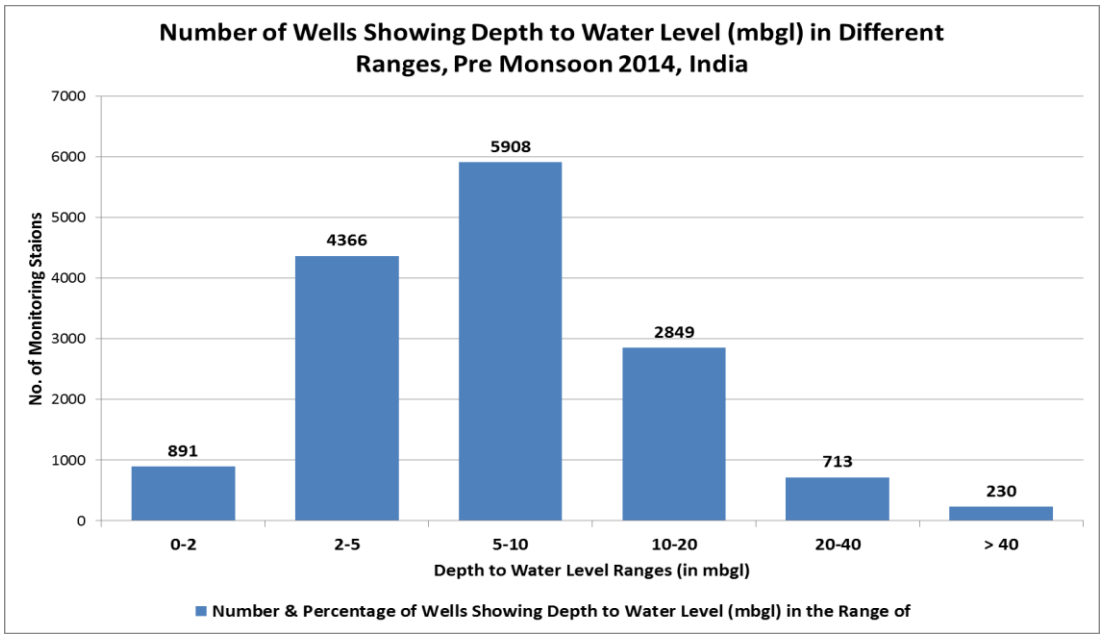
3.1 Ground Water Level Scenario - Premonsoon 2014

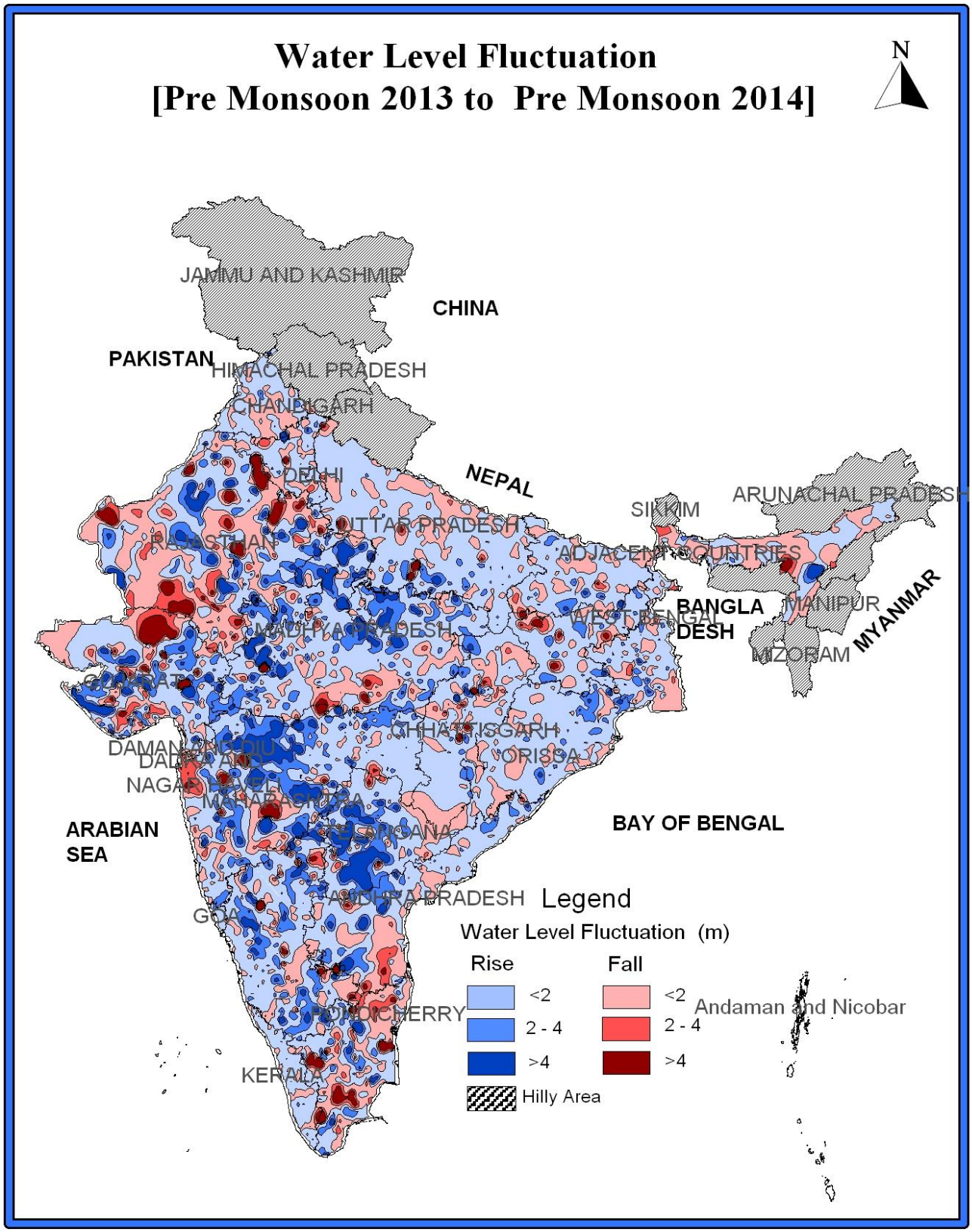
The ground water level data for Premonsoon 2014 indicate that out of the total 14957 wells analysed, 891 (6 %) wells are showing water level less than 2 m bgl (metres below ground level), 4366 (29%) wells are showing water level in the depth range of 2-5 m bgl, 5908 (40 %) wells are showing water level in the depth range of 5-10 m bgl, 2849 (19%) wells are showing water level in the depth range of 10-20 m bgl, 713 (5%) wells are showing water level in the depth range of 20-40 m bgl and the remaining 230 (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 119.60 m bgl is observed in Rajasthan whereas the minimum is less than 1 m bgl.

The depth to water level map of Premonsoon 2014 (**Plate II**) for the country indicates that in general depth to water level ranges from 5 to 10 m bgl as also observed at about 40% of stations. Sub-Himalayan area, north of river Ganges, Uttar Pradesh, Bihar, Odisha, Assam, Andhra Pradesh and Tripura generally the depth to water level varies from 2-5 meter below ground level. In the states of Madhya Pradesh, Jharkhand, Maharashtra, Karnataka, Telangana, Kerala and West Bengal water level generally varies from 5 to 10 m bgl with small patches showing depth to water level between 2 to 5 m bgl.

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 some parts of Delhi and Rajasthan water level of more than 40 m bgl is recorded. Along the eastern & western coast water level is generally less than 10 m. Central part of West Bengal state recorded water level in the range of 10-20 m bgl. In Central India water level generally varies between 2 m bgl to 10 m bgl, except in isolated pockets where water level more than 10 m bgl has been observed. The peninsular part of country generally recorded a water level in the range of 5 to 20 m bgl depth range. Shallow water level less than 2 m bgl have also been observed as isolated patches in Assam, Maharashtra and Andhra Pradesh.

Fig- 1





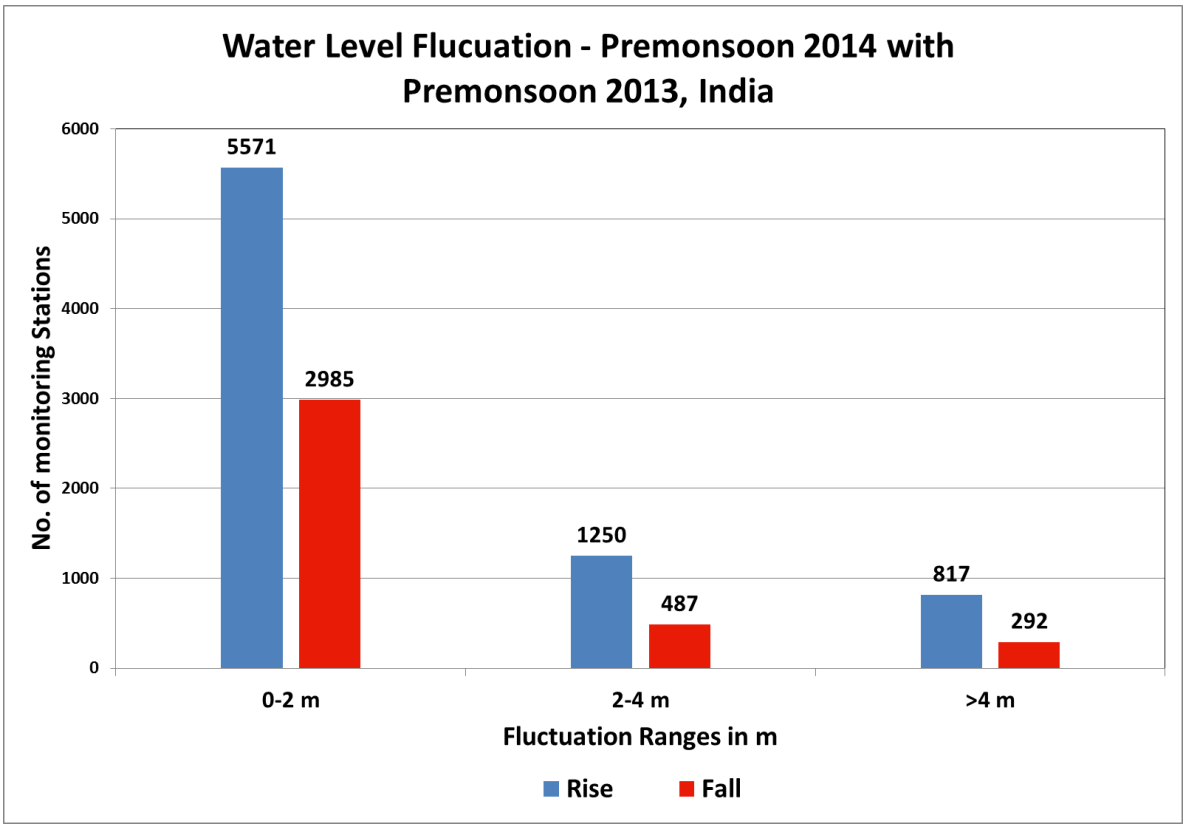
Source: National Data Centre, CGWB, Faridabad

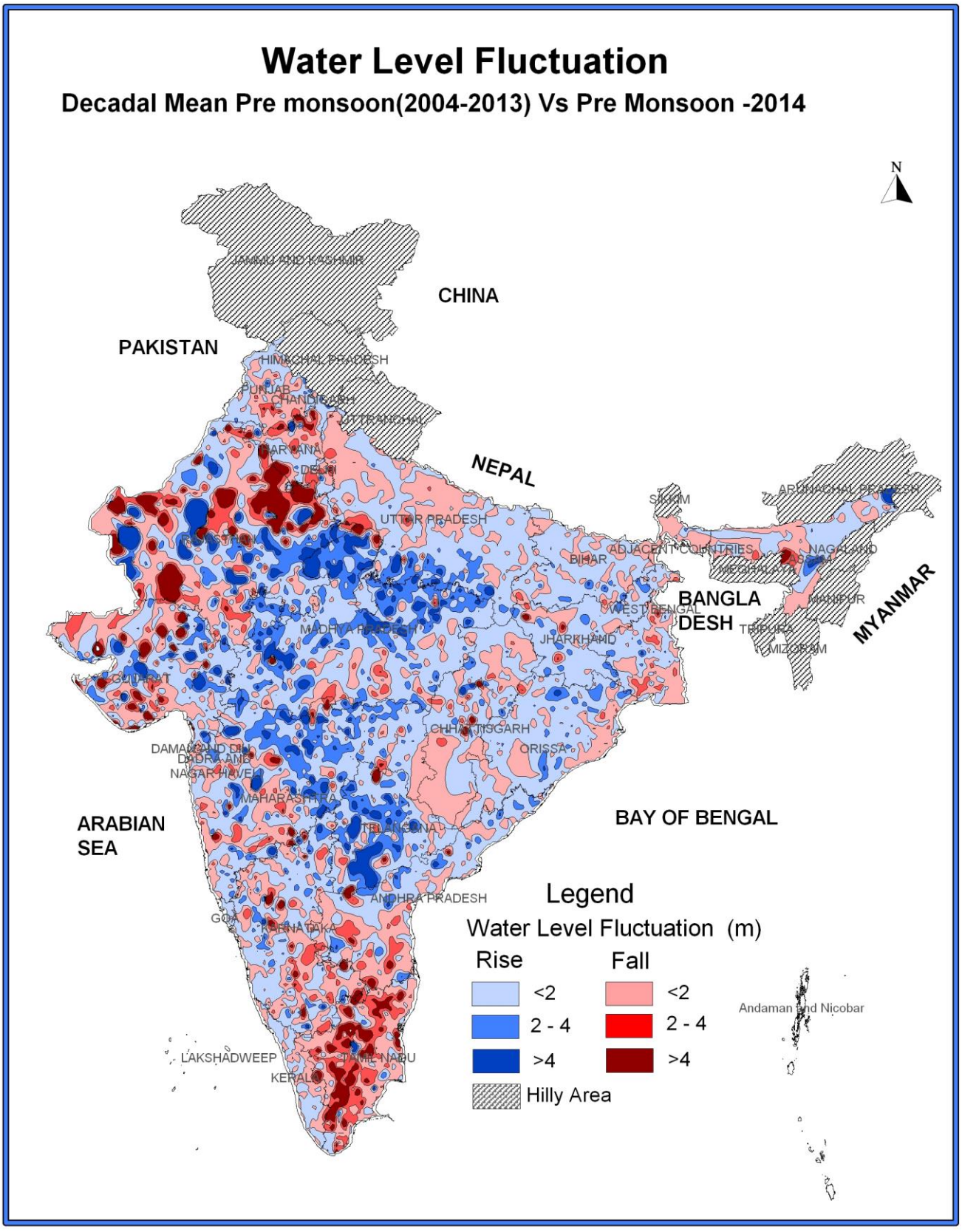
3.2 Water Level Fluctuation (Premonsoon 2013 to Premonsoon 2014)

The water level fluctuation of **Premonsoon 2013 to Premonsoon 2014** shows that out of 11851 wells analysed, 7638 (64%) are showing rise and 3764 (32%) are showing fall in water level. Remaining 449 (4%) stations analysed do not show any change in water level. About 47% wells are showing rise in the water level in the range of less than 2 m. About 10% wells are showing rise in water level in 2-4 m range and 7 % wells showing rise in water level more than 4 m range. About 32% wells are showing decline in water level, out of which 25% wells are showing decline in water level in less than 2 m range. About 4 % wells are showing decline in water level in 2-4 m range. Only 3% 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 2014 to Premonsoon 2013 is presented in the form of water level fluctuation map (Plate III) reveals that in general, there is rise in the water level in almost entire country, especially in the states of Uttar Pradesh, Madhya Pradesh, Bihar, West Bengal, Odisha, Andhra Pradesh, Karnataka, Maharashtra, Haryana, Gujarat and north western parts of Rajasthan. There is a fall in water level mostly in the range of 0-2 m spread over most parts of the country as patches. Fall in water level of more than 2 m has been observed in small pockets in the states of Assam, Tamil Nadu, Haryana, Rajasthan and Gujarat (Plate-III).

Fig- 2





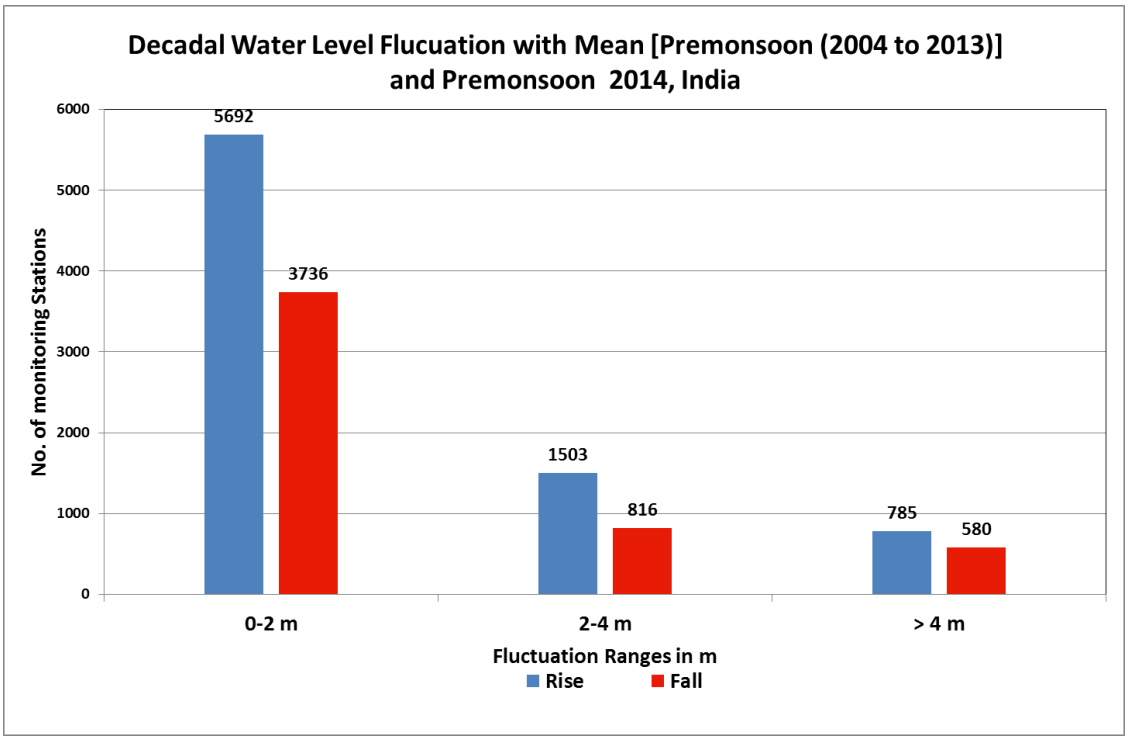
Source: National Data Centre, CGWB, Faridabad

3.3 Water Level Fluctuation (Premonsoon– 2014 with Mean of Premonsoon (2004 - 2013)

A comparison of depth to water level of Premonsoon 2014 with decadal mean of Premonsoon (2004-2013) indicate that 7980 (about 60%) of wells are showing rise in water levels, out of which 43% wells are showing rise of less than 2 m (**Annexure-III**). About 11% wells are showing rise in water in the range of 2-4 m and about 6 % wells are showing rise in water level in the range of more than 4 m. 5132 (about 39%) wells are showing decline in water level, out of which 28% wells are showing decline in water in the range of 0-2 m. 6% wells are showing decline in water level in 2-4 m range and remaining 5% are in the range of more than 4 m. Decline in water level of more than 4 m is mostly prominent in the states of Delhi, Gujarat, Haryana, Karnataka, Punjab, Rajasthan and Tamil Nadu. Rise in water level of more than 4 m is observed mostly in the states of Andhra Pradesh, Telangana, Gujarat, Madhya Pradesh, Maharashtra, Rajasthan and Uttar Pradesh. Remaining 97 (1%) stations analysed do not show any change in water level.

The decadal water level fluctuation map of India for Premonsoon, 2014 with the mean of Premonsoon (2004-2013) is shown in **Plate-IV** and frequency distribution of fluctuation ranges is shown in **Fig. 3.** As observed in Plate-IV maximum fall is observed in and around parts of Punjab, Rajasthan and Tamil Nadu. A rise in water level is observed in almost all parts of the country. In states of Punjab, Kerala and Tamil Nadu rise in water level is observed as patches.

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 Island

Depth to Water Level – Premonsoon 2014

In general depth to water level scenario in the islands of Andaman & Nicobar depicted a water level in the range of 0 to 5 m bgl at almost 90 % of the wells monitored. 24% monitoring station recorded water level within 2 m bgl and around 71 % wells recorded water level between 2-5 m bgl. About 4% wells recorded water level between 5-10 m bgl.

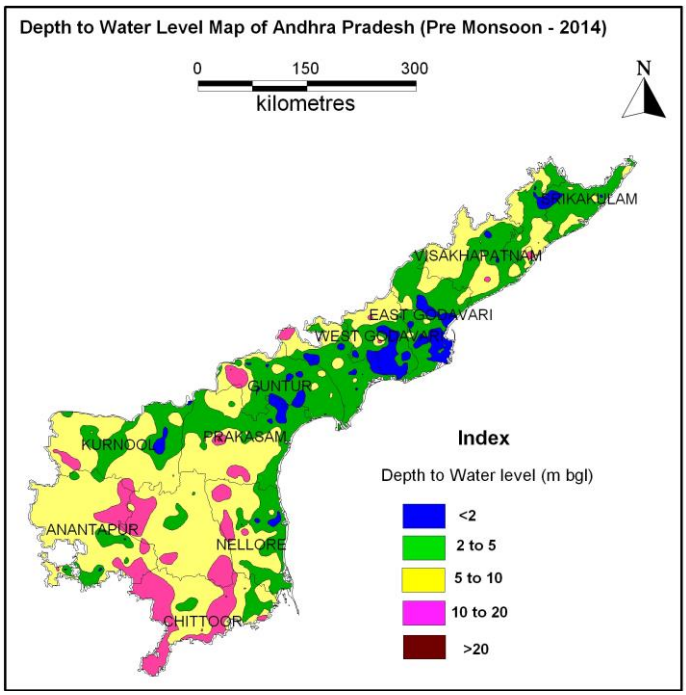
Water Level Fluctuation (Premonsoon 2014 to Premonsoon 2013)

Water level of Pre Monsoon 2013 when compared to that of Premonsoon 2014 shows that there is dominantly fall in water level in the entire island. About 73 % of the wells analysed show a fall in water level mostly in 0-2 m range.

4.02 Andhra Pradesh

Depth to Water Level – Premonsoon 2014

In the state of Andhra Pradesh very shallow water level ranging between 0-5 m bgl was observed in 61% 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 5-10 meters has been observed in 31 % wells mainly in the southern and western parts of the state. Depth to water level ranging between 10-20 meters has been observed in 7% wells. 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 23.78 m bgl (in Ranga Reddy district).



Fluctuation - Premonsoon 2014 to Premonsoon 2013

Water level data of Premonsoon 2014 was compared to Premonsoon 2013 and the analysis shows that about 64% of the wells analysed are showing rise in the water level and 32% wells are showing fall in water level. 4% wells show no change in water level. Out of this, 49% wells have shown a rise in 0-2 m range,11% of the wells have shown rise in the range of 2-4 m and another 4% of the wells show rise in the range of >4m. About 26% of the wells show fall in 0-2 m

range. Maximum rise in water level has been recorded as 17.80 m and maximum fall in water level has been recorded as 10.72 m in the State.

Fluctuation - Premonsoon 2014 to Premonsoon Decadal mean (2004-13)

The water level data of Premonsoon 2014 has been compared with decadal mean (Premonsoon 2004- 2013) to assess the rise/fall in water level during current year with respect to long term average of the corresponding period. About 61 % of analysed wells have shown a rise in water level. Out of this 47% of the wells have shown rise in the range of 0 to 2 m, 11% wells have shown rise in the range of 2 to 4 m and 3% in the range of more than 4 m bgl. About 39% wells have shown a fall in water level, out of which 31% wells have shown fall in the range of 0 to 2 m and 6 % wells have shown fall of more than 2 m.

4.03 Arunachal Pradesh

Depth to Water Level – Premonsoon 2014

In general depth to water level scenario in the state depicted a water level in the range of 0 to 10 m bgl at almost 80 % of the wells monitored. Only 8% monitoring station recorded water level within 2 m bgl and around 62 % wells recorded water level between 2-5 m bgl. About 15% wells recorded water level between 5-10 m bgl and another 15% in 10-20 m bgl.

Water Level Fluctuation (Premonsoon 2014 to Premonsoon 2013)

Water level of Pre Monsoon 2013 when compared to that of Premonsoon 2014 shows that there is dominantly rise in water level in the entire state. About 70 % of the wells analysed show a rise in water level in 0-2 m range.

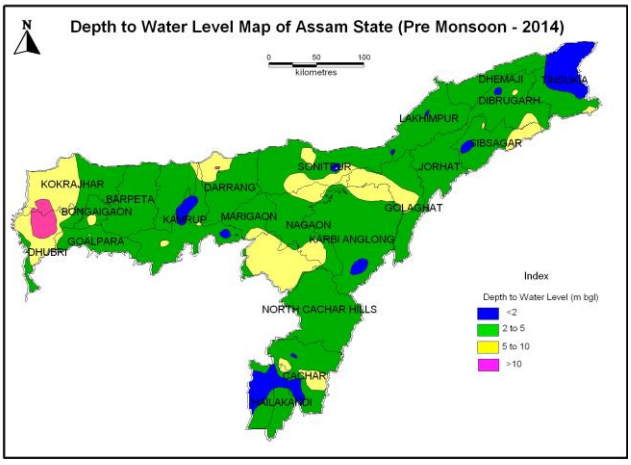
Fluctuation - Premonsoon 2014 to Premonsoon Decadal mean (2004-13)

The water level data of Premonsoon 2014 has been compared with decadal mean (Premonsoon 2004-2013) and it is observed that out of 12 wells analyzed 75 % wells show rise in water level whereas 25% wells show a fall in water level.

4.04 Assam

Depth to Water Level – Premonsoon 2014

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 83 % of the wells monitored. Around 15% monitoring stations recorded water level within 2 m bgl and around 62 % wells recorded water level between 2-5 m bgl. About 21 % wells recorded water level between 5-10 m bgl and only less than 2% wells show water level between 10-20 m bgl.



A shallow water level within 2 m bgl is recorded as patches in few districts such as Tinsukia, Sibsagar, Hailakandi, Cachar, Karbi Anglong, Kokrajhar etc. The maximum depth to water level has been recorded as 16.44 m bgl in western Assam in Dhubri district.

Water Level Fluctuation (Premonsoon 2014 to Premonsoon 2013)

Water level of Pre Monsoon 2013 when compared to that of Premonsoon 2014 shows that there is both rise and fall in water level in the state. About 46 % of the wells analysed show a rise in water level. Out of this, 40 % 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 and a rise of more than 4 m is noticed at 2 % of the wells. About 51 % of wells analysed have shown fall in water level where 45 % of the wells shows fall in the range of 0-2 m.

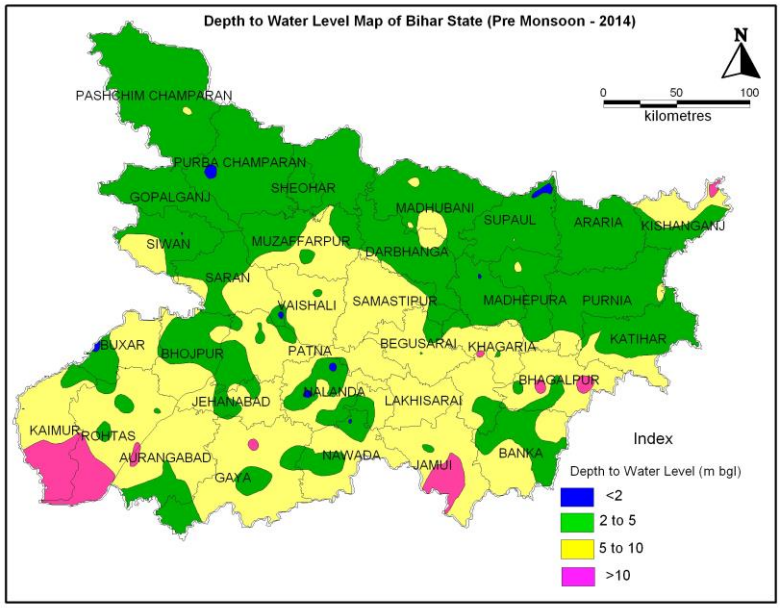
Fluctuation - Premonsoon 2014 to Premonsoon Decadal mean (2004-13)

The water level data of Premonsoon 2014 has been compared with decadal mean (Premonsoon 2004-2013) and it is observed that out of 159 wells analyzed 52 % show a fall in water level whereas 48% show a rise in water level. 47% wells show fall in the range of 0-2 m and about 42% wells show rise in the range of 0-2 m.

4.05 Bihar

Depth to Water Level – Premonsoon 2014

During Premonsoon 2014 water level measurement, a total of 367 wells have been monitored. About 4 % of the wells are showing water level in the range 0-2 m bgl. 51 % of the wells are showing water level in the range 2-5 m bgl and 41 % of the wells analysed are showing water level in the range of 5-10 m bgl. 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 2014 to Premonsoon 2013)

Water level data of Pre Monsoon 2013 was compared to Premonsoon 2014 and the analysis shows that in general there is rise in water level in the state. About 64 % of the wells analysed are showing rise in the water level. Out of this, 56 % wells have shown a rise in 0-2 m range. 32% wells shows fall in water level, out of which about 29 % of the wells analysed are showing

fall in the water level mostly in the range of 0 -2 m. Maximum rise in water level has been recorded as 9.08 m and maximum fall in water level has been recorded as 4.76 m in the State.

Fluctuation - Premonsoon 2014 to Premonsoon Decadal mean (2004-13)

The water level data of Premonsoon 2014 has been compared with decadal mean (Premonsoon 2004 to 2013) and it indicates that out of 351 wells analyzed 62% wells show a rise in water level whereas 37% show a fall in water level. Out of 62 % rise, about 55% wells show rise in the range of 0-2 m bgl. 1% of the wells show no change in water levels.

4.06 Chandigarh

Depth to Water Level – Premonsoon 2014

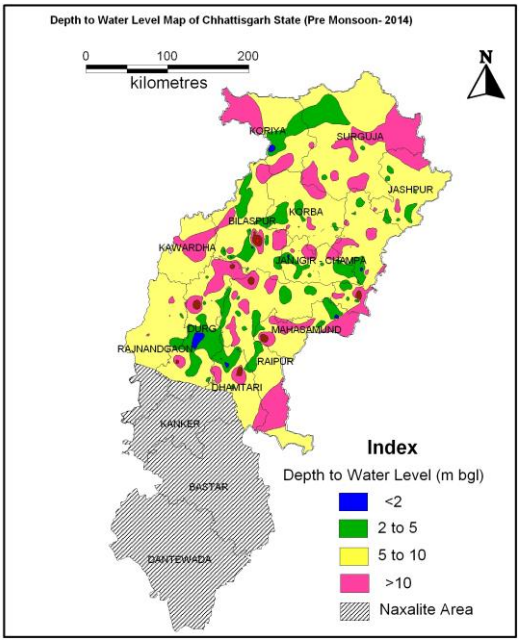
In general depth to water level scenario in the UT of Chandigarh depicted a water level in the range of 2 to 40 m bgl with about 94 % of the wells monitored falling in this range. Around 25% monitoring stations recorded water level between 2-5 m bgl. About 19 % wells recorded water level between 5-10 m bgl, 25% wells show water level between 10-20 m bgl and another 25% falls in the range of 20-40m. 6% wells show water levels of more than 40 m bgl. The maximum depth to water level has been recorded as 44.41 m bgl.

Water Level Fluctuation (Premonsoon 2014 to Premonsoon 2013)

Water level of Pre Monsoon 2013 when compared to that of Premonsoon 2014 shows that there is predominantly rise in water level in the UT. About 63 % of the wells analysed show a rise in water level and another 37% shows decline in water level. Both rise and fall is in the 0-2 m range.

Fluctuation- Premonsoon 2014 to Premonsoon Decadal mean (2004-13)

The water level data of Premonsoon 2014 has been compared with decadal mean (Premonsoon 2004-2013) and it shows that there is both rise and fall in water level in the UT. About 56 % of the wells analysed show rise in water level and another 44% shows decline in water level. Out of 56% in the rise category, 50% wells fall in the 0-2 m range. Decline in 0-2 m range is shown by 32% of the wells monitored.



4.07 Chhattisgarh

Depth to Water Level – Premonsoon 2014

During Premonsoon 2014 water level measurement, a total of 557 wells have been monitored. About 4 % of the wells monitored show water level in the range of 0-2 m bgl, 22 % wells shows water level in 2-5 m bgl and about

52 % wells falls under the category of 5- 10 m bgl. About 19% wells show water levels in the range of 10 – 40 m bgl and 3% show water level more than 40 m bgl. The maximum water level measured is 60.40 m bgl in Dhamtari District.

Water Level Fluctuation (Premonsoon 2014 to Premonsoon 2013)

Water level of Pre Monsoon 2013 is compared to Premonsoon 2014 and the analysis shows that almost 55 % of the observation wells are showing rise in water level. Rise in the range of 0- 2 m is observed in about 44% of the monitored wells. Rise in the range of 2 to 4 m and more than 4 m is observed in 8% and 4 % of the monitored wells respectively. 35% of the wells show fall in water level, mostly in the range of 0-2 m. About 10% of wells show no change in water levels.

Fluctuation - Premonsoon 2014 to Premonsoon Decadal mean (2004-13)

When compared the decadal mean water level (Premonsoon 2004 to 2013) with Premonsoon 2014, about 57 % of observation wells are showing a rise in water level. Out of the 57% wells, 42 % of the wells are showing a rise upto 2 m, 11 % of the monitored wells show rise between 2 to 4 meters and 4% of the monitored wells are showing rise in water level of more than 4 m. Fall of water level as compared to the decadal mean is observed in 40 % of the monitored wells. Almost 30% of the monitored wells are showing a fall in the range of 0-2 m. 3% wells show no change in water level.

4.08 Dadra & Nagar Haveli

Depth to Water Level – Premonsoon 2014

During Premonsoon 2014, a total of 10 wells have been monitored. About 30 % of the wells monitored show water level in the range of 2-5 m bgl, 60 % wells shows water level in 5-10 m bgl and about 10% wells falls under the category of 10-20 m bgl.

Water Level Fluctuation (Premonsoon 2014 to Premonsoon 2013)

Water level of Pre Monsoon 2013 is compared to Premonsoon 2014 and the analysis shows that 20 % of the observation wells are showing rise in water level in the range of 0- 2 m and 80% of the wells show fall in water level, mostly in the range of 0-2 m.

Fluctuation - Premonsoon 2014 to Premonsoon Decadal mean (2004-13)

When compared the decadal mean water level (Premonsoon 2004 to 2013) with Premonsoon 2014, 100% of observation wells are showing rise in water level.

4.09 Daman & Diu

Depth to Water Level – Premonsoon 2014

During Premonsoon 2014, a total of 12 wells have been monitored. About 33 % of the wells monitored show water level in the range of 2-5 m bgl, 58 % wells shows water level in 5-10 m bgl and about 8% wells falls under the category of 10-20 m bgl.

Water Level Fluctuation (Premonsoon 2014 to Premonsoon 2013)

Water level of Pre Monsoon 2013 is compared to Premonsoon 2014 and the analysis shows that 43 % of the observation wells are showing rise in water level, mostly in the range of 0- 2 m and 57% of the wells show fall in water level, mostly in the range of 0-2 m.

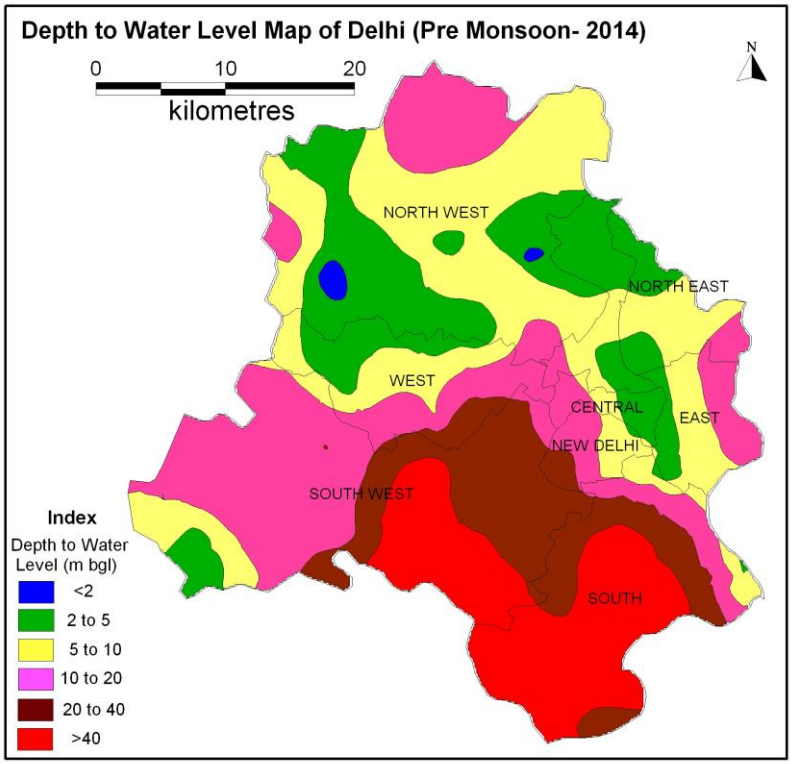
Fluctuation - Premonsoon 2014 to Premonsoon Decadal mean (2004-13)

When compared the decadal mean water level (Premonsoon 2004 to 2013) with Premonsoon 2014, 33% of observation wells are showing rise in water level and 67% wells show fall in water level.

4.10 Delhi

Depth to Water Level – Premonsoon 2014

The depth to water level recorded in the state of Delhi during Premonsoon 2014 ranged from 1.19 m bgl (NW District) to 74.41 m bgl (SW District). It is observed that 3% of the wells have shown water level in the range of 0-2 m bgl. About 24 % of the wells analysed have shown water level in the range of 2-5 m bgl, about 28% of the wells have shown water level in the range of 5-10 mbgl and 22 % wells shows 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 12% & 10% of the wells analysed respectively. It is observed that Southern parts of Delhi show deeper water levels of more than 20 mbgl.



Water Level Fluctuation (Premonsoon 2014 to Premonsoon 2013)

Water level of Pre Monsoon 2013 when compared to water level of Premonsoon 2014 in the state indicates that about 71 % of the wells analysed have recorded a rise in water level, out of which 60 % of analysed wells have recorded a rise in the range of 0 to 2 m, 10 % of analysed wells have shown rise in the range of 2 to 4 m and 1% of the wells have shown rise more than 4 m. About 29% of the wells have shown fall in water level, out of which 26 % fall in the range of 0 to 2m.

Fluctuation - Premonsoon 2014 to Premonsoon Decadal mean (2004-13)

The fluctuation analyses of water level during Premonsoon 2014, when compared with the Decadal mean (Premonsoon 2004-2013) indicate that in general there is rise as well as fall in

water level. About 53 % of analysed wells have shown rise in water level. Out of this 41 % of the wells have shown rise in the range of 0-2 m, 10 % of analysed wells have shown rise in the range of 2 to 4 m. About 47% wells have shown a decline in water level. Out of this 24 % of the wells have shown decline in water level in the range of 0-2 m, 16% of the wells have shown decline in water level in the range of 2-4 m, 7 % 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 2014

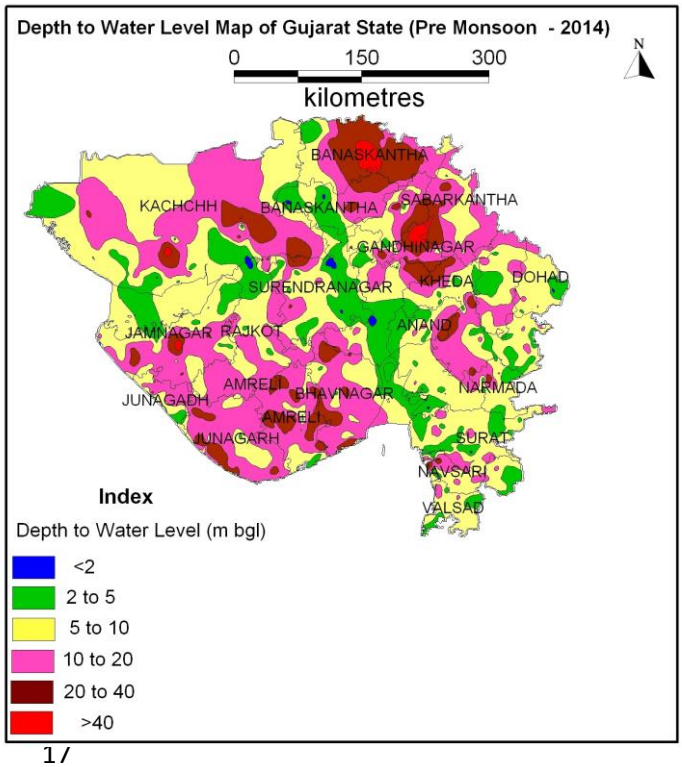
The depth to water level recorded in the state of Goa during Premonsoon 2014 ranges from 0.80 m bgl to 18.72 m bgl in North Goa. It is observed that out of 77 monitored wells, 9 % wells show less than 2 m bgl water level, 36% wells show 2 to 5 m bgl water level, 39% wells show 5 to 10 m bgl water level and 16 % wells show 10 to 20 m bgl water level.

Water Level Fluctuation (Premonsoon 2014 to Premonsoon 2013)

Water level of Premonsoon 2014 when compared to water level of Pre Monsoon 2013 in the state of Goa indicates that in general the entire state have recorded a rise in water level. About 78 % of the wells analysed show rise in water level. Out of which 67 % wells have recorded a rise in the range of 0 to 2 m, 10% of analysed wells have shown rise in the range of 2 to 4 m and 1 % of the wells have shown rise more than 4 m. 19 % wells shows fall in water level, out of which 15 % shows fall in the range of 0-2 m. 3% stations show no change in water level.

Fluctuation - Premonsoon 2014 to Premonsoon Decadal mean (2004-13)

The fluctuation of water level during Premonsoon 2014 when compared with the Decadal mean (Premonsoon 2004-2013) indicates that about 75% of analysed wells have shown a rise in water level. Out of this 69 % of the wells have shown rise in the range of 0 to 2 m, 5 % wells have shown a rise in water level in the range of 2-4 m. About 24 % wells have shown a decline in water level and 21% shows fall in the range of 0-2 m.



4.12 Gujarat

Depth to Water Level - Premonsoon 2014

The depth to water level recorded in the state of Gujarat during Premonsoon 2014 ranges up to 61.20 m bgl in Banaskantha district. The depth to water level for 3 %

of the wells analysed have shown water level in the range of 0-2 m bgl, 21 % 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 5-10 m bgl and 29 % 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 12% of the wells analysed.

Water Level Fluctuation (Premonsoon 2014 to Premonsoon 2013)

Water level data of Premonsoon 2014 when compared to Pre Monsoon 2013 shows that in general there is rise in water level in most parts of the state. About 63 % of the wells analysed shows rise in the water level. Out of this, 35% wells have shown a rise in the range of 0-2 m. About 15% of the wells have shown rise in 2-4 m range and about 13 % wells have shown rise in water in more than 4 m. About 30 % of the total wells have shown a fall in water level, out of which 19% wells have shown a fall in 0-2 m range. 7% of the wells show no change in water levels.

Fluctuation - Premonsoon 2014 to Premonsoon Decadal mean (2004-13)

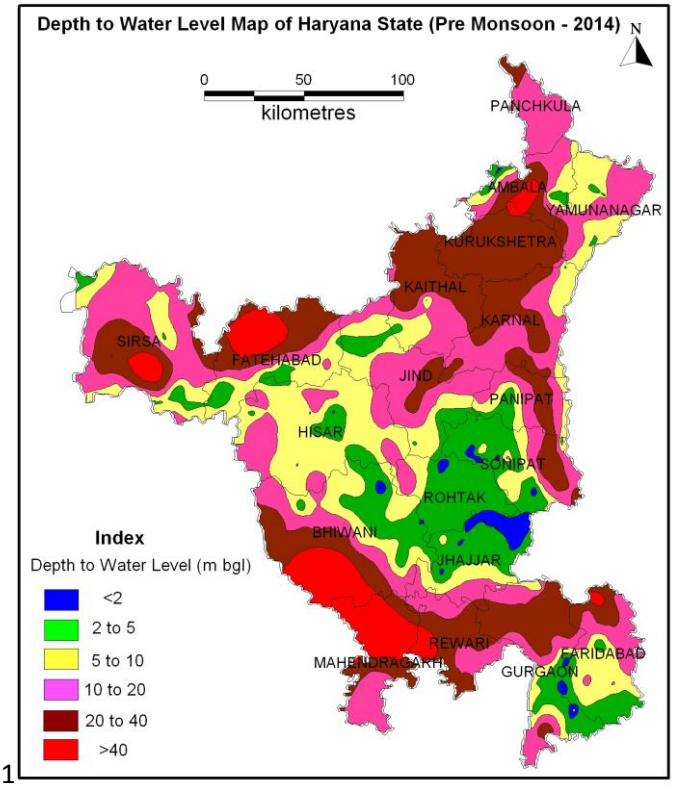
The water level data of Premonsoon 2014 has been compared with decadal mean (Premonsoon 2004 to 2013) to assess the rise/fall in water level of this year with respect to long term average of the corresponding period. 59% of monitoring wells shows rise in water level and 41 % wells are showing fall in water level. About 33% of wells show rise in 0-2 m range, 18% wells shows rise in the 2-4 m range and 8% wells are showing rise in the range of more than 4 m. 27 % of the wells have shown fall in water level in the range of 0-2 m.

4.13 Haryana

Depth to Water Level - Premonsoon 2014

During Premonsoon 2014, the depth to water level in the state of Haryana varies from ground level to 71.78 m bgl in Bhiwani district.

About 7% of wells monitored have reported water level up to 2 m bgl. About 22% of the wells monitored falls within the range of 2-5 m bgl. Another 21 % 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 18% 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 mbgl are observed mostly along the northern and southern boundaries of Haryana.

Water Level Fluctuation (Premonsoon 2014 to Premonsoon 2013)

The water level data of Premonsoon 2014 when compared with Pre Monsoon 2013 indicates that there is rise in water level in about 67 % of the wells monitored. In most of the areas rise is in the range of 0-2 m. About 55 % of the wells monitored show rise in the range between 0-2 m. The water level rise in the range between 2-4 m and more than 4 m have been observed in about 9 % wells & 2 % wells respectively. Decline in water level has been recorded in 33 % of the wells. Fall in range of 0-2 m has been recorded in 29 % wells.

Fluctuation - Premonsoon 2014 to Premonsoon Decadal Mean (2004-13)

The fluctuation of water level during Premonsoon 2014 when compared with the average water level of past decade (Decadal mean Premonsoon 2004-2013) indicates in general there is decline as well as rise in water levels in the entire state. About 56% of monitored wells have shown rise in water level. The rise of 0-2 m has been observed in about 49 % of the wells analysed. About 4% of wells reported rise in water level more than 2 m. About 44% of wells analysed have shown fall in water level. Fall in the range of 0-2 m has been recorded in 29% of monitored wells.

4.14 Himachal Pradesh

Depth to Water Level - Premonsoon 2014

The depth to water level in the state of Himachal Pradesh during Premonsoon 2014 varies from 0.20 m bgl in Kullu district to 20.71 m bgl in Una district. About 50% of the wells show water level of less than 5 m bgl. Out of these almost 10 % of the wells are showing water level in the range of 0-2 m bgl, another 40 % of the wells show water level in the range of 2-5 m bgl. About 25% 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 2 % monitoring stations.

Water Level Fluctuation (Premonsoon 2014 to Premonsoon 2013)

Water level data of Premonsoon 2014 compared to Pre Monsoon 2013 shows that there is mostly rise in water level in entire state. About 75% of the wells analysed shows rise in the water level. Out of this 59 % wells have shown a rise in 0-2 m range, about 10 % of the wells have shown rise in 2- 4 m range and about 6 % wells has shown rise in water level of more than 4 m. About 25 % of the total wells have shown a fall in water level and almost all the wells shows fall in the range of 0-2 m (23%). About 2% wells shows fall in water level in 2-4 m range.

Fluctuation - Premonsoon 2014 to Premonsoon Decadal mean (2004-13)

The water level data of Premonsoon 2014 has been compared with decadal mean (Premonsoon 2004 to 2013) to assess the rise/fall in water level of this year with respect to long term average of the corresponding period. About 79% of monitoring wells show rise in water level and rest 21% wells show fall in water level. Out of 79 % wells in the rise category, about 62 % of the monitored wells show rise in the 0-2 m range and 10% wells showing rise in the 2- 4 m range and remaining 7 % wells are showing rise in water level more than 4 m. 21 % of the wells have shown decline in water level, out of which 17% falls in the range of 0-2 m.

4.15 Jammu & Kashmir

Depth to Water Level - Premonsoon 2014

It is observed that out of the total 248 wells monitored, about 24 % wells have less than 2 m bgl water level, mainly in outer plain areas. About 48% of the wells analysed have shown water level in the range of 2-5 m bgl. About 17% wells have shown water level in the range of 5-10 m bgl. About 6% 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 ground level to 34.27 m bgl in Jammu district. All the areas of valley in Udhampur and Rajouri districts shows water level between 0-5 m bgl.

Water Level Fluctuation (Premonsoon 2014 to Premonsoon 2013)

Water levels of Premonsoon 2014 when compared with water level of Pre Monsoon 2013 in the state indicates that 70% of the wells analysed have recorded a rise in water level, out of which 58% of analysed wells have recorded a rise in the range of 0 to 2 m, 6% of analysed wells have shown rise in the range of 2 to 4 m and about 6% of the wells have shown rise more than 4 m. 28% wells show decline in water level, out of which 26% of the wells have shown fall in water levels mostly in 0-2 m range. 2% wells show no change.

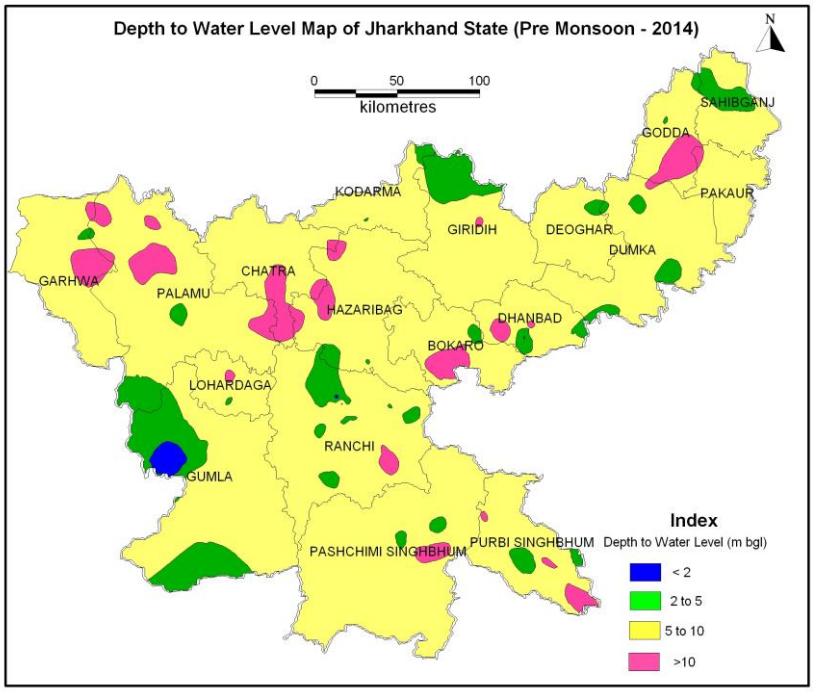
Fluctuation - Premonsoon 2014 to Premonsoon Decadal mean (2004-13)

The fluctuation analyses of water level of Premonsoon 2014 with the decadal mean (Premonsoon 2004-2013) indicates that about 73% of analysed wells have shown a rise in water level. Out of this 62% 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 and 3% in the range of more than 4 m bgl. About 27% wells have shown a decline in water level, out of which almost all the wells have shown fall in the range of 0 to 2 m.

4.16 Jharkhand

Depth to Water Level - Premonsoon 2014

Out of the total 238 wells analysed, about 2% of wells have shown depth to water level in the range of 0 to 2 m. Water level in about 17 % of the wells was found between 2 to 5 m bgl. Maximum of about 70% 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 11 % wells. The water level ranges from 1.15 m bgl in Gumla district to 17.03 m bgl in Purbi Singhbhum District.



Water Level Fluctuation (Premonsoon 2014 to Premonsoon 2013)

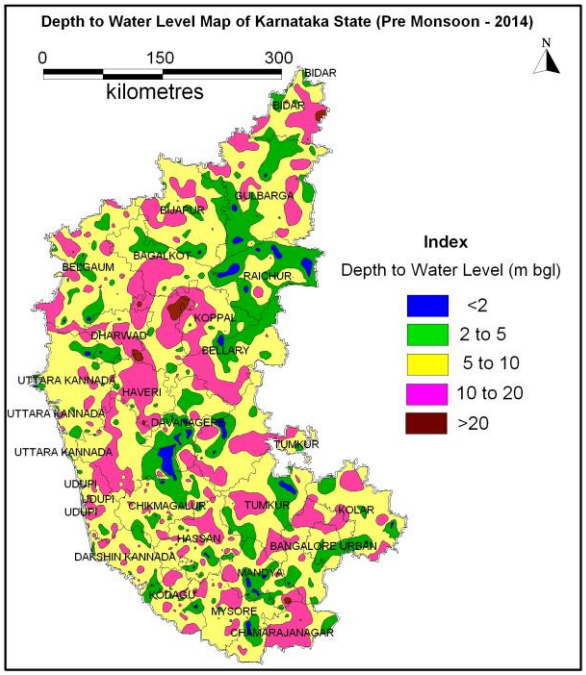
In the state of Jharkhand there is rise in water level in Premonsoon 2014 as compared to Pre Monsoon 2013. About 65 % of the wells analysed shows rise in the water level. Out of this 48% wells have shown a rise in 0-2 m range. About 13% of the wells have shown rise in 2-4 m range and 4% of the wells have shown rise in water level of more than 4 m. 33% of the wells analysed show decline in the water level, out of which 25% shows fall in the range of 0-2 m. 2% stations show no change in water levels.

Fluctuation - Premonsoon 2014 to Premonsoon Decadal mean (2004-13)

The water level data of Premonsoon 2014 has been compared with decadal mean (Premonsoon 2004- 2013 to assess the rise/fall in water level during current year with respect to long term average of the corresponding period. About 71% of analysed wells have shown a rise in water level. Out of this 51% of the wells have shown rise in the range of 0 to 2 m, 15% wells have shown rise in the range of 2 to 4 m and 5% in the range of more than 4 m bgl. About 29% wells have shown a fall in water level, out of which 23% wells have shown fall in the range of 0 to 2 m.

4.17 Karnataka

Depth to Water Level – Premonsoon 2014



The analysis of 1384 wells shows that 9% wells have less than 2 m bgl water level, 25% wells show 2 to 5 m bgl water level and 40% wells show 5 to 10 m bgl water level. Moderately deep water level of 10 to 20 m bgl is seen in 25% wells and more than 20 m bgl is observed in almost 1% of wells.

The depth to water level recorded in the state during Premonsoon 2014 ranges from 0.05 m bgl to 31.50 m bgl in Dharwad District.

Water Level Fluctuation – Premonsoon 2014 to Premonsoon 2013

Water level data of Premonsoon 2014 was compared to Premonsoon 2013 and the analysis shows that there is rise in water level in about 65% of the wells and fall in about 25% of the wells. About 10% of wells have shown no change in water level. 42% wells have shown a rise in 0-2 m range, 13% of the wells have shown a rise in 2-4 m range and 10% wells show a rise of more than 4 m range. 17% wells have shown a fall in the range of 0 - 2 m. Maximum rise in water level has been recorded as 18.50 m and maximum fall in water level has been recorded as 17.80 m in the State.

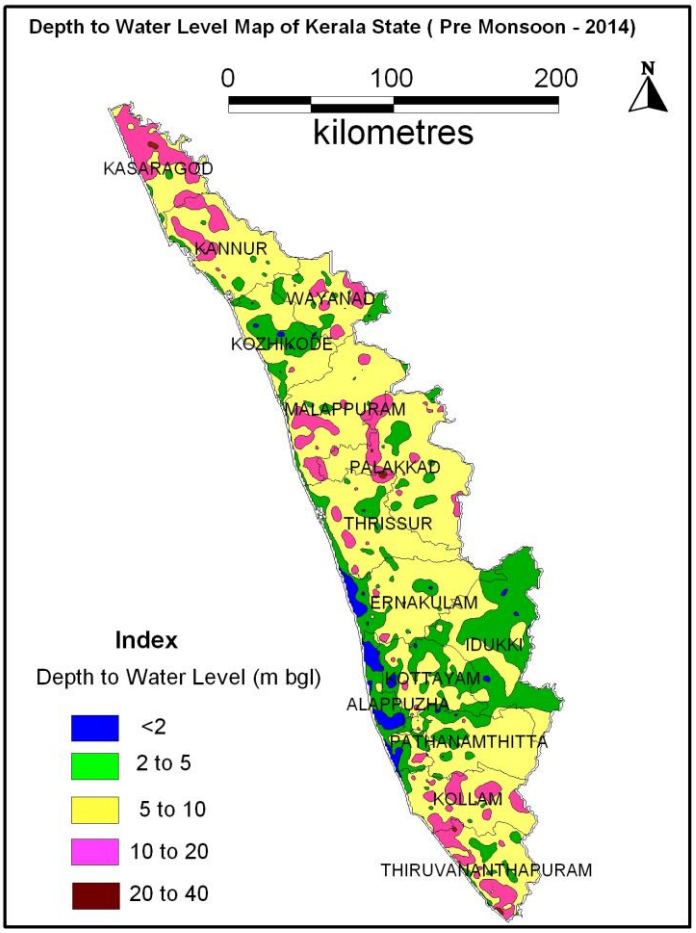
Fluctuation – Premonsoon 2014 to Premonsoon Decadal mean (2004-13)

The fluctuation of water level during Premonsoon 2014 when compared with the average water levels of past decade (Decadal mean Premonsoon 2004 -2013) indicates that about 58% of the wells analysed shows a rise in water level and 40% wells shows a fall. 2% of wells show no change. A rise of 0-2 m is recorded in 40% of analysed wells. A rise in the range of 2-4 m and more than 4 m is recorded in 12 % & 6 % of wells for each range respectively. In the fall category, a fall of 0-2 m is prominent and is recorded in 26% of analysed wells. Fall of 2 to 4 m and more than 4 m is seen in 9% and 5% of the analysed wells respectively.

4.18 Kerala

Depth to Water Level - Premonsoon 2014

During Premonsoon 2014, it is observed that in the state of Kerala, 9% 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 43% wells have shown water level in the range of 5-10 m bgl, 17% wells have shown 10 to 20 m bgl water level and about 2% wells have shown more than 20 m bgl water level.



The depth to water level recorded in the state of Kerala during Premonsoon 2014 ranges from 0.05 to 53.00 m bgl (Thiruv-ananthapuram District).

Water Level Fluctuation – Premonsoon 2014 to Premonsoon 2013

Water level data of Premonsoon 2014 was compared to Premonsoon 2013 and the analysis shows that there is rise in water level in about 65% of the wells and fall in about 34% of the wells. 1% of the wells show no change in water levels. 58% wells have shown a rise in 0-2 m range, 5 % in the range of 2-4 m. 31% of the wells have shown fall in 0-2 m range and 2% of the wells show fall in the range of 2-4 m. Maximum rise in water level has been recorded as 8.75 m and maximum fall in water level has been recorded as 7.85 m in the State.

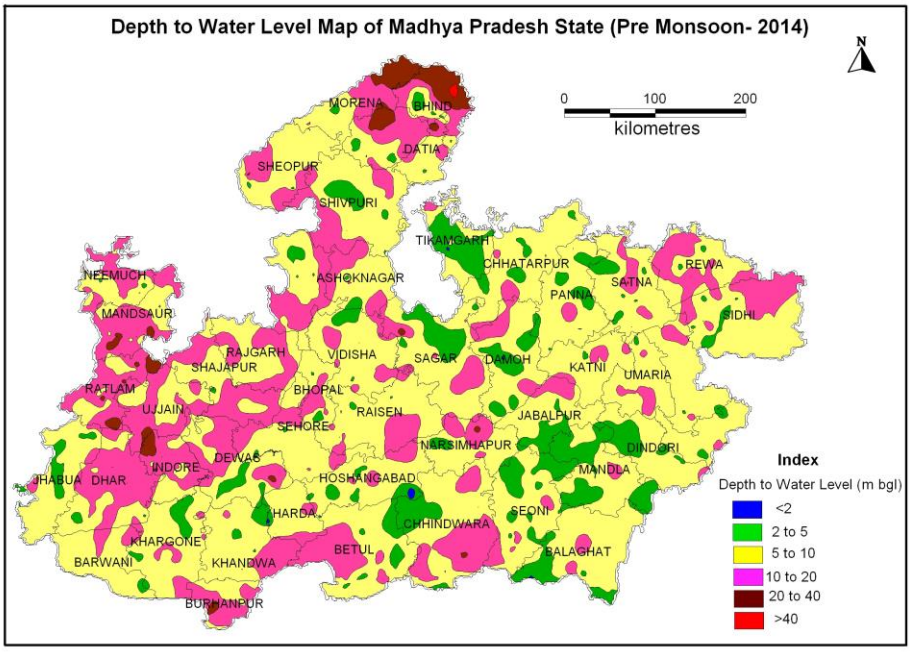
Fluctuation - Premonsoon 2014 to Premonsoon Decadal mean (2004-13)

The fluctuation of water level during Premonsoon 2014 when compared with the decadal mean (Premonsoon 2004 -2013) indicates that about 53% of analysed wells have shown a rise in water level, of which 47% of the wells fall in the range of 0 to 2 m. About 47% wells have shown a fall in water level out of which 43 % wells shows rise in the range of 0-2 m. 47% wells have shown a rise in 0-2 m range, 4% of the wells have shown rise in 2-4 m range and 2% shows rise in more than 4 m range.

4.19 Madhya Pradesh

Depth to Water Level - Premonsoon 2014

The depth to water level during Premonsoon 2014 in Madhya Pradesh varies from 0.83 to 49.40 m bgl in Mandsaur district. In general the depth to water level ranges from 2 to 20 m bgl in most parts of Madhya Pradesh. Only about 1 % monitoring wells are showing water level in 0-2 m bgl range. About 20 % 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 49% wells and about 26% wells show water level ranging more than 10 m bgl located mostly in northern and western parts of the state. Water levels of more than 20 m bgl are observed at 4% wells in northernmost parts of the state in Bundelkhand region.



Water Level Fluctuation - Premonsoon 2014 to Premonsoon 2013

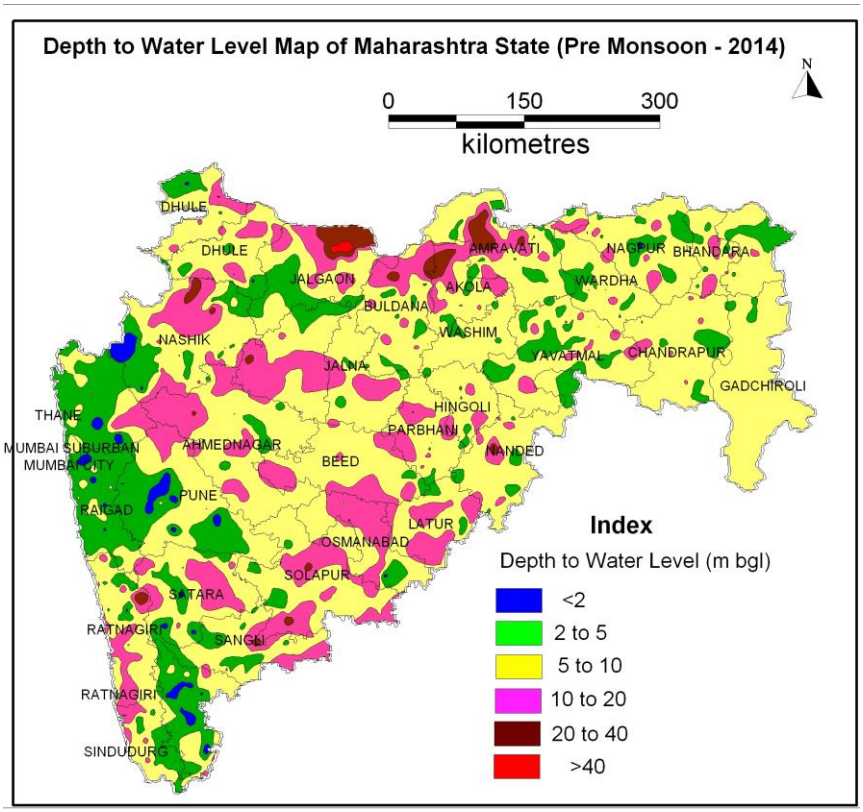
Water level data of Premonsoon 2014 was compared to Premonsoon 2013 and the analysis shows that there is rise in water level in about 71% of the wells and fall in about 25% of the wells. 4% well shows no change in water level. 41% wells have shown a rise in 0-2 m range, 16% of the wells have shown rise in 2-4 m range and 14 % shows rise in more than 4 m range. About 19% wells show fall in the range of 0-2 m. Maximum rise in water level has been recorded as 22.56 m and maximum fall in water level has been recorded as 18.10 m in the State.

Fluctuation - Premonsoon 2014 to Premonsoon Decadal mean (2004-13)

The fluctuation of water level during Premonsoon 2014 when compared with the Decadal mean (Premonsoon 2004 -2013) indicates that about 79% of analysed wells have shown a rise in water level, of which 42% of the wells show rise in the range of 0 to 2 m. About 21% wells have shown a rise in water level in the range of 2-4 m and 16% wells have shown a rise in water level in the range of more than 4 m. About 21% wells have shown a decline in water level, out of which 15% falls in the range of 0-2 m.

4.20 Maharashtra

Depth to Water Level - Premonsoon 2014



During Premonsoon 2014, in the state of Maharashtra, water level less than 2 m bgl are observed in about 4% wells. Depth to water level of 2 to 5 m bgl is observed in 27% of the wells. About 49% of the wells analysed shows water level in the range of 5-10 m bgl whereas about 18% of the wells analysed shows 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 2014 in the state varies from 0.05 m bgl to 53.07 m bgl (deepest level observed in Jalgaon district).

Water Level Fluctuation-Premonsoon 2014 to Premonsoon 2013

Water level data of Premonsoon 2014 was compared to Premonsoon 2013 and the analysis shows that there is rise in water level in about 75% of the wells and fall in about 23% of the wells. 2% wells show no change. 47% wells have shown a rise in the range of 0-2 m; about 16% of the wells have shown rise in the range of 2-4 m and 12% wells show rise of more than 4 m. 17% of the wells have shown fall in 0-2 m range. Maximum rise in water level has been recorded 24.20 m and maximum fall in water level has been recorded as 14.00 m in the State.

Fluctuation - Premonsoon 2014 to Premonsoon Decadal mean (2004-13)

The fluctuations of water level during Premonsoon 2014 when compared with the Decadal mean (Premonsoon 2004-2013) show that about 72% of analysed wells have shown a rise in water level, 44% of the wells show rise in the range of 0 to 2 m and 19% wells have shown rise in the range of 2-4 m. About 27% wells have shown a decline in water level, 20% of which fall in the range of 0-2 m. About 1% wells show no change.

4.21 Meghalaya

Depth to Water Level – Premonsoon 2014

In general depth to water level scenario in the state depicted a water level in the range of 2 to 10 m bgl. About 10% monitoring stations recorded water level within 2 m bgl and remaining 90% wells recorded water level between 2-10 m bgl. Water level varies from 1.16 to 7.78 mbgl.

Fluctuation - Premonsoon 2014 to Premonsoon 2013

Water level data of Premonsoon 2014 was compared to Premonsoon 2013 and the analysis shows that in general there is both rise and fall in water level in the state. About 31 % of the wells analysed are showing rise in the water level and 69% wells are showing fall in water level. Out of 69% wells, 63% wells have shown a fall in 0-2 m range and 6% shows rise in >4 m range. Maximum fall is observed as 4.25 m.

Fluctuation - Premonsoon 2014 to Premonsoon Decadal mean (2004-13)

The water level data of Premonsoon 2014 has been compared with decadal mean (Premonsoon 2004-2013) and it is observed that 40 % wells show a rise in water level where as 60% wells show a fall in water level. Both rise and fall are almost in the range of 0-2 m.

4.22 Nagaland

Depth to Water Level – Premonsoon 2014

During Premonsoon 2014, a total of 7 wells have been monitored. About 29 % of the wells monitored show water level in the range of 2-5 m bgl, 57 % wells shows water level in 5-10 m bgl and about 14% wells falls under the category of 10-20 m bgl.

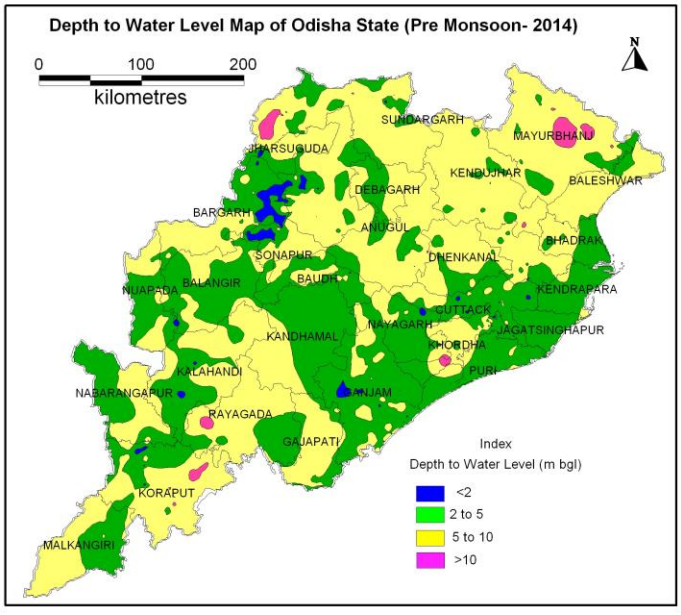
Water Level Fluctuation (Premonsoon 2014 to Premonsoon 2013)

Water level of Pre Monsoon 2013 is compared to Premonsoon 2014 and the analysis shows that 40 % of the observation wells are showing rise in water level in the range of 0- 2 m and 2-4 m. 60% of the wells show fall in water level, mostly in the range of 0-2 m.

4.23 Odisha

Depth to Water Level - Premonsoon 2014

During Premonsoon 2014, it is observed that in 8% of the wells, water level ranges in 0-2 m bgl. About 45% of the wells analysed have shown water level in the range of 2-5 m bgl. About 45% of monitoring stations show depth to water level range of 5-10 m



bgl. Less than 2% wells analysed have water level in the range of 10-20 m bgl.

The depth to water level recorded in the state of Odisha during Premonsoon 2014 ranges upto 14.16 m bgl in Mayurbhanj district.

Water Level Fluctuation-Premonsoon 2014 to Premonsoon 2013

Water level data of Premonsoon 2014 was compared with that of Premonsoon 2013. The analysis shows that there is rise in water level in about 66% of the wells and fall in about 32% of the wells. 2% stations show no change. Out of 66 % wells showing rise, 56% wells have shown a rise in 0-2 m range and 7% shows rise in the range of 2-4 m. 30% of the wells have shown fall in 0-2 m range out of 32% showing fall in water level. Maximum rise in water level has been recorded as 11.60 m and maximum fall in water level has been recorded as 5.34 m in the State.

Fluctuation - Premonsoon 2014 to Premonsoon Decadal mean (2004-13)

The fluctuation of water level during Premonsoon 2014 when compared with the Decadal mean (Premonsoon 2004-2013) indicates that about 62% of analysed wells have shown a rise in water level out of which 51% of the wells show rise in the range of 0 to 2 m, 9% in the range of 2-4 m and 2% in the range of more than 4 m. About 37% wells have shown a fall in water level, falling mostly in the range of 0-2 m (34% of the wells). About 1% wells show no change.

4.24 Pondicherry

Depth to Water Level – Premonsoon 2014

During Premonsoon 2014, a total of 4 wells have been monitored. All the wells shows water level upto 10 m bgl.

Water Level Fluctuation (Premonsoon 2014 to Premonsoon 2013)

Water level of Pre Monsoon 2013 is compared to Premonsoon 2014 and the analysis shows that 25 % of the observation wells are showing rise in water level in the range of 0- 2 m and 75% of the wells show fall in water level in the range of 0-2 m.

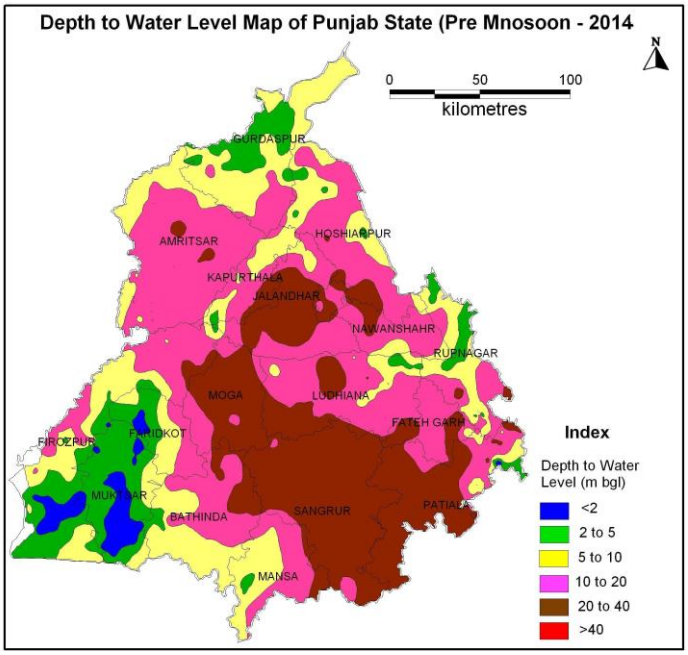
Fluctuation - Premonsoon 2014 to Premonsoon Decadal mean (2004-13)

When compared the decadal mean water level (Premonsoon 2004 to 2013) with Premonsoon 2014, 50% of observation wells are showing rise in water level where as 50% wells shows fall in water level.

4.25 Punjab

Depth to Water Level - Premonsoon 2014

During Premonsoon 2014, in Punjab, it is observed that in 4% 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; 24% fall in the range of 5-10 mbgl; and a majority of wells i.e. 36% of the wells show water levels in the range of 10-20 m bgl. 22 % wells have shown water level in the range of 20-40 m bgl or more. The depth to water level recorded in the state during Premonsoon 2014 ranges from 0.03 to 40.60 m bgl.



Water Level Fluctuation-Premonsoon 2014 to Premonsoon 2013

The comparison of water level data of Premonsoon 2014 and Premonsoon 2013 shows that there is rise in water level in about 65% of the wells and fall in about 35% of the wells. Out of all the wells showing rise, about 58% wells have shown a rise in 0-2 m range and 6 % in 2-4 m range. About 32% of the wells show fall in 0-2 m range. Maximum rise in water level has been recorded as 6.38 m and maximum fall in water level has been recorded as 5.92 m in the State.

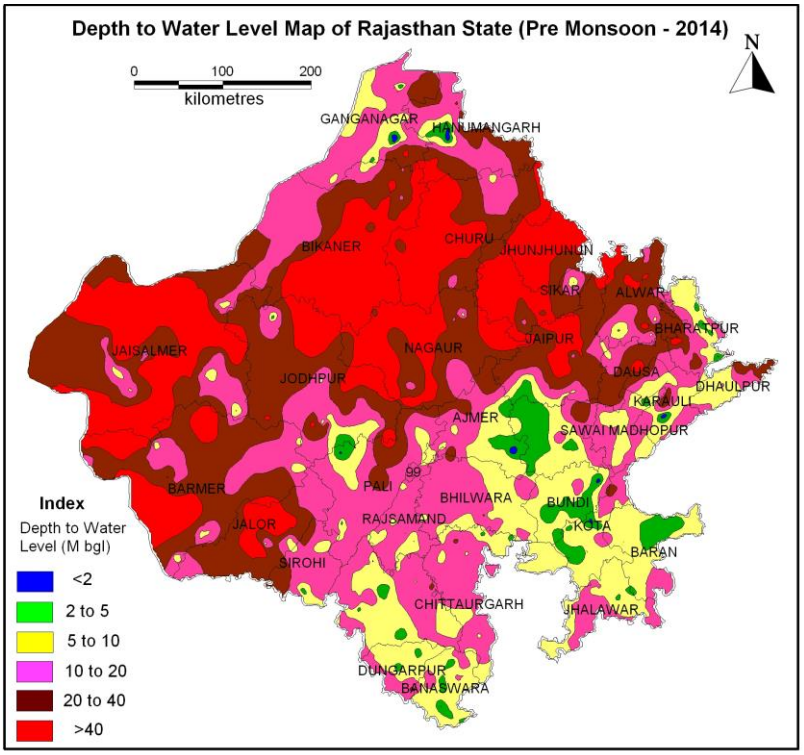
Fluctuation - Premonsoon 2014 to Premonsoon Decadal mean (2004-13)

The fluctuation of water level during Premonsoon 2014 with respect to average water level of past decade (Decadal mean Premonsoon 2004-2013) indicates decline as well as rise of water level in all the districts of Punjab State. About 55% of wells have shown rise, of which 49% wells show water level rise in the range of 0-2 m, 5% of wells reported rise between 2 and 4 m. Rise of more than 4 m has been observed at 1% of the wells analysed. Fall in water level is observed in 45% of the wells. Out of this, 34% of the wells analysed is showing rise in the range of 0-2 m and 11% of the wells showing rise of more than 2 m.

4.26 Rajasthan

Depth to Water Level - Premonsoon 2014

During Premonsoon 2014, it is observed that only 1% wells have shown water level in the range of 0-2 m bgl, 9% of the wells have shown water level in the range of 2-5 m bgl. About 25% of the wells analysed have shown water level in the range of 5-10 m bgl, 27% 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 water level more than 40 m bgl is observed at 20% of the wells analysed. Thus more than 65% of the wells show depth to water level in the range of 10 to more than 40 m bgl. Shallow water levels are recorded in the southwestern parts of the state.



The depth to water level recorded in the state of Rajasthan during Premonsoon 2014 ranges from 0.02 m bgl to 119.60 m bgl in Bikaner district. .

Water Level Fluctuation (Premonsoon 2014 to Premonsoon 2013)

Comparison of water level of Premonsoon 2014 and Pre Monsoon 2013 in the state indicates that about 45% of the wells analysed have recorded a rise in water level, out of which 28% of analysed wells have recorded a rise in the range of 0 to 2 m, 8% of analysed wells have shown rise in the range of 2 to 4 m and 9% of the wells have shown rise more than 4 m. 49% of the wells have shown fall in water level, out of this, 33% have recorded fall in the range of 0 to 2 m. 6% wells show no change in water level.

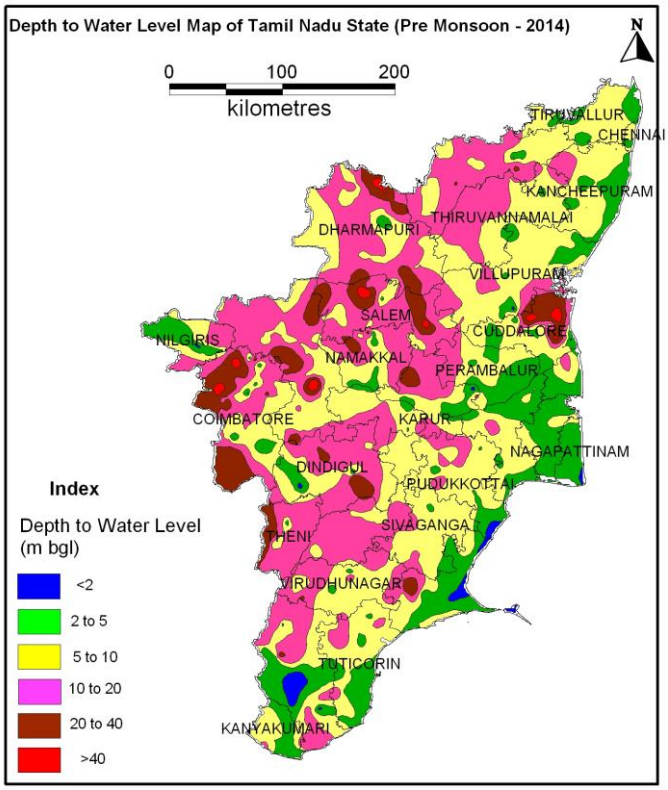
Fluctuation - Premonsoon 2014 to Premonsoon Decadal mean (2004-13)

The fluctuations of water level during Premonsoon 2014 with respect to Decadal mean (Premonsoon 2004 -2013) indicates that there is rise in water level in about 50% of analysed wells. Out of this, 27% 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 10% of the wells have shown rise of more than 4 m. About 48 % of the wells have shown a fall in water level. Out of this 22% of the wells have shown fall in the range of 0-2 m while 11% of the wells have shown fall in the range of 2-4 m and 15% of wells analysed have shown fall of more than 4 m. 2% of wells show no change in water level.

4.27 Tamil Nadu

Depth to Water Level - Premonsoon 2014

The depth to water level during Premonsoon 2014 varies from 0.25 to 68.60 m bgl. It is observed that about 6% wells show water level in the range of 0-2 m bgl, 21 % of the wells have shown water level in the range of 2-5 m bgl. About 39% 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 shown by only 7% of the wells analysed and water level more than 40 m bgl is shown by less than 2% of the wells analysed. Along the coastal areas water varies from 2 to 5 m bgl, whereas towards west the water deepens to 10 m bgl or more.



Water Level Fluctuation (Premonsoon 2014 to Premonsoon 2013)

Water level of Premonsoon 2014 when compared to water level of Pre Monsoon 2013 in the state indicated that there is a rise as well as fall in water level in the entire state. About 53% of the wells analysed have recorded a rise in water level, out of which 36% of analysed wells have recorded a rise in the range of 0 to 2 m, 11% of analysed wells have shown rise in the range of 2 to 4 m and 6% of the wells have shown rise of more than 4 m. About 43% of the wells have shown fall in water level, out of this 29% of wells have recorded fall in the range of 0 to 2 m and 14% have shown fall in the range of more than 2 m. 4% wells have shown no change in water level.

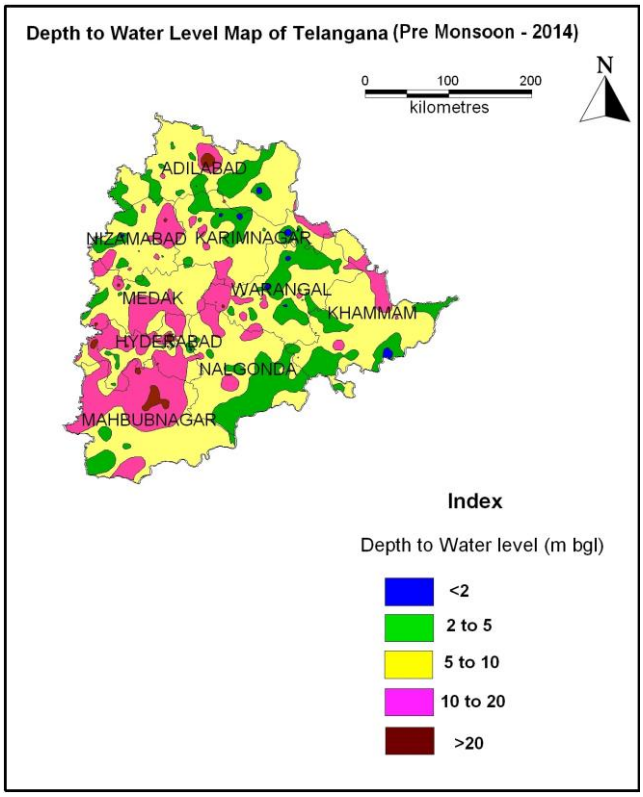
Fluctuation – Premonsoon 2014 to Premonsoon Decadal mean (2004-13)

The water level during Premonsoon 2014 when compared with the Decadal mean (Premonsoon 2004 -2013) indicates that there is in general fall in water level in the entire state. About 74% of analysed wells have shown decline in water level. Out of this, 33% of the wells have shown decline in the range of 0-2 m, 20% of analysed wells have shown fall in the range of 2 - 4 m and 21% of the wells have shown fall of more than 4 m. About 26% 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.

4.28 Telangana

Depth to Water Level – Premonsoon 2014

Depth to water level in Telangana ranges from ground level to 40.03 m bgl In general depth to water level scenario in the state depicted a water level in the range of 2 to 10 m bgl. About 4% monitoring stations recorded water level within 2 m bgl and around 29 % wells recorded water level between 2-5 m bgl. About 42% wells recorded water level between 5-10 m bgl whereas 22% wells recorded water level between 10-20 m bgl. Only 3% show water level more than 20 m bgl. Water levels of more than 10 m bgl are observed in the western parts of the state whereas water levels of less than 2 m bgl are seen in small patches only.



Water Level Fluctuation (Premonsoon 2014 to Premonsoon 2013)

Water level of Pre Monsoon 2013 when compared to that of Premonsoon 2014 shows that there is dominantly rise in water level in the state. About 79% of the wells analysed have recorded a rise in water level, out of which 44% of analysed wells have recorded a rise in the range of 0 to 2 m, 20% of analysed wells have shown rise in the range of 2 to 4 m and 15% of the wells have shown rise of more than 4 m. About 18% of the wells have shown fall in water level, out of this 14% of wells have recorded fall in the range of 0 to 2 m and 4% have shown fall in the range of more than 2 m. 3% wells have shown no change in water level.

Fluctuation - Premonsoon 2014 to Premonsoon Decadal mean (2004-13)

The water levels during Premonsoon 2014 when compared with the Decadal mean (Premonsoon 2004 -2013) indicates that there is in general rise in water level in the entire state. About 22% of analysed wells have shown decline in water level. Out of this, 17% of the wells have shown decline in the range of 0-2 m, 3% of analysed wells have shown fall in the range of 2 - 4 m and 2% of the wells have shown fall of more than 4 m. Remaining 78% of the wells have shown a rise in water level, out of which 43% of the wells have shown rise in the range of 0-2 m; 19% of the wells have shown rise in the range of 2-4 m; and 16% of the wells have shown rise in the range of more than 4 m.

4.29 Tripura

Depth to Water Level – Premonsoon 2014

In general depth to water level scenario in the state depicted a water level in the range of 2 to 10 m bgl at more than 89 % of the wells monitored. Around 11% monitoring stations recorded water level within 2 m bgl and around 39 % wells recorded water level between 2-5 m bgl. About 50 % wells recorded water level between 5-10 m bgl.

Water Level Fluctuation (Premonsoon 2014 to Premonsoon 2013)

Comparison of water level of Pre Monsoon 2013 and Premonsoon 2014 shows that there is rise as well as fall in water level at 46 % of the wells each. 8% show no change in water level. Both rise and fall is in the range of 0-2 m.

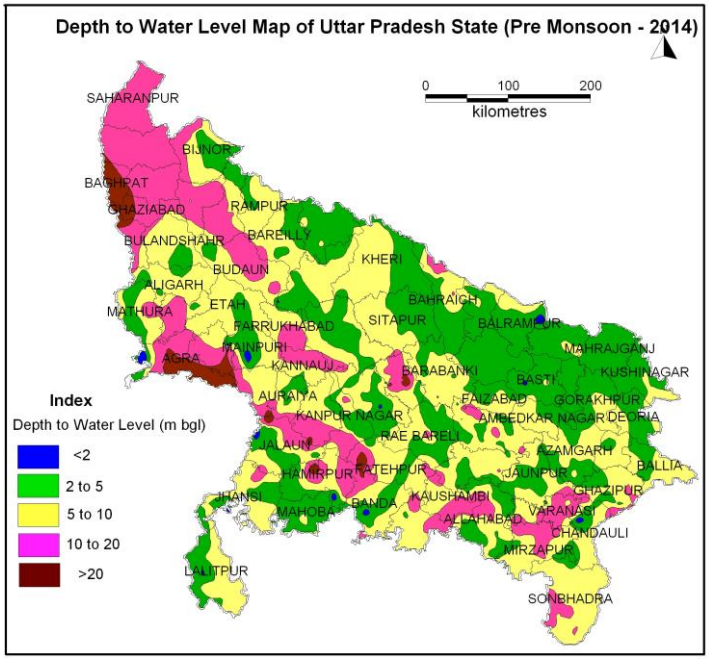
Fluctuation - Premonsoon 2014 to Premonsoon Decadal mean (2004-13)

The water level data of Premonsoon 2014 has been compared with decadal mean (Premonsoon 2004-2013) and it is observed that out of 16 wells analyzed 38% show a rise in water level where as 62% show a fall in water level. Both rise and fall is in the range of 0-2 m.

4.30 Uttar Pradesh

Depth to Water Level - Premonsoon - 2014

During premonsoon period 2014, in Uttar Pradesh shallow water level ranging between 0 and 2 m bgl were observed at only 2% of the wells monitored mostly seen as small patches. Water level ranging between 2 and 5 m bgl was observed at 39% of wells. The depth to water level between 5 and 10 m bgl has been observed in 38 % wells and depth to water level between 10 and 20 meters is observed at 18% of wells. Deeper water levels of more than 20 m bgl are observed at 3% stations and occur as patches along western boundary of the state. The depth to water level in the state ranges upto 38.50 m bgl in Etawah district.



Water Level Fluctuation (Premonsoon 2014 to Premonsoon 2013)

Water levels of Premonsoon 2014 when compared to water level of Pre Monsoon 2013 in the state indicated that the entire state shows a rise in water level at about 68% of the wells analysed, out of which 59% wells have recorded a rise in the range of 0 to 2 m, 8% of analysed

wells have shown rise in the range of 2 to 4 m and 1% wells have shown rise of more than 4 m. About 31% of the wells have shown fall in water level, out of which 28% have shown fall in the range of 0-2 m. 1% wells show no change.

Fluctuation - Premonsoon 2014 to Premonsoon Decadal mean (2004-13)

The fluctuation of water level during Premonsoon 2014, when compared with the Decadal mean (Premonsoon 2004-2013), indicates that there is in general rise in water level in the state. About 63% of analysed wells have shown rise in water level. Out of this 50% of the wells have shown rise in the range of 0-2 m, 10% of analysed wells have shown rise in the range of 2 - 4 m and 3% of the wells have shown rise more than 4 m. About 37% of the wells have shown a fall in water level. Out of this 33% of the wells have shown fall in the range of 0-2 m while 4% of the wells have shown fall in the range of more than 2 m.

4.31 Uttarakhand

Depth to Water Level - Premonsoon 2014

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. Depth to water level in the range of 2-5 m bgl is observed in 35% of the wells analysed, 35% of the wells shows water level in the range of 5-10 m bgl, 19% in the range of 10-20 m bgl, 11% in the range of more than 20 m bgl. In general depth to water in Premonsoon 2014 varies from 2.25 m bgl to 46.05 m bgl in Dehradun district.

Water Level Fluctuation (Premonsoon 2014 to Premonsoon 2013)

The comparison of Premonsoon 2014 water level with Pre Monsoon 2013 reveals that rise in water level is observed at 52% of the wells analysed fall is observed at 48% wells. The rise in water level in the range of 0-2 m has been observed for 36 % of wells whereas the rise in water level for 2-4 m range is observed in 9% wells and rise in water levels of more than 4 m is observed in 7 % wells. The fall in water level in the range of 0-2 m has been observed for 45 % of wells and for 2-4 m fall it is observed at 3% wells.

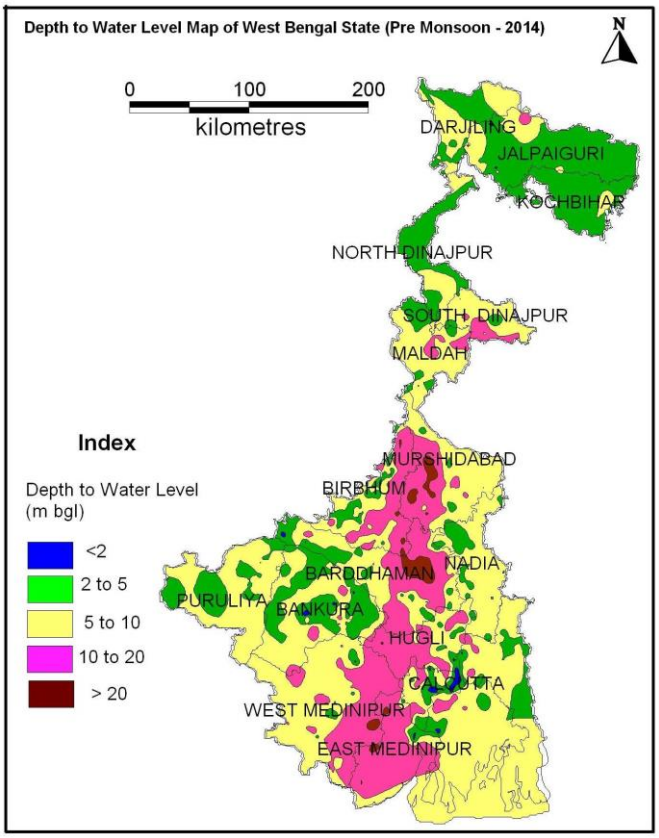
Fluctuation - Premonsoon 2014 to Premonsoon Decadal mean (2004-13)

The comparison of Premonsoon 2014 water level with decadal mean of (Premonsoon 2004 - 2013) reveals that about 43% of the analysed wells have shown rise in water level. Out of this, the rise in water level in the range of 0-2 m has been observed at 22% of wells whereas the rise in water level in 2-4 m range or more is observed at 21% wells. About 57% of the analysed wells have shown decline in water level and out of these 51% wells fall in the range of 0-2 m and 6% show a fall of more than 2m.

4.32 West Bengal

Depth to Water Level – Premonsoon 2014

During Premonsoon, 2014, depth to water level varies in the range of 0-2 m bgl at 4% of wells analysed, 2-5 m bgl at 29 % of wells analysed, 5-10 m bgl at 41% of wells analysed and 10-20 m bgl at 22% of wells analysed. Only 4 % wells are showing water level of more than 20 m bgl. In general water level varies from ground level to 26.90 m bgl. 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 mbgl.



Water Level Fluctuation – Premonsoon 2014 to Premonsoon 2013

Water level data of Premonsoon 2014 was compared to Premonsoon 2013 and the analysis shows that there is rise in water level in about 64% of the wells and fall in about 35% of the wells. 51% wells have shown a rise in the range of 0-2 m, about 9% of the wells have shown rise in the range of 2-4 m, and 4% wells falls in the range of more than 4 m. 28% of the wells have shown fall in the range of 0-2 m. Maximum rise in water level has been recorded as 15.32 m and maximum fall in water level has been recorded as 12.85 m. 1% wells show no change.

Fluctuation - Premonsoon 2014 to Premonsoon Decadal mean (2004-13)

When compared the decadal mean water level (Premonsoon 2004 to 2013) with water level of Premonsoon 2014, there is both rise and fall of water level in the state. 55% of the analysed wells have shown rise in water level. Out of this, the rise in water level in the range of 0-2 m has been observed at 46% of wells whereas the rise in water level in 2-4 m range or more is observed at 9% wells. About 45% of the analysed wells have shown decline in water level and out of these 35% wells fall in the range of 0-2 m and 10% show a fall of more than 2m.

Annexure-I

State-wise Depth to water Level and Distribution of Percentage of Wells for the Period of Premonsoon-2014

S. No.	Name of State/UT	No. of wells Analysed	Depth to Water Level (mbgl)		Number & Percentage of Wells Showing Depth to Water Level (metre below ground level) in the Range of											
					0-2		2-5		5-10		10-20		20-40		> 40	
			Min	Max	No	%	No	%	No	%	No	%	No	%	No	%
1	Andaman & Nicobar	108	0.20	14.34	26	24.0	77	71.0	4	4.0	1	1.0	0	0	0	0.00
2	Andhra Pradesh	740	0.09	23.78	121	16.35	333	45.00	228	30.81	53	7.16	5	0.68	0	0.00
3	Arunachal Pradesh	13	1.48	11.09	1	7.69	8	61.54	2	15.38	2	15.38	0	0.00	0	0.00
4	Assam	164	0.00	16.44	24	14.63	102	62.20	35	21.34	3	1.83	0	0.00	0	0.00
5	Bihar	367	0.44	15.80	14	3.81	188	51.23	152	41.42	13	3.54	0	0.00	0	0.00
6	Chandigarh	16	2.80	44.41	0	0.00	4	25.00	3	18.75	4	25.00	4	25.00	1	6.25
7	Chhattisgarh	557	0.00	60.40	23	4.13	125	22.44	290	52.06	104	18.67	12	2.15	3	0.54
8	Dadra & Nagar Haveli	10	2.55	10.81	0	0.00	3	30.00	6	60.00	1	10.00	0	0.00	0	0.00
9	Daman & Diu	12	3.38	19.10	0	0.00	4	33.33	7	58.33	1	8.33	0	0.00	0	0.00
10	Delhi	116	1.19	74.41	4	3.45	28	24.14	32	27.59	26	22.41	14	12.07	12	10.34
11	Goa	77	0.80	18.72	7	9.09	28	36.36	30	38.96	12	15.58	0	0.00	0	0.00
12	Gujarat	779	0.55	61.20	21	2.70	166	21.31	271	34.79	225	28.88	84	10.78	12	1.54
13	Haryana	351	0.00	71.78	23	6.55	77	21.94	74	21.08	102	29.06	64	18.23	11	3.13
14	Himachal Pradesh	105	0.20	20.71	11	10.48	42	40.00	26	24.76	24	22.86	2	1.90	0	0.00
15	Jammu & Kashmir	248	0.00	34.27	60	24.19	119	47.98	43	17.34	15	6.05	11	4.44	0	0.00
16	Jharkhand	238	1.15	17.03	4	1.68	40	16.81	166	69.75	28	11.76	0	0.00	0	0.00
17	Karnataka	1384	0.05	31.50	120	8.67	352	25.43	545	39.38	351	25.36	16	1.16	0	0.00
18	Kerala	1105	0.17	53.00	103	9.32	323	29.23	475	42.99	188	17.01	15	1.36	1	0.09
19	Madhya Pradesh	1322	0.83	49.40	14	1.06	270	20.42	653	49.39	338	25.57	45	3.40	2	0.15

S. No.	Name of State/UT	No. of wells Analysed	Depth to Water Level (mbgl)		Number & Percentage of Wells Showing Depth to Water Level (metre below ground level) in the Range of											
					0-2		2-5		5-10		10-20		20-40		> 40	
			Min	Max	No	%	No	%	No	%	No	%	No	%	No	%
20	**Maharashtra**	1339	0.05	53.07	50	3.73	359	26.81	662	49.44	239	17.85	27	2.02	2	0.15
21	**Meghalaya**	20	1.16	7.78	2	10.00	13	65.00	5	25.00	0	0.00	0	0.00	0	0.00
22	**Nagaland**	7	3.70	17.30	0	0.00	2	28.57	4	57.14	1	14.29	0	0.00	0	0.00
23	**Odisha**	1324	0.37	14.16	106	8.01	596	45.02	596	45.02	26	1.96	0	0.00	0	0.00
24	**Pondicherry**	4	1.67	5.35	1	25.00	2	50.00	1	25.00	0	0.00	0	0.00	0	0.00
25	**Punjab**	568	0.03	40.60	25	4.40	81	14.26	134	23.59	204	35.92	122	21.48	2	0.35
26	**Rajasthan**	862	0.02	119.60	12	1.39	75	8.70	217	25.17	231	26.80	157	18.21	170	19.72
27	**Tamil Nadu**	641	0.25	68.60	35	5.46	136	21.22	250	39.00	162	25.27	46	7.18	12	1.87
28	**Telangana**	543	0.00	40.03	21	3.87	160	29.47	228	41.99	117	21.55	16	2.95	1	0.18
29	**Tripura**	18	1.15	7.76	2	11.11	7	38.89	9	50.00	0	0.00	0	0.00	0	0.00
30	**Uttar Pradesh**	928	0.13	38.50	21	2.26	361	38.90	352	37.93	163	17.56	31	3.34	0	0.00
31	**Uttarakhand**	37	2.25	46.05	0	0.00	13	35.14	13	35.14	7	18.92	3	8.11	1	2.70
32	**West Bengal**	954	0.02	26.90	40	4.19	272	28.51	395	41.40	208	21.80	39	4.09	0	0.00
Total		**14957**	**0.00**	**119.60**	**891**	**5.96**	**4366**	**29.19**	**5908**	**39.50**	**2849**	**19.05**	**713**	**4.77**	**230**	**1.54**

Annexure-II

State-wise Annual Fluctuation & Frequency Distribution of Different Ranges from Premonsoon 2014 to Premonsoon 2013

S. No.	Name of State/ UT	No. of wells Analysed	Range in m				Rise						Fall						Total				Wells showing no change	
			Rise		Fall		0-2 m		2-4 m		>4 m		0-2 m		2-4 m		>4 m		Rise		Fall			
			Min	Max	Min	Max	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%
1	Andaman & Nicobar	88	0.01	6.82	0.06	5.01	12	14	1	1	1	1	46	52	22	25	5	6	14	16	73	83	1	1
2	Andhra Pradesh	549	01	17.80	01	10.72	269	49	61	11	22	4	140	26	26	5	7	1	352	64	173	32	24	4
3	Arunachal Pradesh	10	0.39	32	0.25	1.55	5	50	2	20	0	0	3	30	0	0	0	0	7	70	3	30	0	0
4	Assam	135	01	17.76	02	6.56	54	40	5	4	3	2	61	46	6	4	2	1	62	46	69	51	4	3
5	Bihar	328	01	98	01	4.76	185	56	18	6	8	2	96	29	6	2	3	1	211	64	105	32	12	4
6	Chandigarh	16	09	3.45	0.22	65	7	44	3	19	0	0	5	32	0	0	1	5	10	63	6	37	0	0
7	Chhattisgarh	539	01	18.49	01	13.69	235	43	41	8	22	4	142	26	26	5	21	4	298	55	189	35	52	10
8	Dadra & Nagar Haveli	5	0.80	0.80	0.60	2.51	1	20	0	0	0	0	3	60	1	20	0	0	1	20	4	80	0	0
9	Daman & Diu	7	0.18	5.16	0.95	9.50	2	29	0	0	1	14	2	29	1	14	1	14	3	43	4	57	0	0
10	Delhi	114	01	4.53	04	3.34	69	60	11	10	1	1	30	26	3	3	0	0	81	71	33	29	0	0
11	Goa	72	08	8.76	03	3.79	48	67	7	10	1	1	11	15	3	4	0	0	56	78	14	19	2	3
12	Gujarat	654	01	14.10	03	17.42	229	35	95	15	86	13	125	18	36	6	37	6	410	63	198	30	46	7
13	Haryana	302	02	24.95	01	11.25	166	55	28	10	7	2	87	29	6	2	6	2	201	67	99	33	2	1
14	Himachal Pradesh	89	01	10.32	02	3.77	53	59	9	10	5	6	20	23	2	2	0	0	67	75	22	25	0	0
15	Jammu & Kashmir	219	01	11.68	01	4.46	128	58	12	6	13	6	56	26	4	2	1	0	153	70	61	28	5	2
16	Jharkhand	142	03	6.67	01	8.82	68	48	18	13	6	4	35	25	4	3	8	5	92	65	47	33	3	2
17	Karnataka	1106	01	18.50	01	17.80	465	42	149	13	110	10	183	17	52	5	31	3	724	65	266	25	116	10
18	Kerala	861	01	8.75	01	7.85	501	58	46	5	20	2	263	31	19	2	5	1	567	65	287	34	7	1

S. No.	Name of State/ UT	No. of wells Analysed	Range in m				Rise						Fall						Total				Wells showing no change	
			Rise		Fall		0-2 m		2-4 m		>4 m		0-2 m		2-4 m		>4 m		Rise		Fall			
			Min	Max	Min	Max	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%
19	**Madhya Pradesh**	1054	01	22.56	01	18.10	435	41	168	16	145	14	199	19	42	4	23	2	748	71	264	25	42	4
20	**Maharashtra**	977	01	24.20	02	14	454	47	159	16	119	12	163	17	37	4	27	2	732	75	227	23	18	2
21	**Meghalaya**	16	05	25	01	4.25	4	25	1	6	0	0	10	63	0	0	1	6	5	31	11	69	0	0
22	**Nagaland**	5	05	3.78	0.39	2.47	1	20	1	20	0	0	2	40	1	20	0	0	2	40	3	60	0	0
23	**Odisha**	1055	01	11.6	01	5.34	578	56	78	7	36	3	318	30	18	2	3	0	692	66	339	32	24	2
24	**Pondicherry**	4	0.17	0.17	0.25	1.70	1	25	0	0	0	0	3	75	0	0	0	0	1	25	3	75	0	0
25	**Punjab**	242	01	6.38	01	5.92	140	58	14	6	3	1	77	32	5	2	2	1	157	65	84	35	1	0
26	**Rajasthan**	745	02	15.27	02	22.70	209	28	58	8	66	9	249	33	70	10	47	6	333	45	366	49	46	6
27	**Tamil Nadu**	376	03	16.92	02	18.30	137	36	40	11	23	6	108	29	28	7	25	7	200	53	161	43	15	4
28	**Telangana**	449	01	18.94	03	17.68	197	44	88	20	69	15	61	14	10	2	12	2	354	79	83	18	12	3
29	**Tripura**	13	04	1.41	0.12	1.21	6	46	0	0	0	0	6	46	0	0	0	0	6	46	6	46	1	8
30	**Uttar Pradesh**	780	01	7.70	01	14.96	461	59	60	8	10	1	219	28	14	2	8	1	531	68	241	31	8	1
31	**Uttarakhand**	33	05	4.65	0.10	3.49	12	36	3	9	2	7	15	45	1	3	0	0	17	52	16	48	0	0
32	**West Bengal**	866	01	15.32	01	12.85	439	51	74	9	38	4	247	28	44	5	16	2	551	64	307	35	8	1
	Total	**11851**	**01**	**24.95**	**01**	**22.70**	**5571**	**47**	**1250**	**10**	**817**	**7**	**2985**	**25**	**487**	**4**	**292**	**3**	**7638**	**64**	**3764**	**32**	**449**	**4**

Annexure-III

State-wise Fluctuation & Frequency Distribution of Different Ranges from Premonsoon 2014 to Decadal Mean [Premonsoon(2004 to 2013)]

S. No.	Name of State/UT	No. of wells Analysed	Range in m				Rise						Fall						Total				Wells showing no change	
			Rise		Fall		0-2 m		2-4 m		>4 m		0-2 m		2-4 m		>4 m		Rise		Fall			
			Min	Max	Min	Max	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%
1	Andhra Pradesh	566	0	9.95	01	12.77	269	47	60	11	16	3	177	31	33	6	9	2	345	61	219	39	2	0
2	Arunachal Pradesh	12	06	14.25	01	2	5	41	2	17	2	17	3	25	0	0	0	0	9	75	3	25	0	0
3	Assam	159	01	13.23	01	6.26	66	42	7	4	4	2	74	47	6	4	2	1	77	48	82	52	0	0
4	Bihar	351	01	4.99	0	4.71	194	55	20	6	4	1	116	33	12	4	1	0	218	62	129	37	4	1
5	Chandigarh	16	01	5.48	04	65	8	50	0	0	1	6	5	32	1	6	1	6	9	56	7	44	0	0
6	Chhattisgarh	552	01	17.37	02	13.51	233	42	59	11	24	4	168	30	32	6	23	4	316	57	223	40	13	3
7	Dadra & Nagar Haveli	5	02	1.41	0	0	5	100	0	0	0	0	0	0	0	0	0	0	5	100	0	0	0	0
8	Daman & Diu	12	02	1.74	0.51	9.53	4	33	0	0	0	0	5	42	2	17	1	8	4	33	8	67	0	0
9	Delhi	116	03	4.19	0.16	8.99	48	41	12	10	2	2	28	24	18	16	8	7	62	53	54	47	0	0
10	Goa	75	03	4.59	06	3.44	51	69	4	5	1	1	16	21	2	3	0	0	56	75	18	24	1	1
11	Gujarat	751	01	29.81	0	45.41	246	33	136	18	60	8	200	27	52	7	53	7	442	59	305	41	4	0
12	Haryana	335	01	11.18	01	13.14	164	49	13	4	9	3	97	29	27	8	25	7	186	56	149	44	0	0
13	Himachal Pradesh	94	02	16.42	04	49	58	62	9	10	7	7	16	17	3	3	1	1	74	79	20	21	0	0
14	Jammu & Kashmir	227	03	12.42	01	6.54	140	62	19	8	6	3	59	27	1	0	1	0	165	73	61	27	1	0
15	Jharkhand	169	09	7.12	01	8.13	86	51	26	15	8	5	39	23	4	2	6	4	120	71	49	29	0	0
16	Karnataka	1167	01	16.44	01	16.12	472	40	132	12	70	6	308	26	101	9	62	5	674	58	471	40	22	2
17	Kerala	894	01	10.66	00	5.8	424	47	34	4	13	2	381	43	33	3	7	1	471	53	421	47	2	0
18	Madhya Pradesh	1154	01	21.97	01	18.66	486	42	246	21	185	16	170	15	46	4	18	1	917	79	234	21	3	0

S. No.	Name of State/UT	No. of wells Analysed	Range in m				Rise						Fall						Total				Wells showing no change	
			Rise		Fall		0-2 m		2-4 m		>4 m		0-2 m		2-4 m		>4 m		Rise		Fall			
			Min	Max	Min	Max	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%
19	**Maharashtra**	1224	01	16.97	01	12.7	543	44	229	19	115	9	245	20	52	4	35	3	887	72	332	27	5	1
20	**Meghalaya**	20	01	2.2	0.27	4.86	7	35	1	5	0	0	11	55	0	0	1	5	8	40	12	60	0	0
21	**Odhisha**	1110	01	9.12	01	6	564	51	97	9	23	2	377	34	33	3	2	0	684	62	412	37	14	1
22	**Pondicherry**	4	01	0.47	0.23	0.49	2	50	0	0	0	0	2	50	0	0	0	0	2	50	2	50	0	0
23	**Punjab**	379	01	14.4	01	115	184	49	22	5	4	1	129	34	27	8	12	3	210	55	168	45	1	0
24	**Rajasthan**	847	01	20.98	02	29.41	228	27	106	13	90	10	183	22	91	11	132	15	424	50	406	48	17	2
25	**Tamil Nadu**	637	01	15.18	01	36.7	128	20	22	4	18	2	207	33	130	20	132	21	168	26	469	74	0	0
26	**Telangana**	467	0	18.94	02	12.87	200	43	90	19	72	16	78	17	14	3	12	2	362	78	104	22	1	0
27	**Tripura**	16	0.12	0.97	02	1.1	6	38	0	0	0	0	10	63	0	0	0	0	6	38	10	63	0	0
28	**Uttar Pradesh**	881	01	14.2	01	81	439	50	90	10	23	3	286	33	30	3	8	1	552	63	324	37	5	1
29	**Uttarakhand**	37	0.12	15.57	0.13	3.69	8	22	3	8	5	13	19	51	2	6	0	0	16	43	21	57	0	0
30	**West Bengal**	932	0	15.32	01	12.85	424	46	64	7	23	2	327	35	64	7	28	3	511	55	419	45	2	0
	Total	**13209**	**01**	**29.81**	**01**	**45.41**	**5692**	**43**	**1503**	**11**	**785**	**6**	**3736**	**28**	**816**	**6**	**580**	**5**	**7980**	**60**	**5132**	**39**	**97**	**1**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