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Government of India

जल शक्ति मंत्रालय

Ministry of Jal Shakti

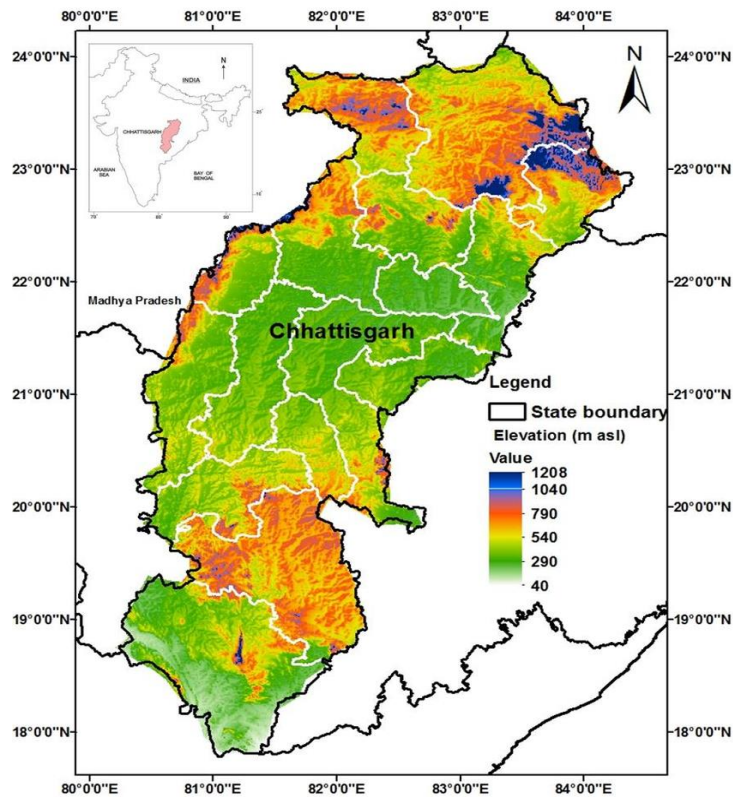
जल संसाधन, नदी विकास और गंगा संरक्षण विभाग

Department of Water Resources, River Development & Ganga Rejuvenation

केन्द्रीय भूमि जल बोर्ड

CENTRAL GROUND WATER BOARD

GROUND WATER YEAR BOOK OF CHHATTISGARH 2019-20



North Central Chhattisgarh Region

Raipur

2020

FOREWORD

Central Ground Water Board, North Central Chhattisgarh Region, Raipur monitors the water levels in the State four times a year through a network of 1055 number of observation wells (both dug wells and piezometers). Water quality is also assessed once in a year. The generated data from these observation wells are compiled, analysed and presented in the form of reports from time to time and circulated to various Central and State Government Departments. The present report embodies data and information collected during monitoring in the year 2019-20.

The report has been compiled and prepared by Smt. Prachi Gupta, Scientist 'B' (Jr. Hg.) and Sh Uddeshya Kumar, Scientist 'B' (Jr. Hg.) under the guidance and supervision of Sh. A. K. Biswal, Scientist-D & Head of the Office. I appreciate the efforts put by the officers in bringing out this report. The water level data, sample collection and analysis were done by the officers of CGWB, NCCR Raipur. I am sure this report will be of immense use to all the stakeholders of groundwater in the State.

(Sh. A. K. Biswal)
*Head of the Office,
CGWB, NCCR, Raipur*

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1. INTRODUCTION

The State of Chhattisgarh lies between North Latitude 17°47' to 24°06' and East Longitude 80°14' to 84°24' (**Fig. 1.1**). Central Ground Water Board, North Central Chhattisgarh Region, Raipur is carrying out ground water regime monitoring in the State. The State covers a geographical area of 1,37,360 sq. km. Nearly 65.90 % of the total area is covered by tribal and hence it is said as tribal dominated State. The ground water regime is monitored through a network of observation dug wells and piezometers. Dug wells represent the shallow phreatic aquifer system whereas piezometers represent the shallow un-confined as well as deeper semi-confined aquifer system. The network of observation stations forms a part of All India Network Hydrograph Stations (NHS), which is being monitored by various Regional offices of the department, located at different parts of the country.

As on March 2020, a network of 1055 observation wells (both dug wells and purpose-built piezometers) are monitored four times a year. The monitoring includes measurement of ground water level and quality. The purpose is to observe the behavior of ground water and their levels in different hydro geological environments in order to estimate the ground water resource from time to time and to know the water quality changes.

The monitoring database on water levels and chemical parameters helps to simulate models of forecasting, planning and management of ground water resources. The behavior of the ground water level and chemical quality analyzed during the period from May 2019 to January 2020 is presented in this report with the idea that it will enable the user agencies to plan the development strategy for optimum utilization of ground water resources in the state.

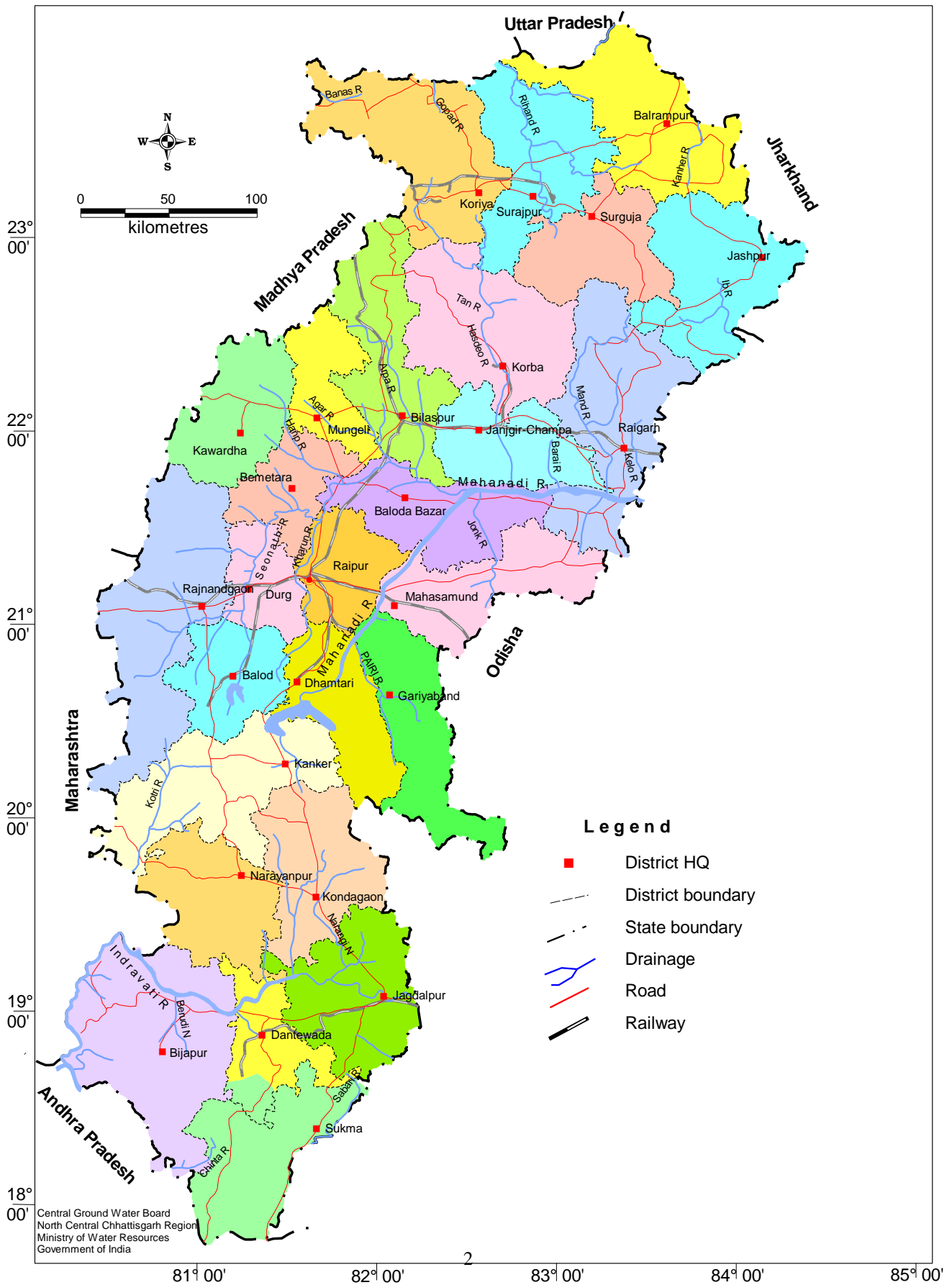


Fig 1.1 Administrative divisions of Chhattisgarh State

Central Ground Water Board
 North Central Chhattisgarh Region
 Ministry of Water Resources
 Government of India

2. GEOMORPHOLOGY

2.1 Physiography

Physiographically, Chhattisgarh can be divided into three distinct units i.e.

- i) Bastar plateau region on the southern part,
- ii) Chhattisgarh Plain region on the central part and
- iii) Northern hilly region on the northern parts of the State.

The Bastar Plateau Region

It covers Bastar, Kondagaon, Narayanpur, Kanker, Bijapur, Sukma and Dantewada districts lying on the southern parts of the State. Except Indravati River plains, most of the area is covered by evergreen dense reserve forests and hilly tracts. The major landforms are high-level plateaus, structural hills and valleys and pediments and pediplains. The altitude varies from 400 to 600 m amsl. In the plains of Indravati River covering central parts, and along the Shabri River, covering southeastern parts the altitude varies from 250 to 300 m amsl.

The Chhattisgarh Plain

It is spread over the central part of the State and covers parts of Bilaspur, Mungeli, Janjgir-Champa, Mahasamund, Dhamtari, Raipur, Balodabazar, Gariyaband Durg, Balod, Bemetara, Rajnandgaon and Kawardha districts. It forms the structural plains on Proterozoic rocks and matures Pediplain with remnants of few isolated hills and ridges in between flood plains of numerous tributaries of Mahanadi River system. It is characterized by a gently undulating and flat terrain. The overall altitude varies from 750 m amsl on northwestern parts of the area to 284 m amsl on southeastern parts.

Northern Hilly Region

It covers from north to the north central part of the area and occupies parts of Sarguja, Balrampur, Surajpur Koriya, Korba, Bilaspur, Jashpur and Raigarh districts. It is a part of Maikal and Hazaribagh hill ranges of central India. It represents structural plains of Gondwana rocks, pediment/pedi plains, structural and denudational plateaus, structural and denudational hills and valleys. It supports north flowing tributaries of Son River and south flowing Hasdeo and other tributaries of Mahanadi River. The

Narmada, an important west-flowing River of central India, originates from Amarkantak in the central part of this physiographic unit.

The highest point in the State is 1197 m amsl at Tulisi Dongri range in Dantewada district and the lowest point is 50 m amsl at Konta in Dantewada district.

2.2 Drainage

The major Rivers flowing in Chhattisgarh State are given in **Table 2.1**. The Mahanadi River and its tributaries Seonath, Hasdeo, Mand and Arpa drain part of Raipur, Durg, Rajnandgaon, Bilaspur, Raigarh and Surguja districts. The Indravati River is a tributary to Godavari River and drains the districts of Kanker, Bastar and Dantewada. Most of the Rivers are perennial in nature. In general, the drainage patterns are dendritic, parallel, angular and radial types. Son is the tributary of Ganga River and drains part of Sarguja and Koriya districts. **Fig. 2.1** shows the physiography and drainage pattern existing in the area.

Table 2.1: Major River Basins in Chhattisgarh State			
S.No.	Major Rivers	Tributaries	Districts
1.	Ganga 18407 Sq.Km.	Son	Surguja, Koriya, Jashpur and Bilaspur
2.	Mahanadi 75858 Sq.Km.	Ib, Hasdeo, Seonath, Tel, Mand	Raipur, Mahasamund, Dhamtari and parts of Durg, Rajnandgaon, Kawardha, Korba, Kanker, Bastar, Surguja, Ramgarh and Bilaspur.
3.	Godavari 38694 Sq.Km.	Indravati, Sabari Wain ganga	Parts of Durg, Bastar, Rajnandgaon, Kanker and Dantewada
4.	Narmada 744 sq.Km.	Narmada	Parts of Rajnandgaon, Bilaspur, and Kawardha
5.	Bramhani 1394 sq.Km.	Sankh	Part of Jashpur

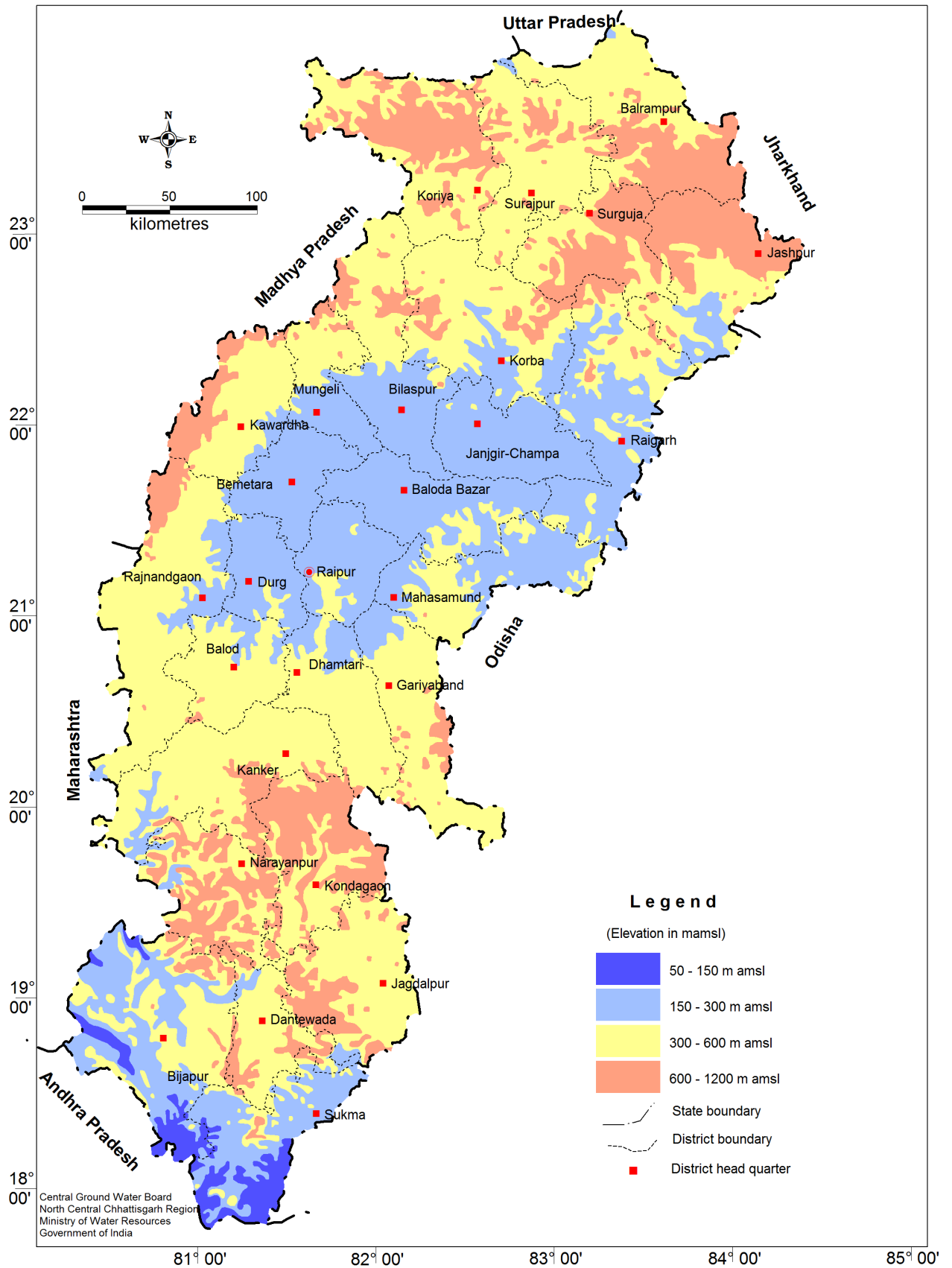


Fig 2.1 Physiography of Chhattisgarh State

3. CLIMATE AND RAINFALL

3.1 Rainfall

The region is endowed with sub-tropical monsoon climate with three distinct seasons i.e. summer, monsoon, and winter. The southwest monsoon starts from June and continues till middle of September. Winter season spreads from October to February. Summer season extends from March to middle of June. Rainfall is the major source of ground water recharge in the area and receives maximum (85%) rainfall during the southwest monsoon season. The winter rainfall is meager (10 - 15%).

Table 3.1 DISTRICT WISE AVERAGE ANNUAL RAINFALL (mm) OF CHHATTISGARH

Sl. No.	District	Year					Average
		2014	2015	2016	2017	2018	
1	Balod	-	-	1527.4	1425	1246.5	1399.63
2	Baloda bazar	-	-	855.2	690.9	1043.4	863.17
3	Bastar	1476.6	1538.5	1821.6	1583.1	1460.1	1575.98
4	Bemetara	-	-	1147.4	1162.7	1427.3	1245.80
5	Bijapur	1696.5	1675.1	1693.8	1241.3	2126.6	1686.66
6	Bilashpur	1348.2	1056.8	1126.9	944.9	941.6	1083.68
7	Dantewara	1440.2	1548.8	1470.7	1315.1	1322.1	1419.38
8	Dhamtari	1289.2	974.6	1165.2	1181.8	1268	1175.76
9	Durg	1379.7	1008.7	1180.2	845	1163.7	1115.46
10	Gariyaband	-	-	1085.9	1017	1211.3	1104.73
11	Jangir	1169.7	955.7	1320.1	985.9	935.7	1073.42
12	Jashpur	786.2	1016.5	1139.8	1250.6	1075.9	1053.80
13	Kabirdham	1289.1	827.3	894.8	1448.2	871.6	1066.20
14	Kanker	1364.4	1165	1819.2	1145	1384.9	1375.70
15	Khondagaon	-	-	1655.3	1288	1271.4	1404.90
16	Korba	1304	1085.3	1314.8	1203.6	1054.8	1192.50
17	Koriya	1511.4	811.9	1229.3	752.4	946.8	1050.36
18	Mahasamund	1519.8	1228.3	1212.6	951.1	1091.3	1200.62
19	Mungeli	-	-	894.5	790.7	915.8	867.00
20	Narayanpur	1529.6	1430.3	1793.6	1048.7	1422.3	1444.90
21	Raigarh	1227.8	2244.4	1252.4	1020.6	1093.2	1367.68
22	Raipur	1233.2	921.4	1198.4	867.4	1405.4	1125.16
23	Rajnanadgaon	1119	850.8	1104.2	799.4	933.2	961.32
24	Sukma	-	-	1459	1779.8	1781.4	1673.40
25	Surajpur	-	-	704.9	1108.3	1195.3	1002.83
26	Surguja	840	989.8	1507.5	1453.6	1230.5	1204.28
Chhattisgarh							1220.55

Source: India Meteorological Department (IMD)

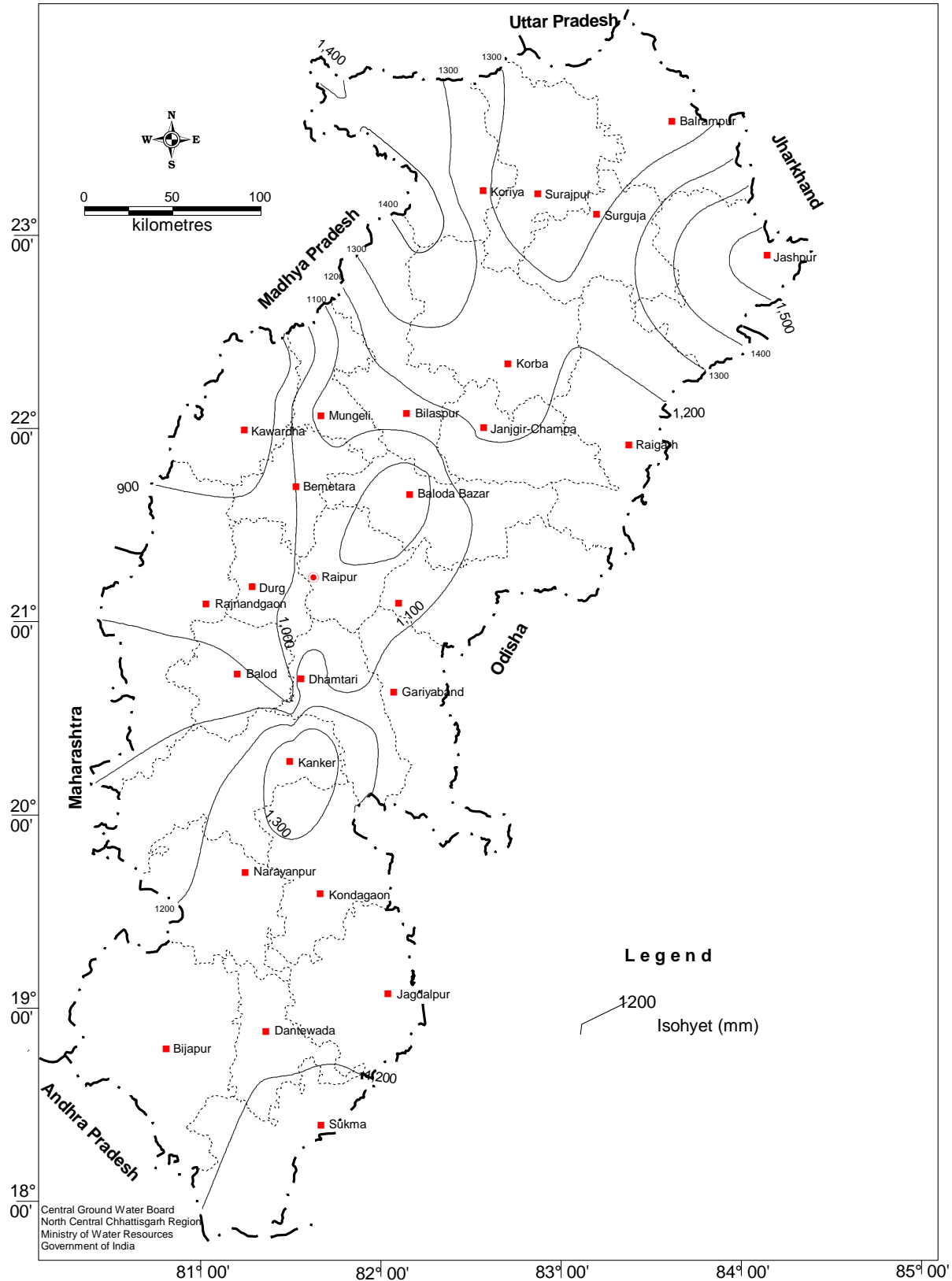


Fig 3.1 Rainfall Map of Chhattisgarh state

3.2 Temperature

The State experiences sub-tropical climate characterized by extreme summer and moderate winter. The summer extends from March to mid-June and May is the hottest month. The mean daily maximum temperature during the month of May goes up to 46°C. The winter season lasts till end of February. January is the coldest month with the mean daily maximum temperature at 30°C and the mean daily minimum temperature at 10.2°C. In Raipur area, the average temperature varies from 13°C during winter to 46°C in summer. However, in the plateau areas on the northern part, the variation was from 10°C in winters to 39°C in summers.

4. SOIL AND LANDUSE

4.1 Soil

The soils in the upper reaches of the drainage are shallow, young and are eroding in nature. Changes in soil properties indicate the drainage conditions, transport of eroded material and redeposition of soil constituents. Down the slope, the soil depth, water holding capacity, ion exchange capacity, and preponderance of calcium and magnesium increases. The color changes from red to dark brown. The texture also changes from sandy loam to clayey, and sticky to very sticky. The various soil types existing in the State and their suitability for various crops is enumerated in **Table 4.1** and **Fig 4.1**.

Table 4.1: Distributions of Soils and suitability of crops in Chhattisgarh State

Type of soil	Parent Rock	Distribution (Districts/tehsils)	Suitable Crops
Red-yellow soil (Matasi)	Gondwana, Chhattisgarh Supergroup	Surguja, Koriya, Jashpur, Raigarh, Korba, Bilaspur Kawardha, Durg, Raipur, Dhamtari and Mahasamund districts	Paddy
Red-sandy soil	Archaean Granite	Bastar, Dantewada, Kanker, Durg, Rajnandgaon and Dhamtari districts	Kodo-Kutki, Jawar, Maize, Potato Coarse grains etc
Red-domat soil	Archaean Granite	Dantewara and Konta tehsils	Paddy
Laterite soil	Mixed	Bagicha, Samri, Sitapur, Ambikapur, Kawardha, Chhui-Khaddan, Saja, Bemetera and Jagdalpur tehsils	Potato, Jawar, Kuddo-Kutti, Oilseeds, Pulses etc.
Black soil	Mixed	Mungeli, Ariya, Raipur, Rajim, Mahasamund, Kurud and Kawardha tehsils	Paddy, Wheat, Cotton, Gram, Sugarcane and Rabi crops

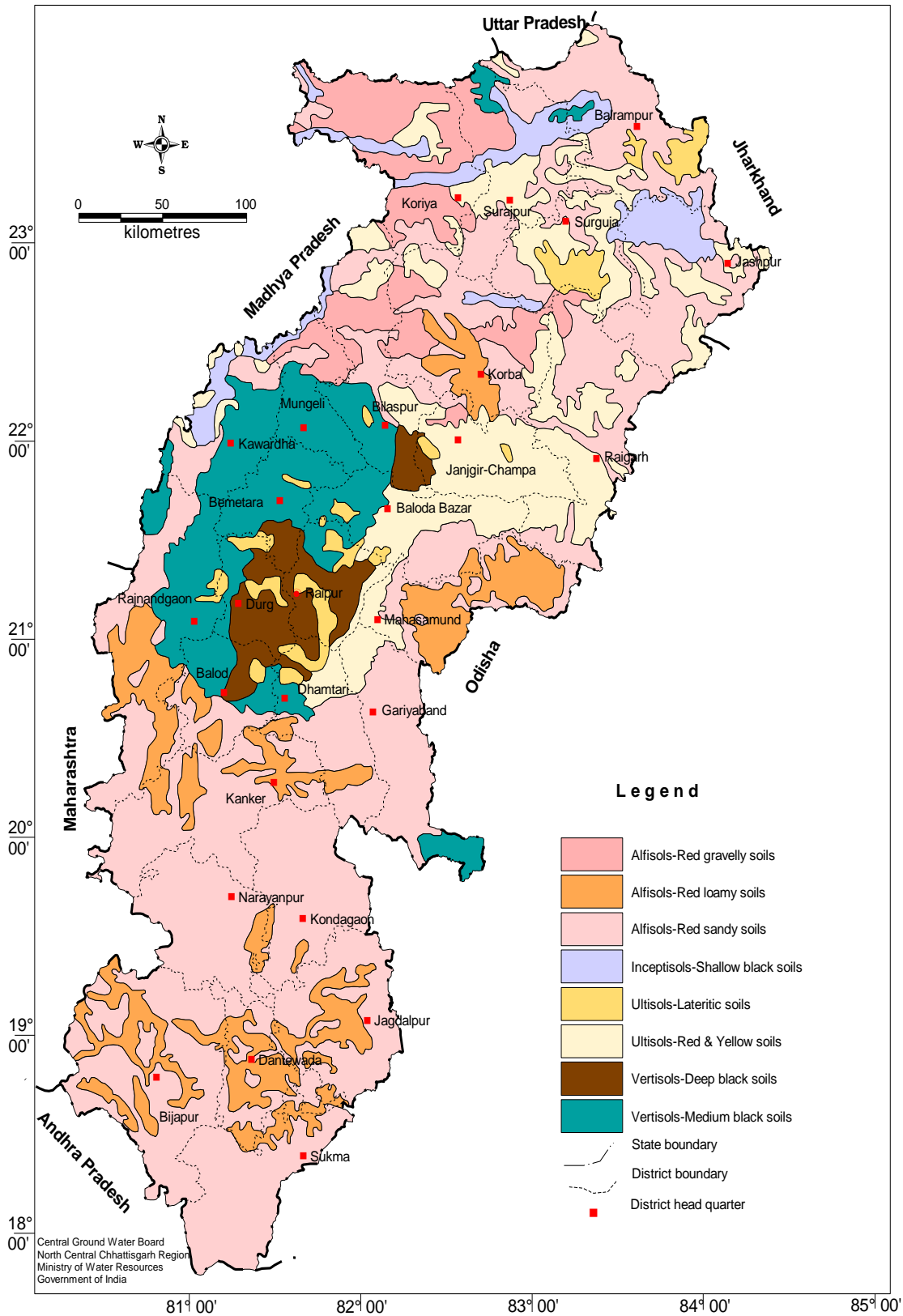


Fig 4.1 Distribution of soil in the State

4.2 Land use

The land use pattern is an important index of the human, social, cultural, and economic

developments. As per the available statistics (Department of Statistics, Govt. of Chhattisgarh), 6303503 Ha. (46 %) of the total area in the State is covered by forests. The forests include protected forests, reserved forests, revenue forests and others. Nearly 85.14 % of Narayanpur district (638801 Ha) is covered and area wise Narayanpur district has the maximum forest cover (638801 Ha). Bemetara district has the lowest forest cover in terms of percentage of the total area (0.015 %, 40 Ha) and also area wise Bemetara has the lowest forest cover (40Ha). The net sown area for Chhattisgarh is just 33.74% (4653495Ha). The double cropped area is 886744 Ha. Nearly 37 % of the net sown area has irrigation facilities. Land use map is presented in fig 4.2.

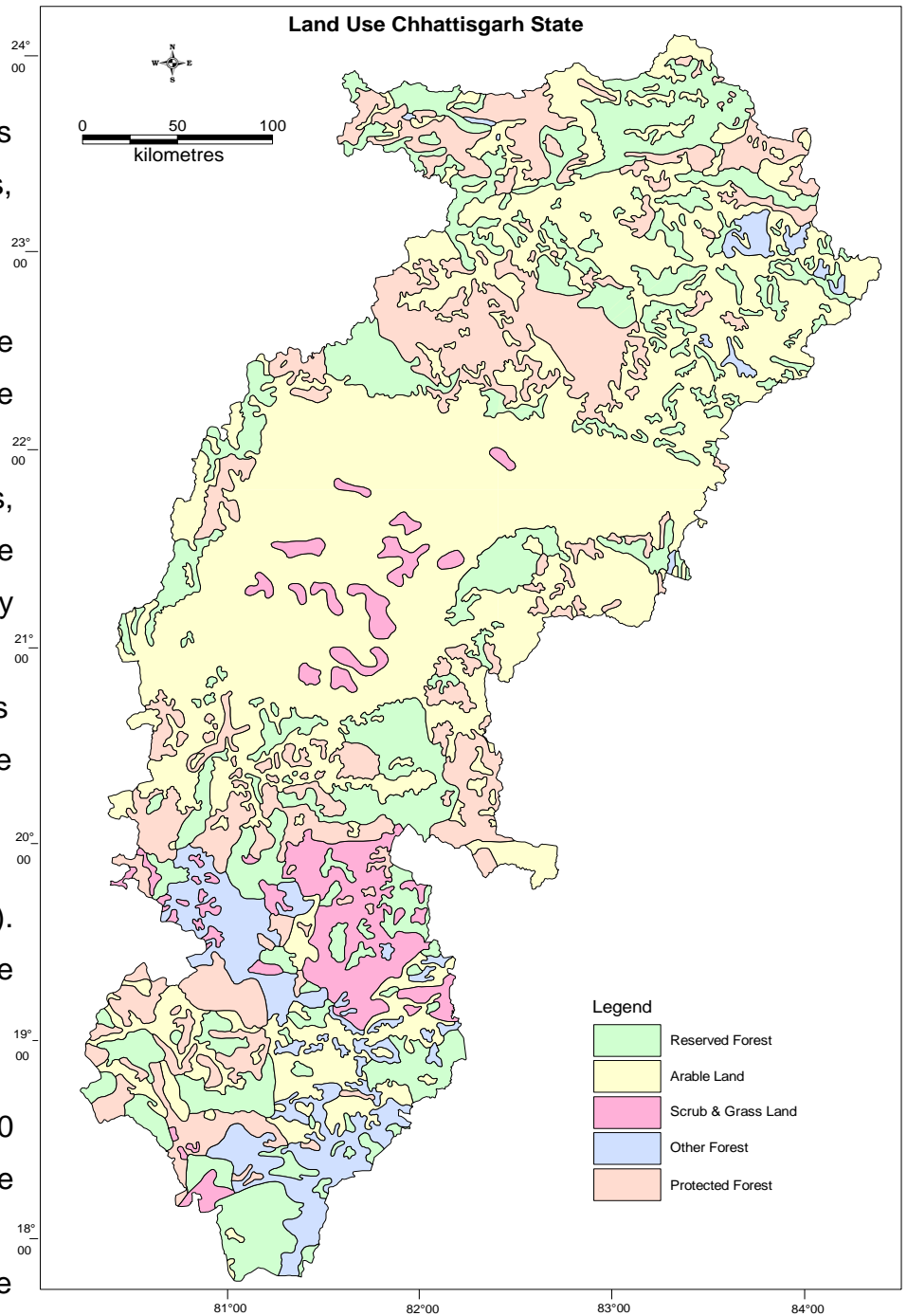


Fig 4.2 Land use map of the State

The double cropped area is 886744 Ha. Nearly 37 % of the net sown area has irrigation facilities. Land use map is presented in fig 4.2.

5. HYDROGEOLOGICAL CONDITIONS

The occurrence and movement of ground water is related to the existing geology of the area. The State is underlain by various rock types belonging to different geological ages, from Azoic to Quaternary. The major litho-units are shown in **Fig. 5.1** and the general geological succession is given in **Table 5.1**.

Nearly 58 % of the State is covered by Crystalline and metamorphic rocks; around 27 % of the area is covered by Chhattisgarh Group of rocks. The semi-consolidated Gondwana Supergroup of rocks covers 13 % of the area and the remaining 2 % by Daccan trap, Lameta, Laterite and River Alluvium.

The Archaean crystalline rocks comprise of granites and gneisses form the major litho-unit in the area. The ground water occurs under unconfined to semi-confined conditions. All the districts except Janjgir- Champa are covered by crystalline. The weathered formation and the fractures form the main repository for ground water in these rocks. The second important litho- unit in the area is the Proterozoic arenaceous–argillaceous- calcareous rocks of Chhattisgarh, Indravati, Khariyar and Sukma Groups. The weathered formation, caverns, fractures and formation contacts form the potential ground water zones. The karstified argillo –calcareous rocks are much more productive than compact –silicified arenaceous sediments. The gypsum karsts are more intense than calcareous karsts in the Chhattisgarh basin. The overall karstification in Indravati basin is much higher than in the Chhattisgarh basin. Karsts, though few and far in between are the best repository for ground water. These rocks cover the districts of Bastar, Narayanpur, Kondagaon, Dantewada, Bijapur, Sukma, Kanker, Raipur, Dhamtari, Mahasamund, Durg, Rajnandgaon, Kawardha, Bilaspur, Mungeli, Janjgir- Champa, Korba and Raigarh.

The rocks belonging to Gondwana Supergroup are the third major litho-unit in the area. The sandstone shows primary and occasional secondary porosity. They form thick and extensive unconfined to confined aquifers extending to a depth of 300 mbgl. At some places free flow conditions are existing and at places the temperature goes

up to 50°C. The Gondwana formations are covering the districts of Raigarh, Korba, Koriya and Surguja and are exhibiting confined conditions.

Table 5.1: Geological Succession for Chhattisgarh State

Age	Formation	Lithology
Quaternary	Recent to sub recent	Alluvium – clay, silt, sand pebble, gravel, laterite ferruginous concretions
Cenozoic	Deccan traps	Traps with or without intertrappean sediments
Cenozoic, Mesozoic, upper Paleozoic	Gondwana Super group	Sandstone, shale, conglomerate, quartzite, silt – stone, clay stone.
Proterozoic	Chhattisgarh Super group Chilipi, Kotri, Dongargarh, Iron Ore Super group	Limestone and shale Arkose, conglomerate, sandstone, silt stone, shale Schist, phyllite, slate, gneiss, marble, BHQ.
Azoic	Basement crystalline Basement crystalline	Charnockite, Khondalite, granulite, gneisses and meta sediments Granites, gneisses and associated basic and ultra-basic intrusive

The unconsolidated formation of Quaternary age comprise of alluvium, clay, silt and laterite form as a thin and extensive unconfined aquifer in several isolated patches along major River courses. The thickness extending up to a depth of 30 mbgl along Mahanadi, Arpa, Hasdeo, Seonath, Kharun, Mand, Kelo Rivers.

From the hydrogeological point of view, all rock types existing in the State can broadly be divided into three groups as i) the consolidated formations, ii) the semi consolidated formations and iii) the unconsolidated formations. The hydrogeological map of the state is presented in **Fig. 5.2**.

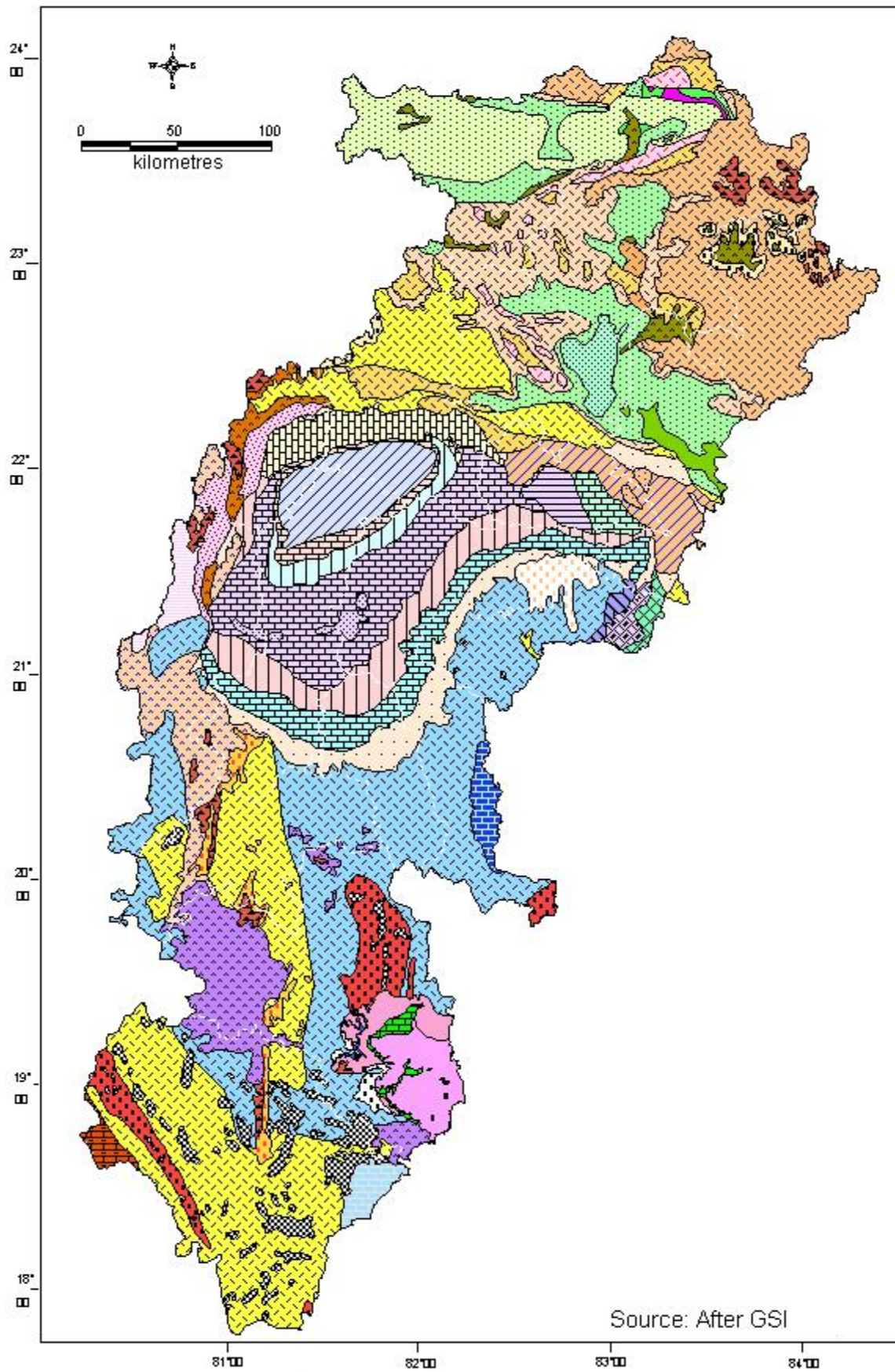



















































Fig. 5.1: Geological map of Chhattisgarh State

Geology Legend	
	Laterites
	Deccan Trap
	Lameta Group
	Mahadeva Formation
	Jabalpur, Parsora, Tiki Formation
	Panchet Formation
	Kamthi Formation
	Barakar Formation
	Raniganj Formation
	Talchir Formation
	Maniari Formation
	Hirri Formation
	Saradih Formation
	Tarenga Formation
	Chandi Sandstone
	Chandi Limestone
	Bamnidih Formation
	Pandaria Formation
	Gunderdehi Formation
	Charmuria Formation
	Raigarh Formation (Sandstone)
	Raigarh Formation
	Chandrapur Group
	Machkot Dolomite
	Jagdarpur Formation
	Kanger Limestone
	Cherakur Shale
	Cherakur Sandstone
	Tirathgarh Sandstone
	Nawagarh Group
	Sabri Group
	Pakhal Group
	Saraipali Formation
	Chhuipali Formation
	Rehalikhol Formation
	Chilpi Group
	Khairagarh Group
	Abujhmar Group
	Bijli Rhyolite
	Pitepani Volcanics
	Dongargarh Granite
	Granite of Bilas-Raig-Sug
	Sonakhan Group
	Unclassified Metamorphics_BRA
	Bailadila Group
	Chhotanagpur Gneissic Rocks
	Bastar Gneisses
	Bengpal Group
	Charnokite- Khondalite Group

5.1 Consolidated Formations

The consolidated formations include the crystalline and the metamorphosed sedimentary formations belonging to Proterozoic age. They are mainly granites, granite gneisses, schistose rocks, charnockites, quartzites, calcisilicate rocks, shales, phyllites and limestones. These rocks are devoid of primary porosity. The ground water occurs in the secondary porosity resulting from fracturing, jointing and weathering. These hard rock aquifers exhibit considerable variations laterally as well as depth wise. The weathered formation is composed of loose regolith with secondary intergranular porosity, which facilitates free circulation of ground water. Also, the

fractures at depth form potential repository of ground water. In general, the average thickness of weathered formation varies from 15 to 20 m. The ground water occurs under water table conditions. The water bearing fracture zones are generally occurring within a depth of 100m, but deeper potential fractures are also encountered in some of the boreholes.

Deccan Trap basalts are typical hard rock formations. The lava flows are generally 10 to 20 m thick. The top of each flow comprises of 25 to 40 % vesicular/fragmentary basalt. The vesicles are generally filled with secondary minerals like calcite and zeolite. The characteristic red bole beds form the marker horizons and occur as inter- trappean beds between successive flows. Deccan Traps with primary vesicular structure and secondary fractures and joints are moderately productive from ground water point of view. The ground water occurs under both unconfined to semi confined conditions. The Deccan Trap basalts are occurring at few places.

5.2 Semi-consolidated formations

The semi-consolidated formations include Gondwana Supergroup of sedimentary rocks and ranging in age from Upper Carboniferous to Cretaceous. This group includes sandstone, shale, siltstone and conglomerate beds. These formations are generally highly compact and possess less intergranular porosity. The coarse to medium grained, weathered, fractured and friable sandstone forms good aquifer. The ground water occurs under water table conditions in the near surface aquifers and under confined conditions in the deeper aquifers. The depth of weathering in Gondwana Group of rocks generally extends to a depth of 15 m.

5.3 Unconsolidated formations

The unconsolidated formations include alluvium and laterite. Alluvium occurs as discontinuous patches along the River courses where the thickness is limited. The sand and gravel layers act as a good repository for ground water. The ground water occurs under unconfined conditions. The laterites occur as cap rocks on basalts or granites. The laterites are vesicular, essentially ferruginous and form good repository of ground water.

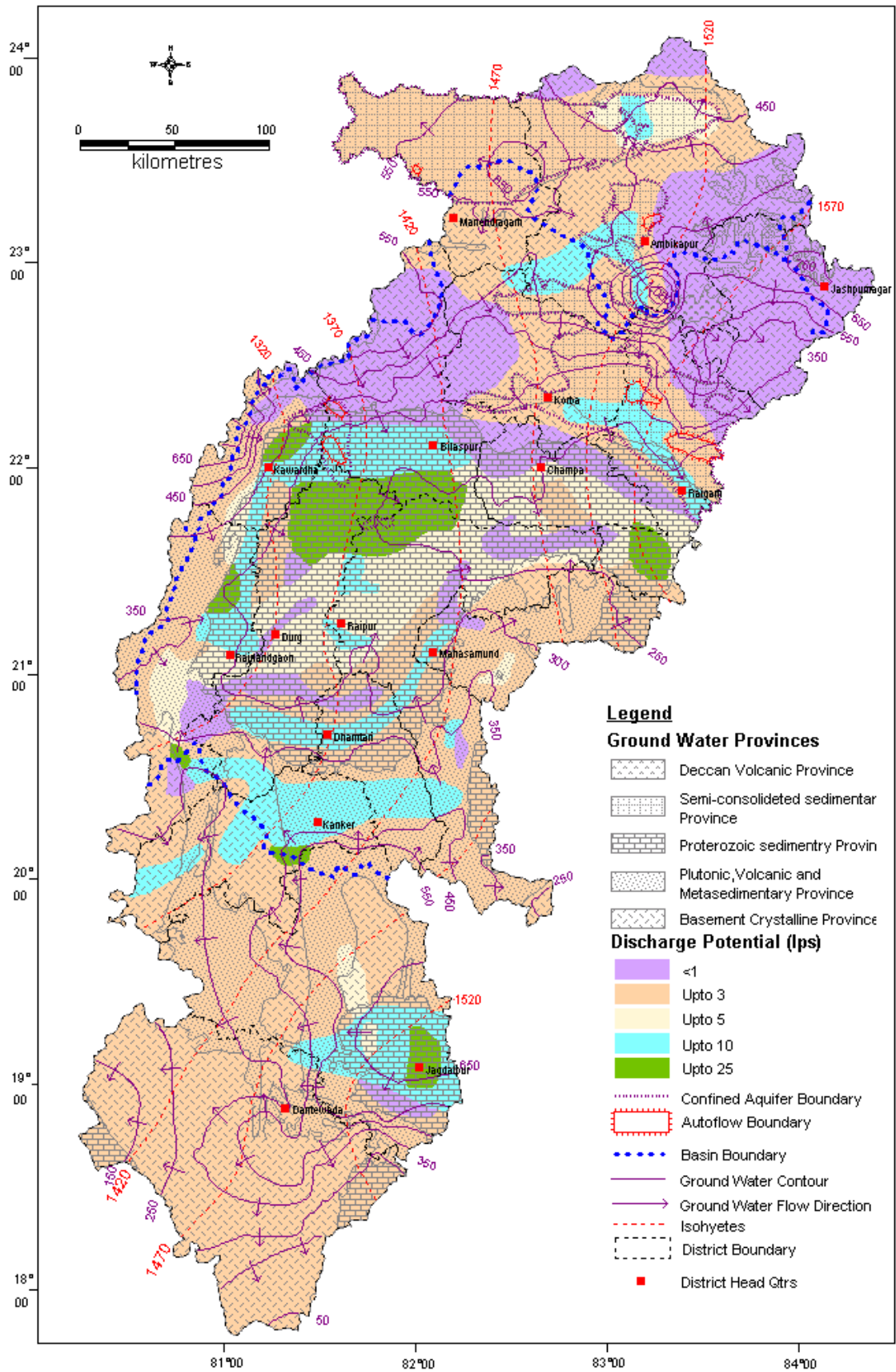


Fig. 5.2: Hydrogeological map of Chhattisgarh State

6. GROUND WATER REGIME MONITORING

Ground water level is not static. It is always under the influence of time-dependent recharge and discharge factors. As a result, the water level in the aquifer system fluctuates and the range depends on the period of influence. The recharge is due to many factors such as rainfall, seepage from reservoirs, lakes, ponds, rivers and irrigation, etc. The discharge includes ground water withdrawal through manual and pumping systems, natural seepage to rivers and sea, evaporation from shallow water table and transpiration through vegetation.

The Central Ground Water Board is monitoring the ground water regime through the length and breadth of the country since the year 1969 through a network of Hydrograph Stations (NHS). As on 31st March 2020, a total of 1055 number of observation wells, which included both dug wells (863) and piezometers (192) were established in Chhattisgarh for monitoring purposes. Location of the NHS wells is shown in **Fig. 6.1**. The details of NHS are given in **Annexure-I**.

The hydrograph network stations (NHS) are established permanently and are monitored during every set of measurements. The existing network provides information on ground water regime with fair degree of accuracy. The NHS wells are monitored four times in a year during the following months. They are;

May - 21st to 31st of the month - represents water level of Pre-monsoon period.

August - 21st to 31st of the month - represents peak monsoon water level

November - 1st to 10th of the month- represents water level of Post-monsoon period.

January - 1st to 10th of the month- represents the recession stage of water level

Water samples were collected from each network station during Pre-monsoon to assess the chemical quality of ground water.

6.1 Distribution of Hydrograph Network Stations (NHS)

District-wise- The total number of hydrograph network stations (NHS) in the State are 1055. Out of these 863 are dug wells tapping the shallow aquifer and 192 are piezometers tapping both shallow and deeper aquifers. District-wise distribution of the hydrograph network stations is given in **Table 6.1** and is also shown in **Fig. 6.1**.

Table 6.1 District-wise distribution of the Hydrograph Network Stations

SI No	Name of the District	Total No. of Ground Water Monitoring Wells (As on 31, Mar, 2019)			Total No. of Ground Water Monitoring Wells Abandoned During 2019-20			Total No. of Ground Water Monitoring Wells Established During 2019-20			Total No. of Ground Water Monitoring Wells (As on March, 2020)		
		DW	PZ	Total	DW	PZ	Total	DW	PZ	Total	DW	PZ	Total
1	Bastar	55	11	66	2	1	3	0	0	0	53	10	63
2	Bilaspur	89	11	100	39	2	41	0	0	0	50	9	59
3	Dhamtari	48	10	58	4	0	4	0	0	0	44	10	54
4	Durg	90	33	123	19	0	19	3	0	3	74	33	107
5	Janjgir-Champa	51	11	62	5	1	6	0	0	0	46	10	56
6	Jashpur	73	11	84	8	0	8	0	0	0	65	11	76
7	Kanker	34	4	38	4	1	5	0	0	0	30	3	33
8	Kawardha	19	9	28	10	0	10	0	0	0	9	9	18
9	Korba	80	29	109	38	15	53	0	0	0	42	14	56
10	Koriya	52	6	58	11	5	16	0	0	0	41	1	42
11	Mahasamund	33	20	53	2	0	2	1	0	1	32	20	52
12	Raigarh	125	19	144	19	6	25	0	0	0	106	13	119
13	Raipur	124	36	160	5	7	12	1	0	1	120	29	149
14	Rajnandgaon	85	9	94	10	0	10	3	0	3	78	9	87
15	Surguja	81	21	102	8	10	18	0	0	0	73	11	84
	Total	1039	240	1279	184	48	232	8	0	8	863	192	1055

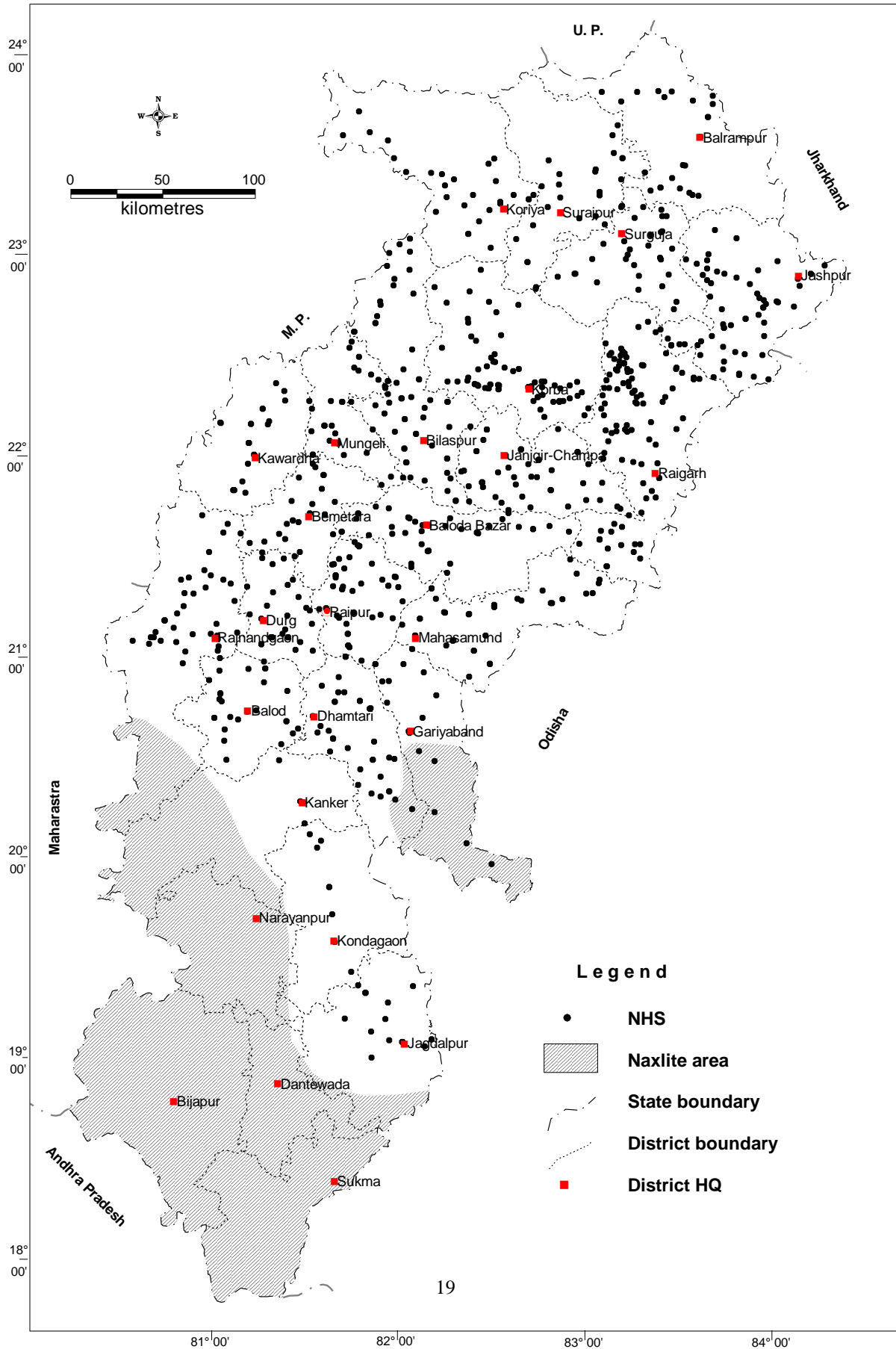


Fig 6.1 Location of NHS monitoring stations, Chhattisgarh State

7. ANALYSIS OF WATER LEVELS

The ground water levels observed over a period provides valuable information on the behavior of the ground water regime, which is constantly subjected to changes due to recharge and discharge phenomena. A balance between these two factors is resulting in the decline or rise in the ground water storage. When the recharge exceeds discharge there will be a rise in the ground water storage and vice versa. The decline in water level may be due to increase in draft (for different purposes) or decrease in precipitation (less recharge to ground water). On the other hand, a rise in water level may be due to an increase in rainfall and/or due to changes in irrigation practices.

The dug wells are tapping the phreatic aquifer which is mostly limited to a depth of 15 m. The depth of piezometers which are tapping both the phreatic and deeper aquifers varies from 18 to 90 m. Hence the water level recorded in the piezometers may not be the same as that of dug wells for a particular period though both the structures are in the same place. In this report the water level data collected from the dug wells is presented. The water level in some of the wells on the southern part of the State could not be measured due to various reasons. Hence those areas are left blank while preparing different maps.

The NHS (dug wells) water level data collected four times during the year 2019-20 was analyzed and for every set of measurements, write up and maps were prepared and are presented here under various paragraphs. The NHS (dug well) water level data is given in **Annexure-II**. The purpose of water level data analysis is;

- i) Four measurements of depth to water level gives an overall idea regarding the ground water level in the state during the year of measurement.
- ii) The fluctuation in comparison to the same month in the previous year gives an idea about the change in the ground water level for a particular period with respect to that of the level during the same month in the previous year. This gives an idea about the change in the amount of draft and rainfall between the two years.

- iii) The water level fluctuation during the pre-monsoon period in comparison to last year gives an idea about the seasonal fluctuation, which ultimately reflects the change in dynamic ground water resources.
- iv) The water level fluctuation during a particular month of measurement with reference to the decadal mean for the same months gives an idea of the behavior of the ground water level on long-term basis.

7.1 Depth to Water Level

7.1.1 May 2019

In general, the depth to water level ranges 5 to 10 mbgl is observed in approximately 64.40% of the wells and depth to water level range up to 20 mbgl is observed in 14.93% of the wells in the state. Deeper water levels ranging between 10 and 20 to 40 mbgl occur only in 0.24% of the observation wells only in parts of Bilaspur district. The deepest water level of 40.0 m bgl was monitored in Achanakmar PZ observation well (piezometer) of Bilaspur district.

12 numbers of wells (approximately 1.43% of the monitored wells) in the state are showing water levels between 0-2 m bgl in almost all the districts of Chhattisgarh State except Bilaspur, Jashpur, Kawardha, Korba, Rajnandgaon and Surguja districts. Water levels in the range of 2-5 m bgl are recorded in about 148 of the observation wells monitored. The highest percentages of wells in this range are in Raipur (30.67%), Durg (18.02%), Jnajgir-Champa (38.00%), Bilasput(15.32%), Rajgarh(25.76%) and Dhamtari(32.50%) districts. Nearly 64.40% of observation wells are exhibiting water level in the range of 5-10 mbgl in most of the districts of the state. The district wise frequency distribution of different ranges of depth to water level are furnished in Annexure-I and II. District wise distribution of percentage of observation wells at different ranges of depth to water level as observed in May 2019 are given in **Table 7.1** and represented on a map and appended as **Fig 7.1**.

Table 7.1 District wise distribution of percentage of observation wells at different ranges of depth to water level in May' 2019

District	No. of Wells Analyzed	Depth to Water Table (mbgl)		No. / Percentage of Wells Showing Depth to Water Table (mbgl) in the Range of				
		Min	Max	0.0-2.0	2.0-5.0	5.0-10.0	10.0-20.0	20.0-40.0
BASTAR	25	1.95	12.50	1 4%	9 36%	12 48%	3 12%	0
BILASPUR	111	2.52	40.00	0	17 15.32%	63 56.76%	29 26.12%	2 1.8%
DHAMTARI	40	0.92	11.35	1 2.50%	13 32.50%	25 62.50%	1 2.50%	0
DURG	111	1.40	24.30	3 2.70%	20 18.02%	63 56.76%	25 22.52%	0
JANJGIR - CHAMPA	50	1.97	15.00	1 2%	19 38%	24 48%	6 12%	0
JASHPUR	54	3.25	14.15	0	8 14.81%	42 77.78%	4 7.41%	0
KANKER	7	1.50	8.95	1 14.29%	2 28.57%	4 57.14%	0	0
KAWARDHA	15	5.00	19.64	0	1 6.67%	13 86.67%	1 6.67%	0
KORBA	68	3.66	14.76	0	6 8.82%	49 72.06%	13 19.12%	0
KORIYA	43	2.00	15.20	1 2.33%	3 6.98%	30 69.77%	9 20.93%	0
MAHASAMUND	31	1.27	14.00	1 3.23%	8 25.81%	18 58.06%	4 12.90%	0
RAIGARH	66	0.60	14.00	1 1.52%	17 25.76%	41 62.12%	7 10.61%	0
RAIPUR	75	1.85	18.54	2 2.67%	23 30.67%	47 62.67%	3 4.00%	0
RAJNANDGAON	47	2.63	15.12	0	5 10.64%	37 78.72%	5 10.64%	0
SURGUJA	94	2.40	16.46	0	8 8.51%	71 75.53%	15 15.96%	0
Total	837	0.60	40.00	12	159	539	125	2

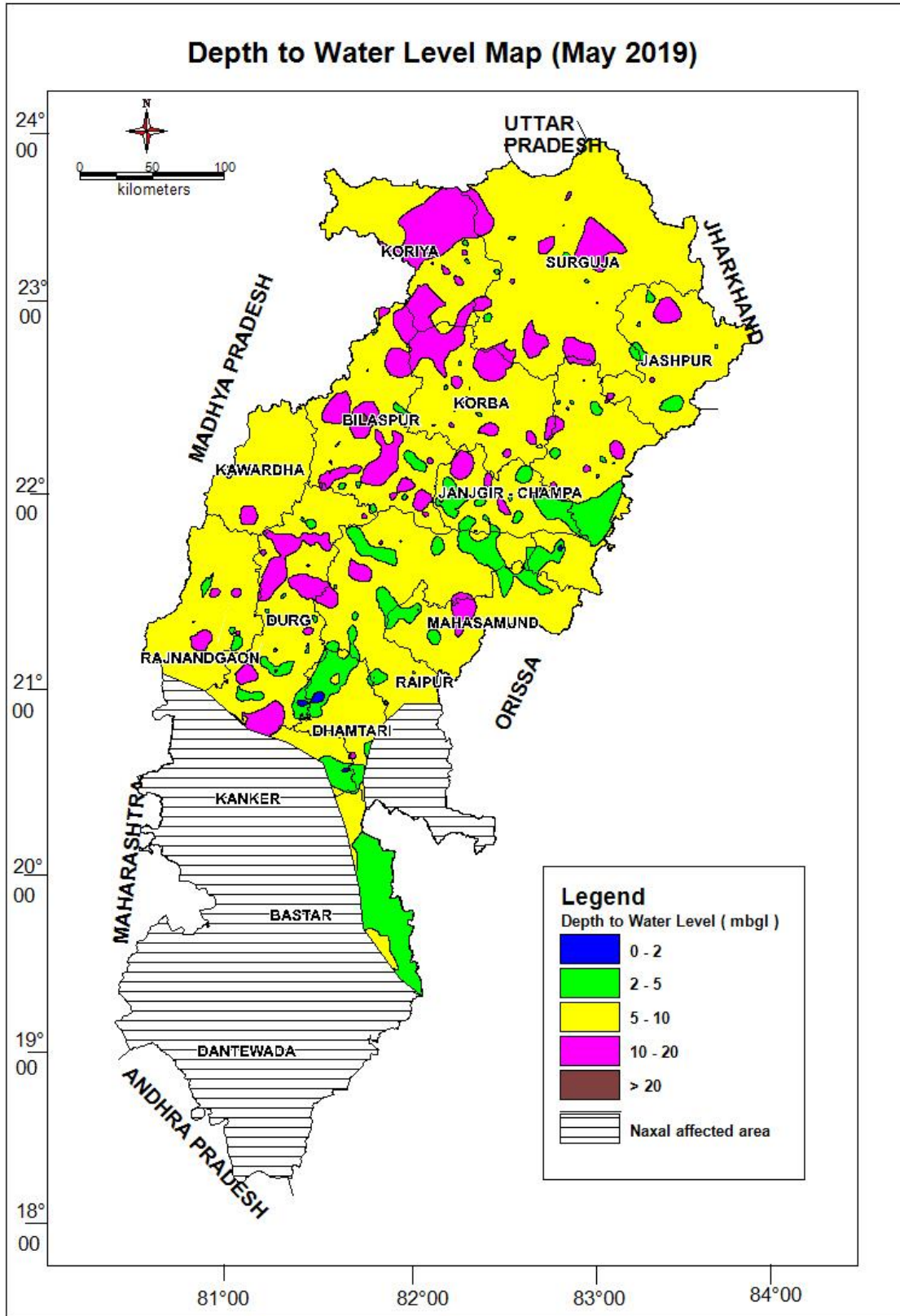


Fig 7.1 Depth to Water Level Map May' 2019

7.1.2 August 2019

In general, the depth to water level range up to 5 mbgl is observed in approximately 54.06% of the wells and depth to water level range up to 10 mbgl is observed in approximately 14% of the wells in the state. Deeper water levels ranging between 10 and 20 mbgl occur only in 1.41% of the observation wells and mostly in parts of Bilaspur, Durg, Dhamtari, Kawardha, and Rajgarh districts. The deepest water level of 19.18 mbgl was monitored in Sambalpur² observation well (Shallow piezometer) of Durg district.

173 numbers of wells (approximately 30.57% of the monitored wells) in the state are showing water levels between 0-2 m bgl in almost all the districts of Chhattisgarh State except Jashpur and Rajgarh districts. Water levels in the range of 2-5 m bgl are recorded in about 306 of the observation wells monitored (approximately 54.06%). The highest percentages of wells in this range are in Bilaspur (56.00%), Durg (56.00%), Korba (70.49%), Raipur (37.97%), Rajnandgaon (57.78%) and Sarguja (71.88%) districts. Nearly 14% of observation wells are exhibiting water level in the range of 5-10 mbgl in most of the districts of the state.

The district wise frequency distribution of different ranges of depth to water level are furnished in **Annexure-I and II**. District wise distribution of percentage of observation wells at different ranges of depth to water level as observed in August'2019 are given in **Table 7.2** and represented on a map and appended as **Fig 7.2**.

Table 7.2 District wise distribution of percentage of observation wells at different ranges of depth to water level in August' 2019

District	No. of Wells Analysed	Depth to Water Table (mbgl)	No. / Percentage of Wells Showing Depth to Water Table (mbgl) in the Range of					
			Min	Max	0.0-2.0	2.0-5.0	5.0-10.0	10.0-20.0
BASTAR	22	0.85	6.80	8 36.36%	12 54.55%	2 9.09%	0	0
BILASPUR	90	1.10	11.46	21 23.33%	56 62.22%	11 12.22%	2 2.22%	0
DHANTARI	35	0.74	10.38	19 54.29%	11 31.43%	4 11.43%	1 2.86%	0
DURG	100	0.30	19.18	20 20.00%	56 56.00%	22 22.00%	2 2.00%	0
JANJGIR - CHAMPA	24	1.19	7.70	8 33.33%	13 54.17%	3 12.50%	0	0
JASHPUR	0	0	0	0	0	0	0	0
KANKER	8	1.00	4.80	3 37.50%	5 62.50%	0	0	0
KAWARDHA	17	1.57	15.68	1 5.88%	9 52.94%	5 29.41%	2 11.76%	0
KORBA	61	0.89	9.45	15 24.59%	43 70.49%	3 4.92%	0	0
KORIYA	26	1.00	4.50	11 42.31%	15 57.69%	0	0	0
MAHASAMUND	26	0.67	9.49	14 53.85%	7 26.92%	5 19.23%	0	0
RAIGARH	1	11.90	11.90	0	0	0	1 100.00%	0
RAIPUR	79	0.50	9.80	43 54.43%	30 37.97%	6 7.59%	0	0
RAJNANDGAON	45	1.03	8.59	6 13.33%	26 57.78%	13 28.89%	0	0
SURGUJA	32	0.63	9.19	4 12.50%	23 71.88%	5 15.63%	0	0
Total	566	0.30	19.18	173	306	79	8	0

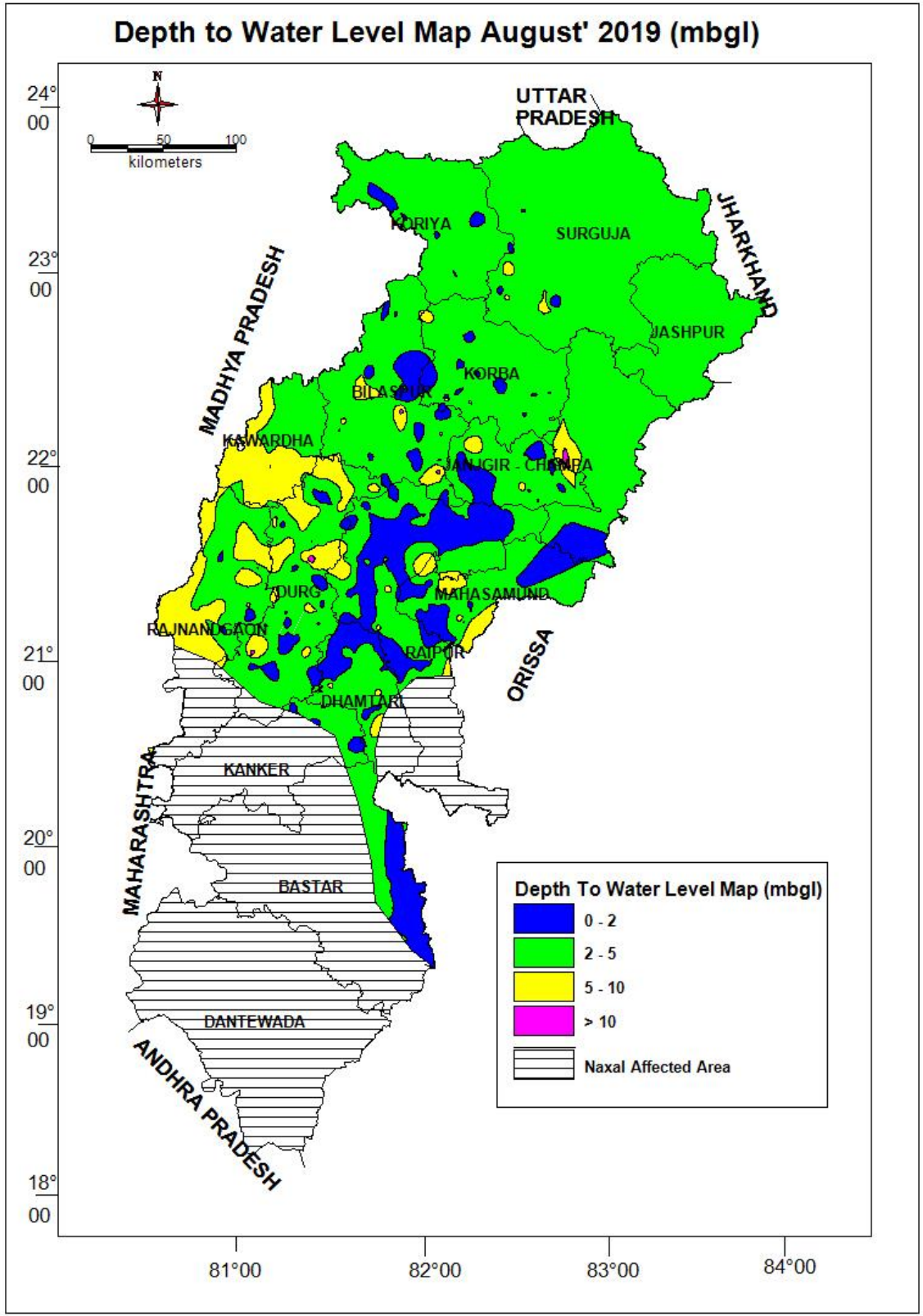


Fig 7.2 Depth to Water Level Map (August'2019)

7.1.3 November 2019

In general, the depth to water level range up to 5 mbgl is observed in approximately 64.97% of the wells and depth to water level range up to 10 mbgl is observed in approximately 19.78% of the wells in the state. Deeper water levels ranging between 10 and 20 mbgl occur only in 1.16% of the observation wells and mostly in parts of Durg, Kawardha and Surguja districts. The deepest water level of 28.55 mbgl was monitored in Ganiyari new observation well (Deep piezometer) of Bilaspur district.

96 numbers of wells (approximately 13.95% of the monitored wells) in the state are showing water levels between 0-2 m bgl in almost all the districts of Chhattisgarh State. Water levels in the range of 2-5 m bgl are recorded in about 447 (64.97) of the observation wells monitored. The highest percentages of wells in this range are in Durg (63.27%), Surguja (61.54%), Bilaspur (59.79%), Raipur (63.29%) and Korba (75.86%) districts. Nearly 19.78% of observation wells are exhibiting water level in the range of 5-10 mbgl in most of the districts of the state. The district wise frequency distribution of different ranges of depth to water level are furnished in **Annexure-I and II**. District wise distribution of percentage of observation wells at different ranges of depth to water level as observed in November '2019 are given in **Table 7.3** and represented on a map and appended as **Fig 7.3**.

Table 7.3 District wise distribution of percentage of observation wells at different ranges of depth to water level in November' 2019

District	No. of Wells Analysed	Depth to Water Table (mbgl)	No. / Percentage of Wells Showing Depth to Water Table (mbgl) in the Range of					
			Min	Max	0.0-2.0	2.0-5.0	5.0-10.0	10.0-20.0
BASTAR	21	0.93	4.70	6 28.57%	15 71.43%	0	0	0
BILASPUR	92	0.48	28.55	4 4.35%	55 59.78%	32 34.78%	0	1 1.09%
DHAMTARI	39	0.65	08.30	9 23.08%	23 58.97%	7 17.95%	0	0
DURG	98	0.73	13.11	20 20.41%	62 63.27%	14 14.29%	2 2.04%	0
JANJGIR – CHAMPA	44	1.20	9.22	5 11.36%	33 75.00%	6 13.64%	0	0
JASHPUR	30	0.52	5.50	2 6.67%	26 86.67%	2 6.67%	0	0
KANKER	3	1.00	2.55	1 3.33%	2 66.67%	0	0	0
KAWARDHA	16	1.38	14.48	1 6.25%	6 37.50%	7 43.75%	2 12.50%	0
KORBA	58	1.10	7.19	2 3.45%	44 75.86%	12 20.69%	0	0
KORIYA	45	1.21	8.11	6 13.33%	28 62.22%	11 24.44%	0	0
MAHASAMUND	27	1.27	7.28	6 22.22%	15 55.56%	6 22.22%	0	0
RAIPUR	79	0.77	10.00	23 29.11%	50 63.29%	6 7.59%	0	0
RAJNANDGAON	45	1.06	7.06	6 13.33%	32 71.11%	7 15.56%	0	0
SURGUJA	91	1.00	11.18	5 5.49%	56 61.54%	26 28.57%	4 4.40%	0
Total	688	0.48	28.55	96	447	136	8	1

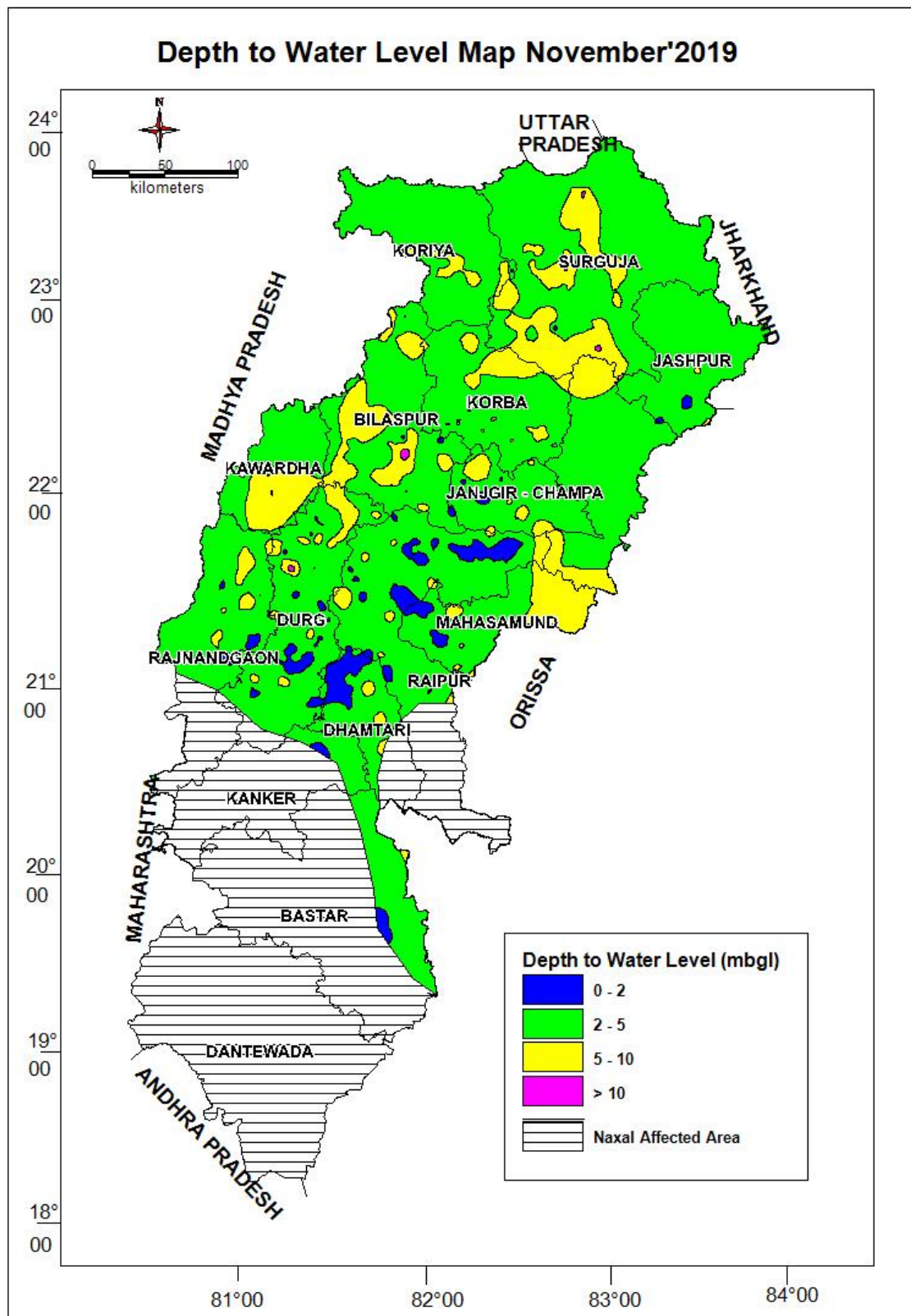


Fig.7.3 Depth to Water Level Map (November'2019)

7.1.4 January 2020

In general, the depth to water level range up to 5 mbgl is observed in approximately 50.32% of the wells and depth to water level range up to 10 mbgl is observed in approximately 40.76% of the wells in the state. Deeper water levels ranging between 10 and 20 mbgl occur only in 3.18% of the observation wells and mostly in parts of Bilaspur, Durg, Jashpur, Kawardha, Koriya, Mahasamund, Raigarh, Raipur, Rajnandgaon and Surguja districts. The deepest water level of 17.27 mbgl was monitored in Jhalap S observation well (piezometer) of Mahasamund district.

49 numbers of wells (approximately 6.24% of the monitored wells) in the state are showing water levels between 0-2 mbgl in almost all the districts of Chhattisgarh State. Water levels in the range of 2-5 mbgl are recorded in about 391 (31.2%) of the observation wells monitored. The highest percentages of wells in this range are in Raipur (64.71%), Durg (61.39%), Suguja (28.00%), Raigarh (47.44%), Jashpur (40.68%) and Bilaspur (54.10%) districts. Nearly 40.76% of observation wells are exhibiting water level in the range of 5-10 mbgl in most of the districts of the state. The district wise frequency distribution of different ranges of depth to water level are furnished in **Annexure-I and II**. The district wise frequency distributions of different ranges of depth to water level are furnished in **Table 7.4**. Different ranges of depth to water table as observed in January 2020 are represented on a map and appended as **Fig 7.4**.

Table 7.4 District wise distribution of percentage of observation wells at different ranges of depth to water level in Jan' 2020

District	No. of Wells Analysed	Depth to Water Table (mbgl)	No. / Percentage of Wells Showing Depth to Water Table (mbgl) in the Range of					
			Min	Max	0.0-2.0	2.0-5.0	5.0-10.0	10.0-20.0
BASTAR	23	1.00	9.00	1 4.35%	18 78.26%	4 17.39%	0	0
BILASPUR	61	0.50	12.84	7 11.48%	33 54.10%	20 32.79%	1 1.64%	0
DHAMTARI	33	1.23	08.82	3 9.09%	18 54.55%	12 36.36%	0	0
DURG	101	0.92	14.29	10 9.90%	62 61.39%	25 24.75%	4 3.96%	0
JANJGIR - CHAMPA	38	1.64	9.60	3 7.89%	19 50.00%	16 42.11%	0	0
JASHPUR	59	1.65	14.80	2 3.39%	24 40.68%	31 52.54%	2 3.39%	0
KANKER	7	0.80	5.05	1 14.29%	5 71.43%	1 14.29%	0	0
KAWARDHA	17	1.78	16.16	1 5.88%	6 35.29%	8 47.06%	2 11.76%	0
KORBA	55	1.86	9.45	1 1.82%	32 58.48%	22 40.00%	0	0
KORIYA	47	1.87	11.00	1 2.13%	21 44.68%	23 48.94%	2 4.26%	0
MAHASAMUND	31	1.30	17.27	3 9.68%	12 38.71%	13 41.94%	3 9.68%	0
RAIGARH	78	1.20	12.95	2 2.56%	37 47.44%	38 48.72%	1 1.28%	0
RAIPUR	85	0.65	10.90	9 10.59%	55 64.71%	19 22.35%	2 2.35%	0
RAJNANDGAON	50	1.50	11.00	3 6.00%	21 42.00%	24 48.00%	2 4.00%	0
SURGUJA	100	1.52	16.39	2 2.00%	28 28.00%	64 64.00%	6 6.00%	0
Total	785	0.50	17.27	49	391	320	25	0

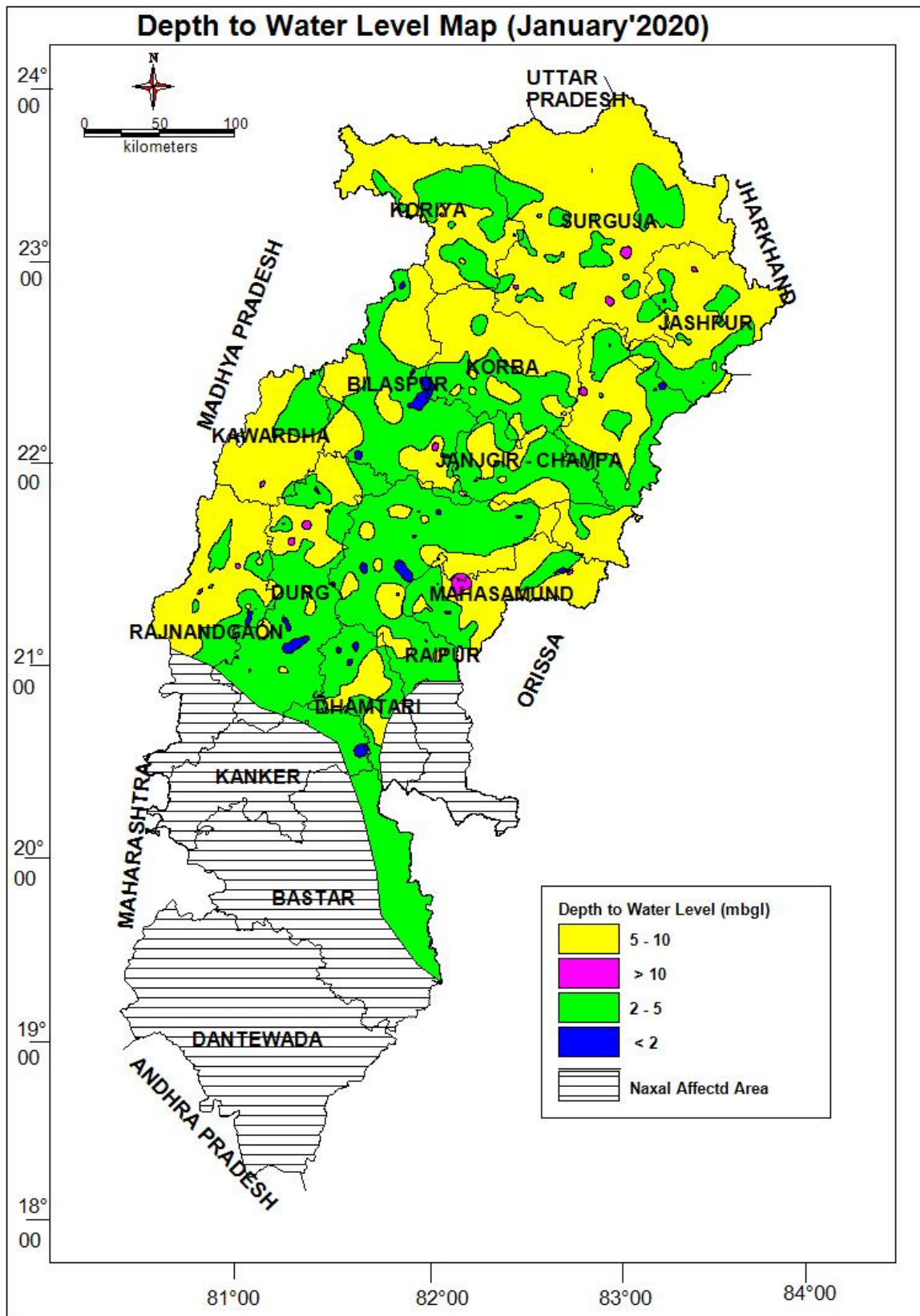


Fig. 7.4 Depth to Water Level Map (January'2020)

7.2 Water Level Fluctuation

7.2.1 May 2018 vs May 2019

When compared to water level in May 2018, nearly 45.86% of the observation wells are showing rise in water level in May' 2019. Rise of water level in the range of 0-2 m is observed in 28.12 % of the wells distributed in almost all the districts. Rise of water level in the range of 2-4 m is observed in 10.12 % of the wells distributed in almost all the districts except Kanker and Koriya districts. Rise of water level by more than 4 m is also observed in 7.62 % of the monitored wells except Kanker, Kawardha, and Koriya district. Fall of water level is recorded in nearly 46.52% of the monitored wells. Fall of water level in the range of 0-2 m, 2-4 m and more than 4 m are observed in 28.91%, 11.43% and 6.18% of the monitored wells, respectively in the State.

The district wise frequency for different fluctuation ranges is presented in **Table 7.5**. Different ranges of fluctuation in May 2019 as compared to May 2018 are represented on a map and appended as **Fig 7.5, Table 7.5**.

Table 7.5 District wise frequency for different fluctuation ranges between May 2018 vs May 2019

District	No. of Wells	Range of Fluctuation (m)				No. of Wells/Percentage Showing Fluctuation						Total No. of Wells	
		Rise		Fall		Rise			Fall			Rise	Fall
		Min	Max	Min	Max	0 to 2	2 to 4	>4	0 to 2	2 to 4	>4		
BASTAR	17	0.01	4.85	0.10	2.19	5 29.41 %	1 5.88%	1 5.88 %	9 52.94%	1 5.88%	0	7	10
BILASPUR	105	0.02	16.8 0	0.01	8.68	26 24.76 %	15 14.29 %	16 15.24 %	13 12.38%	6 5.71%	4 3.81%	57	23
DHAMTARI	38	0.06	5.52	0.10	6.94	13 34.21 %	4 10.53 %	2 5.26 %	10 26.32%	8 21.05%	1 2.63%	19	19
DURG	92	0.19	8.25	0.03	8.29	24 26.09 %	7 7.61%	4 4.35 %	20 21.74%	16 17.39%	13 14.13 %	35	49
JANJGIR - CHAMPA	47	0.04	7.70	0.17	1.99	18 38.30 %	11 23.40 %	5 10.64 %	12 25.53%	0	0	34	12
JASHPUR	51	0.25	7.24	0.05	2.05	9 17.65 %	2 3.92%	3 5.88 %	33 64.71%	1 1.96%	0	14	34
KANKER	3	-	-	0.04	0.45	0	0	0	3 100.0%	0	0	0	3
KAWARDHA	15	0.06	3.88	0.93	11.8 4	4 26.67 %	2 13.33 %	0	4 26.67%	2 13.33%	2 13.33 %	6	8
KORBA	66	0.05	14.3 2	0.01	0.80 5	26 39.39 %	7 10.61 %	6.09 %	10 15.15%	5 7.58%	1 1.52%	39	16
KORIYA	38	0.10	1.00	0.15	8.70	3 7.89%	0	0	16 42.11%	12 31.58%	5 13.18 %	3	33
MAHASAMUN D	28	0.04	7.00	0.16	5.55	7 25.00 %	2 7.14%	2 7.14 %	9 32.14%	4 14.29%	3 10.71 %	11	16
RAIGARH	63	0.10	7.40	0.04	5.80	19 30.16 %	7 11.11 %	3 4.76 %	25 39.68%	4 6.35%	2 3.17%	29	31
RAIPUR	73	0.11	14.6 5	0.07	14.1 3	21 28.77 %	9 12.33 %	5 6.85 %	18 24.66%	16 21.92%	3 4.11%	35	37
RAJNANDGA ON	43	0.03	6.31	0.24	8.80	16 37.21 %	4 9.30%	5 11.63 %	8 18.60%	2 4.65%	6 13.95 %	25	16
SURGUJA	82	0.03	8.00	0.21	9.91	23 28.05 %	6 7.32%	6 7.32 %	30 36.59%	10 12.20%	7 8.54%	35	47
Total	761	0.25	1.00	0.01	14.1 3	214	77	58	220	87	47	349	354

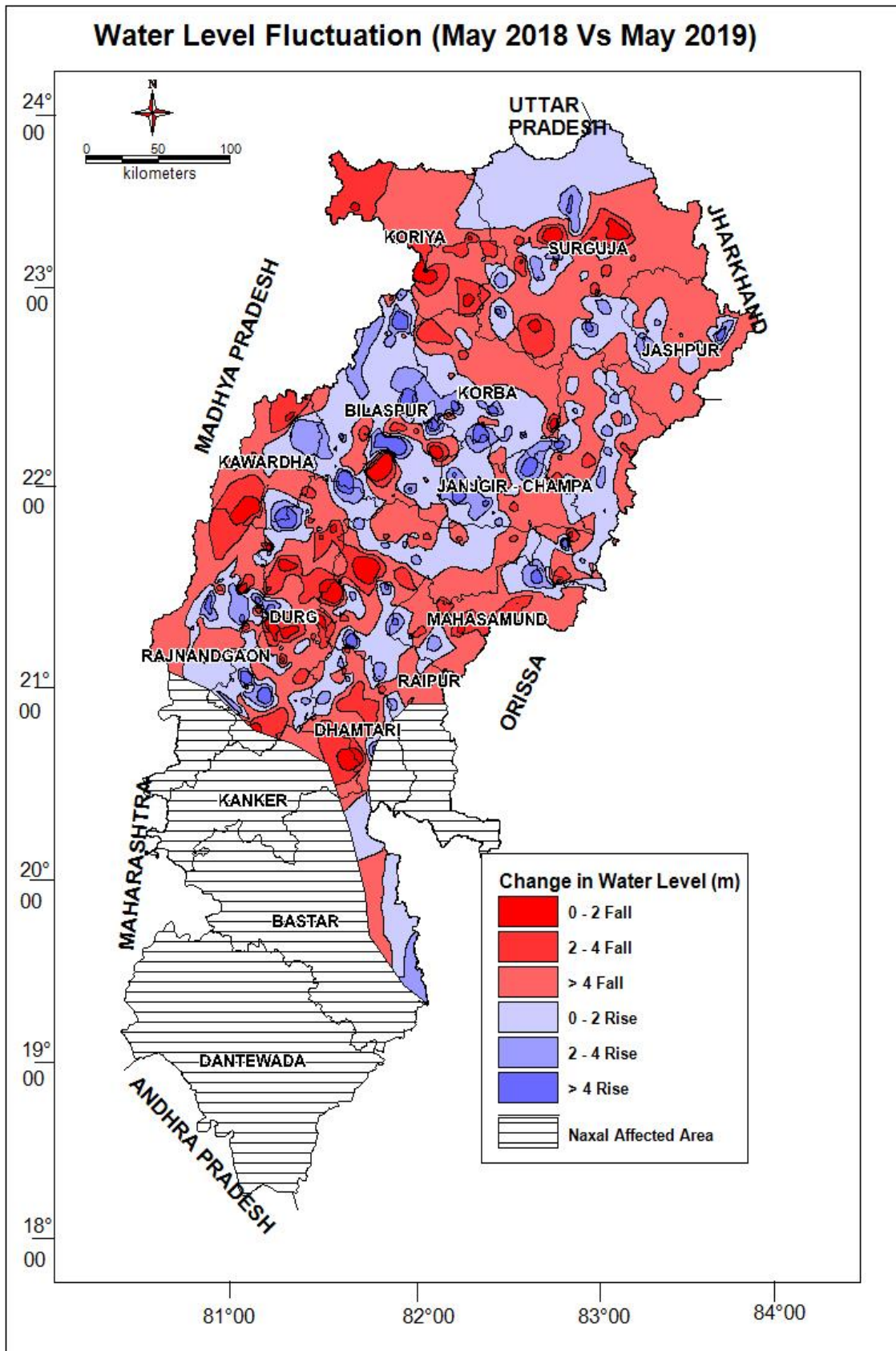


Fig. 7.5 Water Level Fluctuation (May'2018 Vs May'2019)

7.2.2 August 2018 vs August 2019

When compared to water level in August 2018, nearly 30.26% of the observation wells are showing rise in water level in August' 2019. Rise of water level in the range of 0-2 m is observed in 21.89 % of the wells distributed in almost all the districts except Kawardha district. Rise of water level in the range of 2-4 m is observed in 5.58 % of the wells monitored mostly in Bilaspur, Korba, Koriya and Surguja districts. Rise of water level by more than 4 m is observed in 2.15% of the monitored wells in Bilaspur, Korba and Koriya districts. Fall of water level is recorded in nearly 69.10% of the monitored wells. Fall of water level in the range of 0-2 m, 2-4 m and more than 4 m are observed in 43.35%, 16.52% and 9.23% of the monitored wells, respectively in the State.

The district wise frequency for different fluctuation ranges is presented in **table 7.6**. Different ranges of fluctuation in August 2019 as compared to August 2018 are represented on a map and appended as **fig 7.6**.

7.2.3 November 2018 vs November 2019

When compared to water level in November 2018, nearly 71.66% of the observation wells are showing rise in water level in November' 2019. Rise of water level in the range of 0-2 m is observed in 50.36 % of the wells distributed in almost all the districts and mostly in Durg (54.65%), Surguja (54.12%) and Raipur (60.00%). Rise of water level in the range of 2-4 m is observed in 16.98 % distributed in almost all the districts except in Kawardha district. Rise of water level by more than 4 m is observed in 4.33 % of the monitored wells except in Janjgir-Champa, Kanker, Mahasamund, Raipur and Rajnandgaon districts. Fall of water level is recorded in nearly 27.98% of the monitored wells. Fall of water level in the range of 0-2 m, 2-4 m and more than 4 m are observed in 23.47, 3.79% and 0.72% of the monitored wells, respectively in the State.

The district wise frequency for different fluctuation ranges is presented in **Table 7.7**. Different ranges of fluctuation in Nov' 2019 as compared to Nov' 2018 are represented on a map and appended as **Fig. 7.7**.

7.2.4 January 2019 vs January 2020

When compared to water level in January 2019, nearly 63.04% of the observation wells are showing rise in water level in January' 2020. Rise of water level in the range of 0-2 m is observed in 46.17 % of the wells distributed mostly in Surguja (53.33%), Durg (44.71%), Korba (60.00%) and Raipur (49.12%) districts. Rise of water level in the range of 2-4 m is observed in 13.96% of the wells except in Kanker and Koriya districts. Rise of water level by more than 4 m is observed in 2.91 % of the monitored wells except in Janjgir-Champa, Jashpur, Koriya, Mahasamund, Raipur and Rajandgaon. Fall of water level is recorded in nearly 36.35% of the monitored wells. Fall of water level in the range of 0-2 m, 2-4 m and more than 4 m are observed in 27.61%, 6.90% and 1.84% of the monitored wells, respectively in the State.

The district wise frequency for different fluctuation ranges is presented in **Table 7.8**. Different ranges of fluctuation in January 2020 as compared to January 2019 are represented on a map and appended as **fig 7.8**

Table 7.6 District wise frequency for different fluctuation ranges between Aug 2018 vs Aug 2019

District	No. of Wells	Range of Fluctuation (m)				No. of Wells/Percentage Showing Fluctuation						Total No. of Wells	
		Rise		Fall		Rise			Fall			Rise	Fall
		Min	Max	Min	Max	0 to 2	2 to 4	>4	0 to 2	2 to 4	>4		
BASTAR	15	0.87	1.04	0.12	3.50	2 13.33%	0	0	10 66.67%	2 13.33%	0	2	12
BILASPUR	61	0.14	10.74	0.03	10.01	15 24.59%	12 19.67%	7 11.48%	17 27.87%	6 9.84%	3 4.92%	34	26
DHAMTARI	31	0.03	1.16	0.06	8.98	9 29.03%	0	0	13 41.94%	6 19.35%	3 9.68%	9	22
DURG	88	0.04	0.72	0.02	13.51	10 11.36%	0	0	41 46.59%	20 22.73%	16 18.18%	10	77
JANJGIR - CHAMPA	19	0.03	1.96	0.55	5.70	11 57.89%	0	0	6 31.58%	0	2 10.53%	11	8
KANKER	6	1.29	1.66	0.30	4.33	2 33.33%	0	0	1 16.67%	2 33.33%	1 16.67%	2	4
KAWARDHA	14	-	-	2.03	12.34	0	0	0	0	9 64.29%	5 35.71%	0	14
KORBA	43	0.04	6.87	0.05	7.65	11 25.58%	7 16.28%	1 2.33%	21 48.84%	2 4.65%	1 2.33%	19	24
KORIYA	25	0.02	8	0.04	2.37	9 36.00%	3 12.00%	2 8.00%	9 36.00%	2 8.00%	0	14	11
MAHASAMUND	21	0.02	0.75	0.01	7.97	3 14.29%	0	0	15 71.43%	1 4.76%	2 9.52%	3	18
RAIGARH	1	0.20	0.20	-	-	1 100.00%	0	0	0	0	0	1	0
RAIPUR	74	0.01	1.51	0.02	8.75	19 25.68%	0	0	44 59.46%	9 12.16%	2 2.70%	19	55
RAJNANDGAON	38	0.26	0.26	0.03	7.05	1 2.63%	0	0	13 34.21%	16 42.11%	8 21.05%	1	37
SURGUJA	30	0.20	2.98	0.01	2.74	12 40.00%	4 13.33%	0	12 40.00%	2 6.67%	0	16	14
Total	466	1.29	0.20	0.00	13.51	105	26	10	202	77	43	141	322

District	No. of Wells	Range of Fluctuation (m)				No. of Wells/Percentage Showing Fluctuation						Total No. of Wells	
		Rise		Fall		Rise			Fall			Rise	Fall
		Min	Max	Min	Max	0 to 2	2 to 4	>4	0 to 2	2 to 4	>4		
BASTAR	14	0.40	6.76	1.85	1.85	7 50.00 %	3 21.43 %	3 21.43 %	1 7.14%	0	0	13	1
BILASPUR	49	0.10	16.58	0.02	3.92	21 42.86 %	8 16.33 %	8 16.33 %	10 20.41%	2 4.08%	0	37	12
DHAMTARI	37	0.12	4.67	0.09	3.59	18 48.65 %	5 13.51 %	2 5.41 %	8 21.62%	4 10.81%	0	25	12
DURG	86	0.01	7.40	0.07	9.92	47 54.65 %	13 15.12 %	3 3.49 %	21 24.42%	1 1.16%	1 1.16%	63	23
JANJGIR - CHAMPA	32	0.02	3.35	0.01	1.99	11 34.38 %	5 15.63 %	0	15 46.88	0	0	16	15
JASHPUR	23	0.08	4.51	0.34	1.04	10 43.48 %	7 30.43 %	1 4.35 %	5 21.74%	0	0	18	5
KANKER	2	1.60	2.78	-	-	1 50.00 %	1 50.00 %	0	0	0	0	2	0
KAWARDHA	14	0.20	7.88	0.16	4.74	3 21.43 %	0	1 7.14 %	6 42.86	3 21.43%	1 7.14%	4	10
KORBA	30	0.06	5.15	0.01	1.77	15 50.00 %	6 20.00 %	3 10.00 %	6 20.00%	0	0	24	6
KORIYA	44	0.01	5.28	0.02	3.51	20 45.45 %	9 20.45 %	2 4.55 %	11 25.00%	1 2.27%	0	31	12
MAHASAMUND	23	0.05	3.51	0.13	3.98	12 52.17 %	2 8.70%	0	6 26.09%	3 13.04%	0	14	9
RAIPUR	75	0.03	3.61	0.02	4.86	45 60.00 %	17 22.67 %	0	11 14.67%	1 1.33%	1 1.33%	62	13
RAJNANDGAON	40	0.06	3.58	0.08	2.71	23 57.50 %	4 10.00 %	0	12 30.00%	1 2.50%	0	27	13
SURGUJA	85	0.10	4.02	0.03	4.29	46 54.12 %	14 16.47 %	1 1.18 %	18 21.18%	5 5.88%	1 1.18%	61	24
Total	554	1.60	2.78	0.00	9.92	279	94	24	130	21	4	397	155

District	No. of Wells	Range of Fluctuation (m)				No. of Wells/Percentage Showing Fluctuation						Total No. of Wells	
		Rise		Fall		Rise			Fall			Rise	Fall
		Min	Max	Min	Max	0 to 2	2 to 4	>4	0 to 2	2 to 4	>4		
BASTAR	17	0.05	4.36	0.29	2.77	8 47.06 %	4 23.53 %	1 5.88 %	2 11.76%	1 5.88%	0	13	3
BILASPUR	55	0.02	10.6 8	0.21	6.65	23 41.82 %	15 27.27 %	4 7.27 %	9 16.36%	3 5.45%	1 1.82%	42	13
DHAMTARI	31	0.18	5.28	0.61	3.20	15 48.39 %	6 19.35 %	1 3.23 %	8 25.81%	1 3.23%	0	22	9
DURG	85	0.03	8.95	0.03	11.2 1	38 44.71 %	16 18.82 %	4 4.71 %	18 21.18%	6 7.06%	2 2.35%	58	26
JANJGIR - CHAMPA	37	0.05	3.90	0.20	4.60	19 51.35 %	4 10.81 %	0	10 27.03%	3 8.11%	1 2.70%	23	14
JASHPUR	48	0.07	2.47	0.05	6.05	19 39.58 %	3 6.25%	0	13 27.08%	8 16.67%	4 8.35%	22	25
KANKER	6	0.70	4.32	0.20	0.20	4 66.67 %	0	1 16.67 %	1 16.67%	0	0	5	1
KAWARDHA	14	0.04	8.34	0.09	5.68	7 50.00 %	2 14.29 %	1 7.14 %	3 21.43%	0	1 7.14%	10	4
KORBA	50	0.13	8.32	0.21	2.68	30 60.00 %	7 10.00 %	1 2.00 %	8 16.00%	4 8.00%	0	38	12
KORIYA	43	0.05	1.62	0.12	1.02	21 48.84 %	0	0	21 48.84%	0	0	21	21
MAHASAMUN D	16	0.23	2.40	0.09	4.10	2 12.50 %	2 12.50 %	0	10 62.50%	1 6.25%	1 6.25%	4	12
RAIGARH	59	0.05	5.03	0.05	4.12	24 40.68 %	6 10.17 %	3 5.08 %	20 33.90%	5 8.47%	1 1.69%	33	26
RAIPUR	57	0.02	3.90	0.03	4.20	28 49.12 %	8 14.04 %	0	16 28.07%	4 7.02%	1 1.75%	36	21
RAJNANDGA ON	44	0.12	3.84	0.01	3.97	15 34.09 %	15 34.09 %	0	8 18.18%	6 13.64%	0	30	14
SURGUJA	90	0.07	5.28	0.08	2.82	48 53.33 %	3 3.33%	3 3.33 %	33 36.67%	3 3.33%	0	54	36
Total	652	0.70	1.62	0.01	11.2 1	301	91	19	180	45	12	411	237

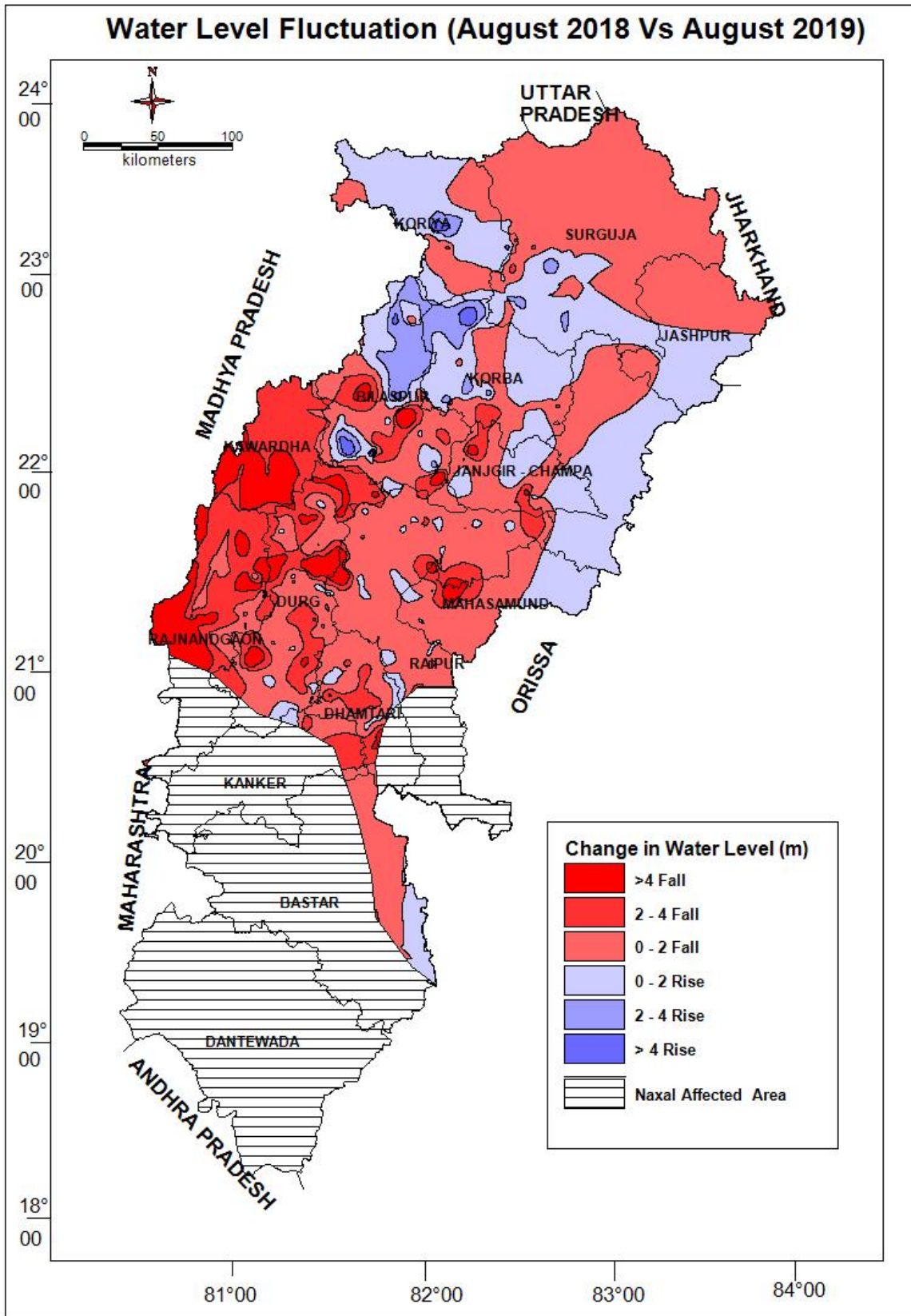


Fig.7.6 Water Level Fluctuation (August' 2018 Vs August'2019)

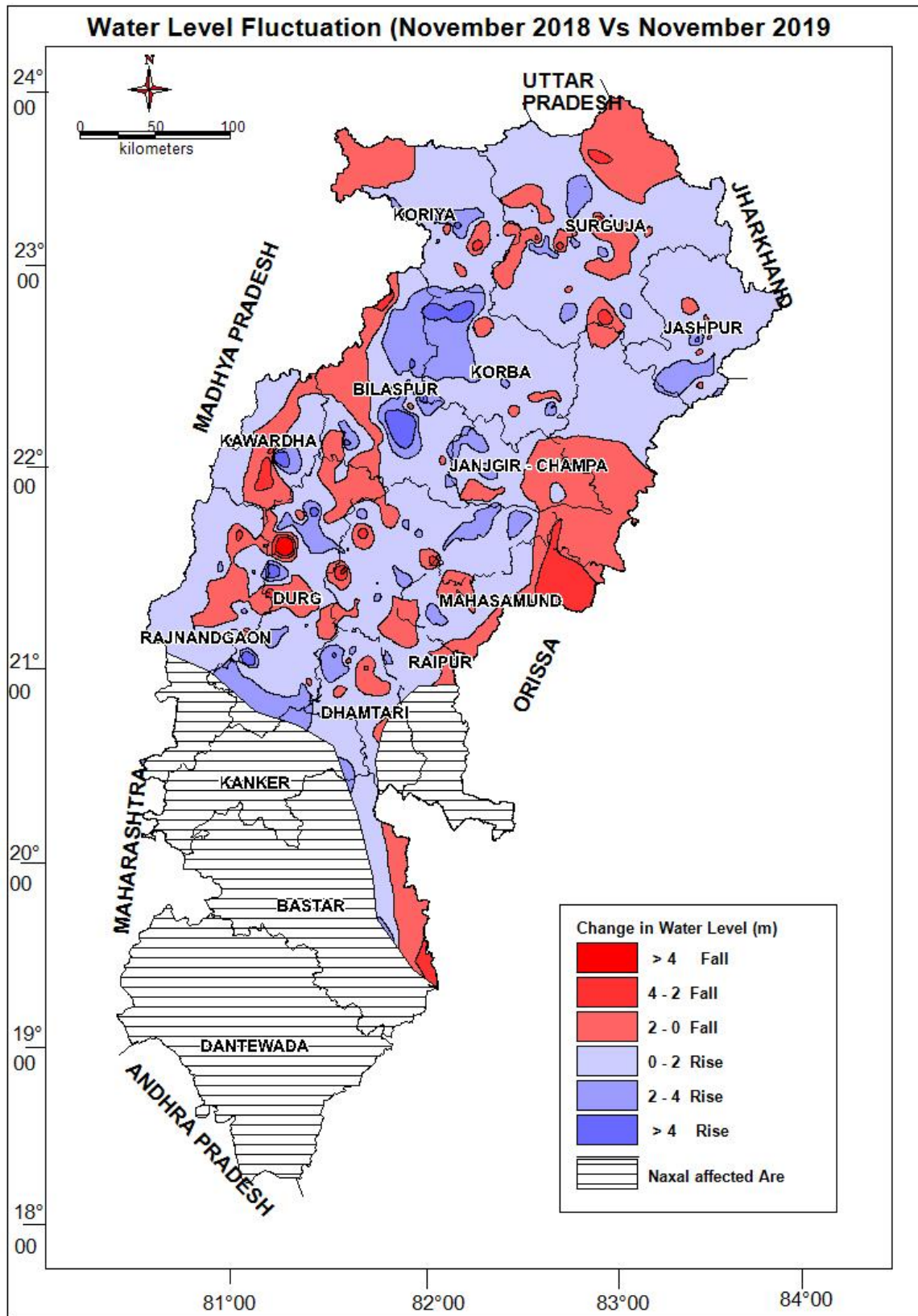


Fig. 7.7 Water Level Fluctuation (November'2018 Vs November' 2019)

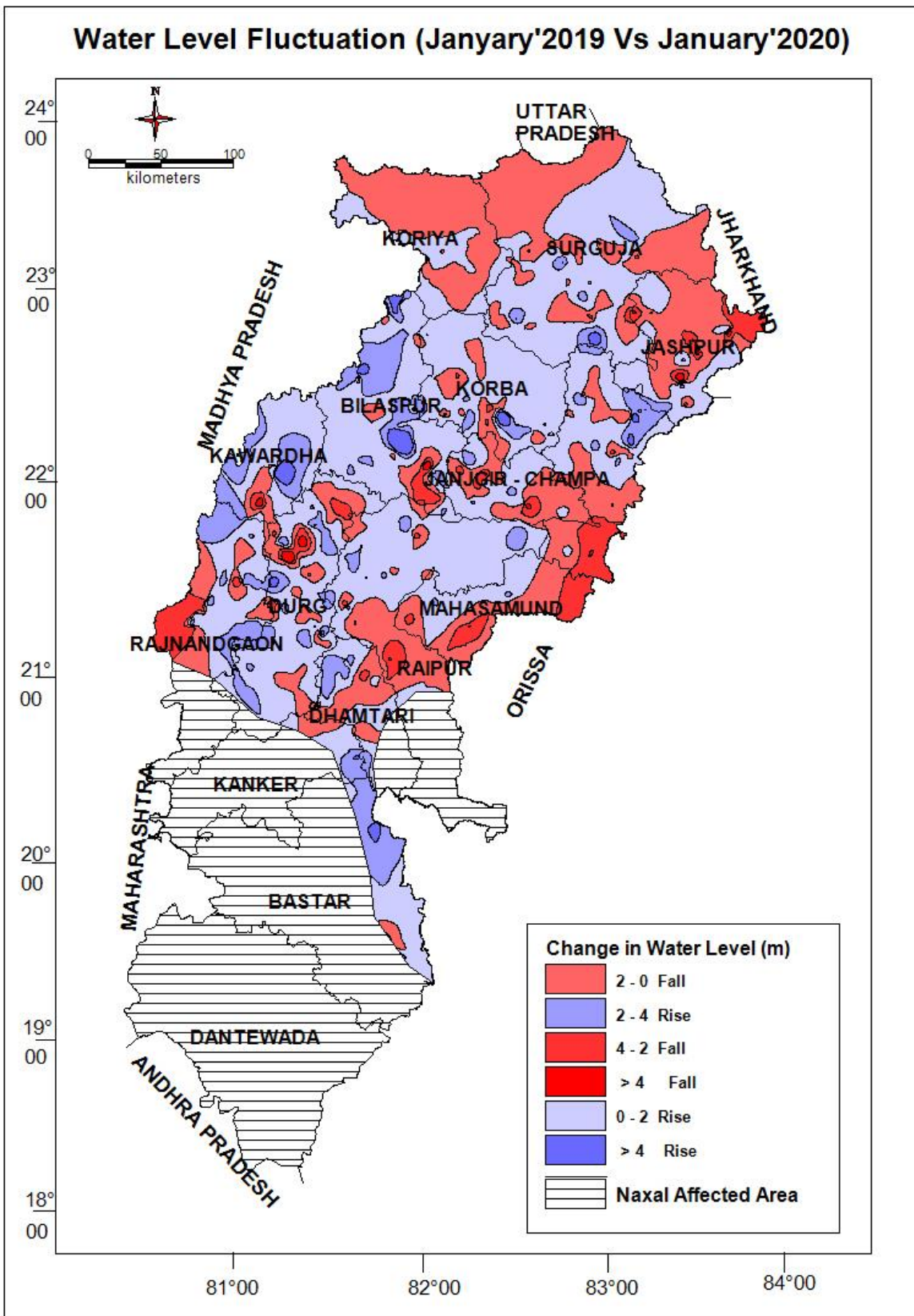


Fig. 7.8 Water Level Fluctuation (January'2019 Vs January' 2020)

7.3 Water Level Fluctuation with Reference to Pre monsoon Water Level

7.3.1 May 2019 vs August 2019

There is mostly a rise in water levels in August' 2019 when compared with the water levels of May, 2019. About 97.50% of the monitored wells exhibits rise in the water level. Out of this, about 15.16% of the monitored wells exhibits rise of water level in the range of 0-2 m covering parts of almost all the districts. In 30.52 % of the monitored wells, the water levels show rise in the range of 2-4 m covering parts of all the districts monitored except Raigarh district. While the remaining 49.90 % of the observation wells also show rise of more than 4 m covering parts of all the districts monitored except Raigarh district. Fall of water level as compared to May'15 is observed in about 2.30% of the observation wells monitored. Most of the wells exhibit fall in the range of 0-5m mainly in Bilaspur district and also including Bastar, Dhamtari, Korba, Mahasamund, Raipur, Rajanandgaon districts.

The district wise frequency for different fluctuation ranges is presented in **Table 7.9**. Fluctuation of water level (May' 2019 vs Aug' 2019) is represented on a map appended as **fig 7.9**.

7.3.2 May 2019 vs November 2019

There is mostly a rise in water level in November 2019 when compared to water level in May 2019. About 95.28% of the monitored wells exhibit rise in the water level. Out of this, about 19.69% of the monitored wells exhibit rise in the water level in the range of 0-2 m in parts of all the districts. In 36.54 % of the monitored wells the water levels show rise in the range of 2-4 m in most of the districts except Kanker district, while the remaining 39.05% of the observation wells show rise of more than 4 m mostly in Bilaspur, Surguja, Raipur, Durg, Korba and Koriya districts. Fall of water level as compared to May'15 is observed in about 4.25% of the observation wells monitored. Most of the wells exhibit fall in the range of 0-2m.

The district wise distribution of different fluctuation ranges is presented in **Table 7.10** and is also shown in **Fig. 7.10**.

7.3.3 May 2019 vs January 2020

The water levels in nearly 88.43% of the observation wells were showing a rise for the month of January 2020 in comparison to that of the water levels measured during the month of May 2019. The rise in water levels in the range of 0 to 2 m was observed in nearly 30.75% of the observations wells mainly in Durg, Raipur and Surguja districts. In 36.07% of the observation wells it was in the range of 2 to 4 m mostly in Durg, Surguja, Jashpur and Raipur districts. The rise of more than 4 m was recorded in 21.61% of wells mainly in Durg district. The fall in water levels was recorded in 10.96 % of the observation wells. Fall of water level was recorded 7.31% in the range of 0 to 2 m distributed among all the district except Koriya and Kawardha districts. Fall of water was 2.28% in the range of 2 to 4 m and it was 1.37% in for more than 4 m mainly in Jashpur, Raipur, Rajnandgaon and Surguja districts.

The district wise distribution of different fluctuation ranges is presented in **Table 7.11** and is also shown in **Fig. 7.11**.

Table 7.9 District Wise - Fluctuation and Frequency Distribution from Different Ranges from One Period to Other May 2019 vs Aug 2019

District	No. of Wells	Range of Fluctuation (m)				No. of Wells/Percentage Showing Fluctuation						Total No. of Wells	
		Rise		Fall		Rise			Fall			Rise	Fall
		Min	Max	Min	Max	0 to 2	2 to 4	>4	0 to 2	2 to 4	>4		
Bastar	21	0.75	9.05	1.80	1.80	4 19.05%	7 33.33%	9 42.86%	1 4.76%	0	0	20	1
Bilaspur	88	1.30	13.80	0.53	5.16	5 5.68%	25 28.41%	54 61.36%	1 1.14%	1 1.14%	1 1.14%	84	3
Dhamtari	32	0.18	7.58	0.72	7.08	9 28.13%	8 25.00%	12 37.50%	1 3.13%	0	2 6.25%	29	3
Durg	92	0.05	13.04	-	-	15 16.30%	31 33.70%	46 50.00%	0	0	0	92	0
Janjgir - champa	24	0.78	10.91	-	-	7 29.17%	9 37.50%	8 33.33%	0	0	0	24	0
Kanker	7	0.45	4.15	-	-	3 42.86%	2 28.57%	2 28.57%	0	0	0	7	0
Kawardha	14	0.07	6.26	-	-	1 7.14%	10 71.43%	3 21.43%	0	0	0	14	0
Korba	60	1.28	11.50	3.34	3.34	3 5.00%	21 35.00%	35 58.33%	0	1 1.67%	0	59	1
Koriya	22	0.81	12.70	-	-	2 9.09%	3 13.64%	17 77.27%	0	0	0	22	0
Mahasamund	24	1.07	9.22	0.70	1.34	5 20.83%	4 16.67%	13 54.17%	2 8.33%	0	0	22	2
Raigarh	1	0.10	0.10	-	-	1 100.00%	0	0	0	0	0	1	0
Raipur	68	0.37	12.31	1.46	1.46	14 20.59%	20 29.41%	33 48.33%	1 1.47%	0	0	67	1
Rajnandgaon	39	0.48	11.84	0.43	0.43	7 17.95%	20 51.28%	11 28.21%	1 2.56%	0	0	38	1
Surguja	29	0.85	10.81	-	-	3 10.34%	9 31.03%	17 58.62%	0	0	0	29	0
TOTAL	521	1.30	0.10			79	169	260	7	2	3	508	12

Table 7.10 District wise frequency for different fluctuation ranges between May 2019vs November 2019

District	No. of Wells	Range of Fluctuation (m)				No. of Wells/Percentage Showing Fluctuation						Total No. of Wells	
		Rise		Fall		Rise			Fall			Rise	Fall
		Min	Max	Min	Max	0 to 2	2 to 4	>4	0 to 2	2 to 4	>4		
BASTAR	18	0.40	8.65	0.23	0.50	1 5.56%	2 11.11%	12 66.67%	2 11.11%	0	0	15	2
BILASPUR	90	0.08	15.96	0.05	1.73	22 24.44%	27 30.00%	35 38.89%	6 6.67%	0	0	84	6
DHAMTARI	36	0.18	8.90	0.26	3.70	10 27.78%	10 27.78%	11 30.56%	3 8.33%	2 5.56%	0	31	5
DURG	92	0.25	15.90	0.70	0.70	13 14.13%	31 33.70%	46 50.00%	1 1.09%	0	0	90	1
JANJGIR - CHAMPA	44	0.12	10.33	0.04	0.69	17 38.64%	17 38.64%	6 13.64%	4 9.09%	0	0	40	4
JASHPUR	28	1.00	4.75	-	-	4 14.29%	19 67.86%	5 17.86%	0	0	0	28	0
KANKER	3	0.50	6.53	-	-	1 33.33%	0	2 66.67%	0	0	0	3	0
KAWARDHA	13	0.18	6.47	-	-	2 15.38%	6 46.15%	5 38.46%	0	0	0	13	0
KORBA	57	0.39	10.58	-	-	9 15.79%	24 42.11%	24 42.11%	0	0	0	57	0
KORIYA	39	0.26	9.40	-	-	6 15.38%	9 23.08%	24 61.54%	0	0	0	39	0
MAHASAMUND	25	0.72	9.72	0.07	0.07	5 20.00%	9 36.00%	10 40.00%	1 4.00%	0	0	24	1
RAIPUR	67	0.22	10.75	1.43	1.43	15 22.39%	20 29.85%	31 46.27%	1 1.49%	0	0	66	1
RAJNANDGAON	40	1.18	11.15	0.29	0.29	5 12.50%	21 52.50%	13 32.30%	1 2.50%	0	0	39	1
SURGUJA	83	0.14	12.35	0.14	4.00	15 18.07%	37 44.58%	24 28.92%	5 6.02%	1 1.20%	0	76	6
TOTAL	635	1.18	4.75	0.00	4.00	125	232	248	24	3	0	605	27

Table 7.11 District wise frequency for different fluctuation ranges between May 2019 vs January 2020

District	No. of Wells	Range of Fluctuation (m)				No. of Wells/Percentage Showing Fluctuation						Total No. of Wells	
		Rise		Fall		Rise			Fall			Rise	Fall
		Min	Max	Min	Max	0 to 2	2 to 4	>4	0 to 2	2 to 4	>4		
BASTAR	21	0.10	6.30	0.25	2.35	6 28.57%	9 42.86%	4 19.05%	1 4.76%	1 4.76%	0	19	2
BILASPUR	59	0.02	11.34	0.08	4.97	13 22.03%	14 23.73%	27 45.76%	4 6.78%	0	1 1.69%	54	5
DHAMTARI	30	0.17	7.15	0.28	5.62	16 53.33%	8 26.67%	2 6.67%	3 10.00%	0	1 3.33%	26	4
DURG	88	0.38	12.80	0.38	3.83	20 22.73%	29 32.95%	32 36.36%	6 6.82%	1 1.14%	0	81	7
JANJGIR - CHAMPA	37	0.20	9.60	0.50	3.67	15 40.54%	9 24.32%	5 13.51%	5 13.51%	3 8.11%	0	29	8
JASHPUR	48	0.05	4.85	0.35	4.90	16 33.33%	25 52.08%	2 4.17%	1 2.08%	3 6.25%	1 2.08%	43	5
KANKER	6	0.70	4.10	0.30	0.30	2 33.33%	2 33.33%	1 16.67%	1 16.67%	0	0	5	1
KAWARDHA	13	0.27	5.32	-	-	5 38.46%	5 38.46%	2 15.38%	0	0	0	12	0
KORBA	50	0.08	10.76	0.57	0.89	12 24.00%	26 52.00%	10 20.00%	2 4.00%	0	0	48	2
KORIYA	41	0.06	8.92	-	-	14 34.15%	18 43.90%	9 21.95%	0	0	0	41	0
MAHASAMUND	24	0.13	7.12	0.05	2.43	7 29.17%	4 16.67%	7 29.17%	5 20.83%	1 4.17%	0	18	6
RAIGARH	47	0.01	7.70	0.29	6.60	18 38.30%	14 29.79%	6 12.77%	7 14.89%	0	2 4.26%	38	9
RAIPUR	66	0.02	13.74	0.14	4.76	20 30.30%	24 36.36%	15 22.73%	3 4.55%	1 1.52%	2 3.03%	59	6
RAJNANDGAON	40	0.49	11.45	0.13	5.43	13 32.50%	10 25.00%	11 27.50%	4 10.00%	1 2.50%	1 2.50%	34	6
SURGUJA	87	0.05	10.12	0.09	6.00	25 28.74%	40 45.98%	9 10.34%	6 6.90%	4 4.60%	1 1.15%	74	11
Total	657	0.70	4.10	0.00	6.60	202	237	142	48	15	9	581	72

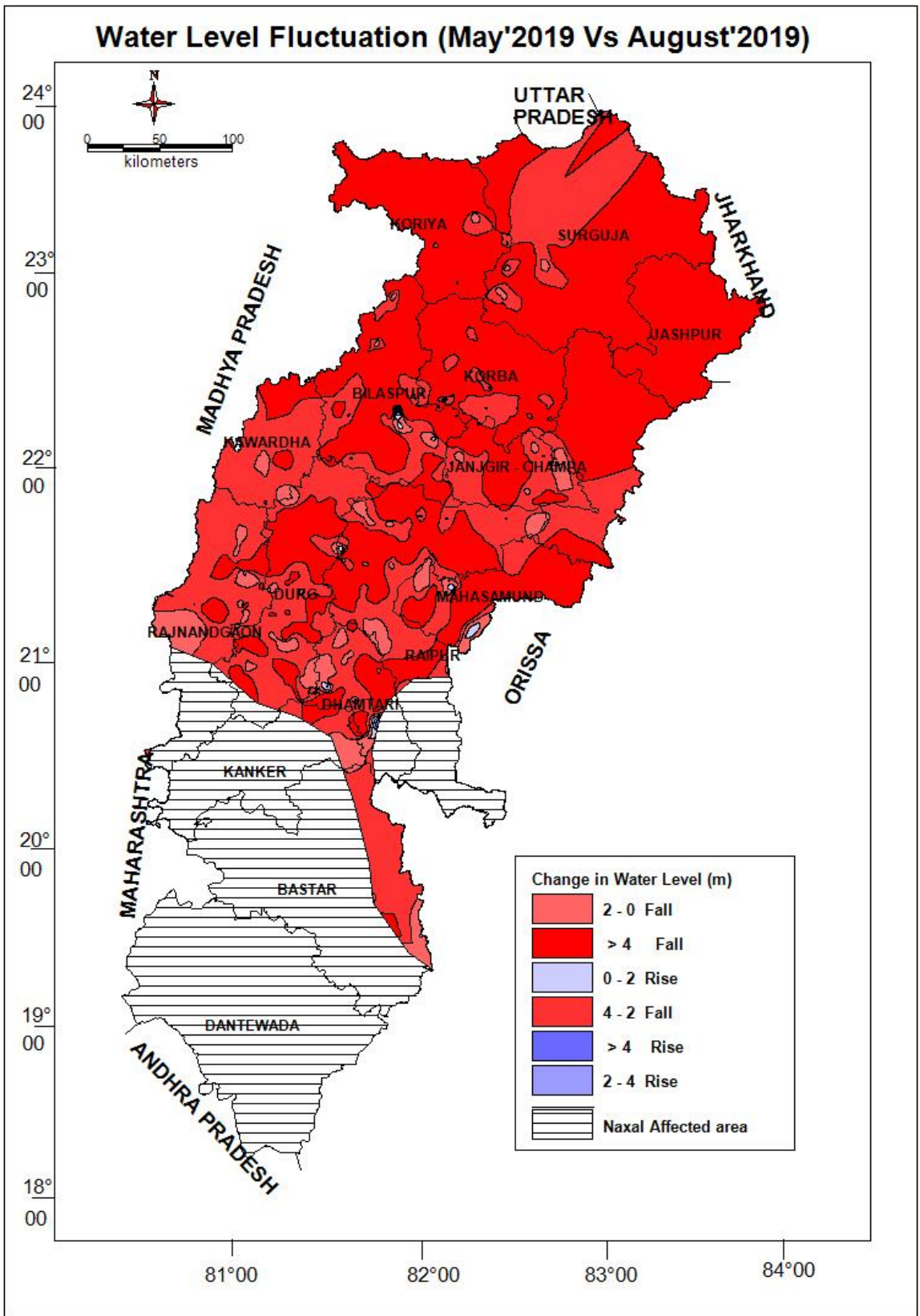


Fig. 7.9 Water Level Fluctuation (May'2019 Vs August' 2019)

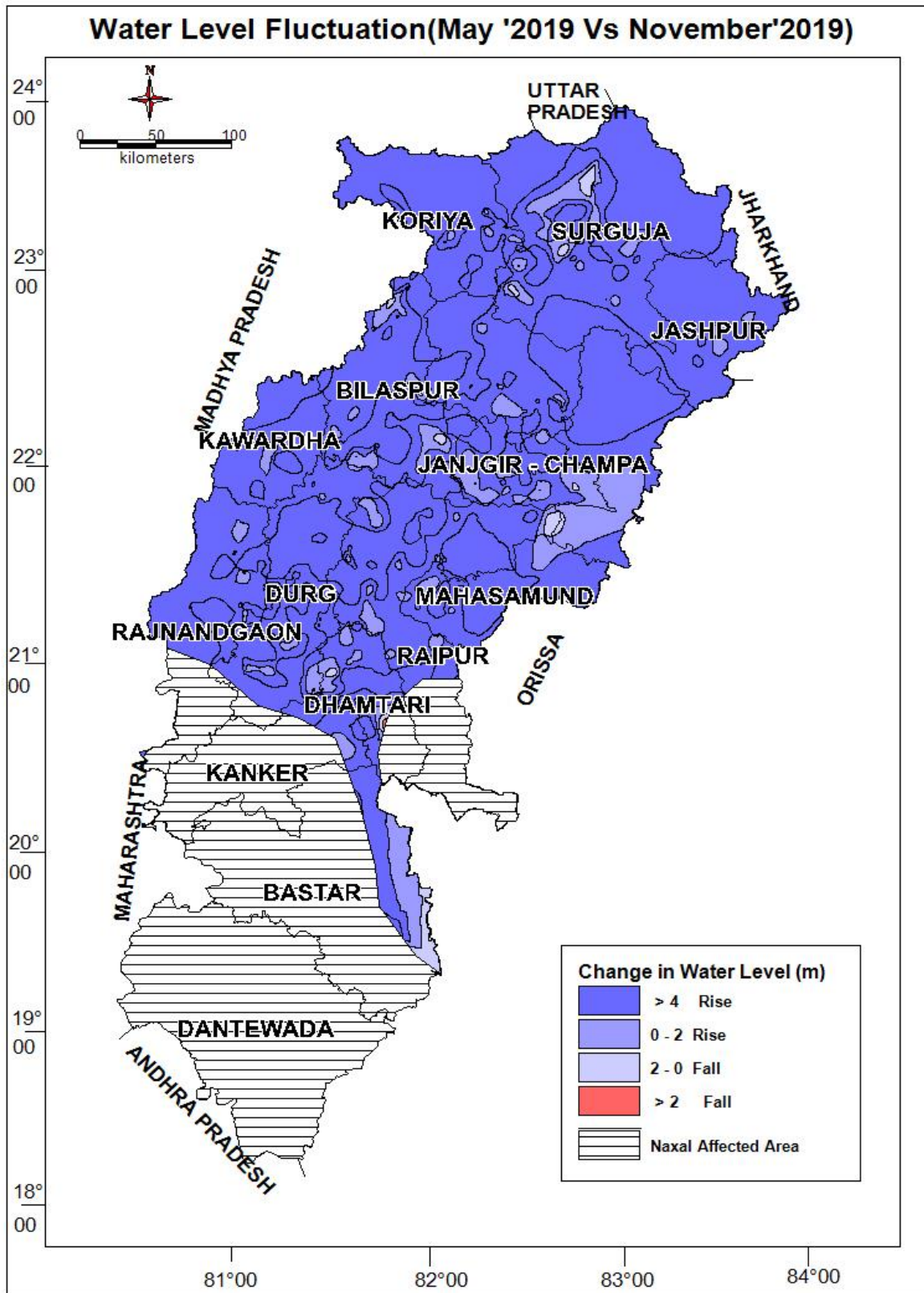


Fig. 7.10 Water Level Fluctuation (May'2019 Vs November' 2019)

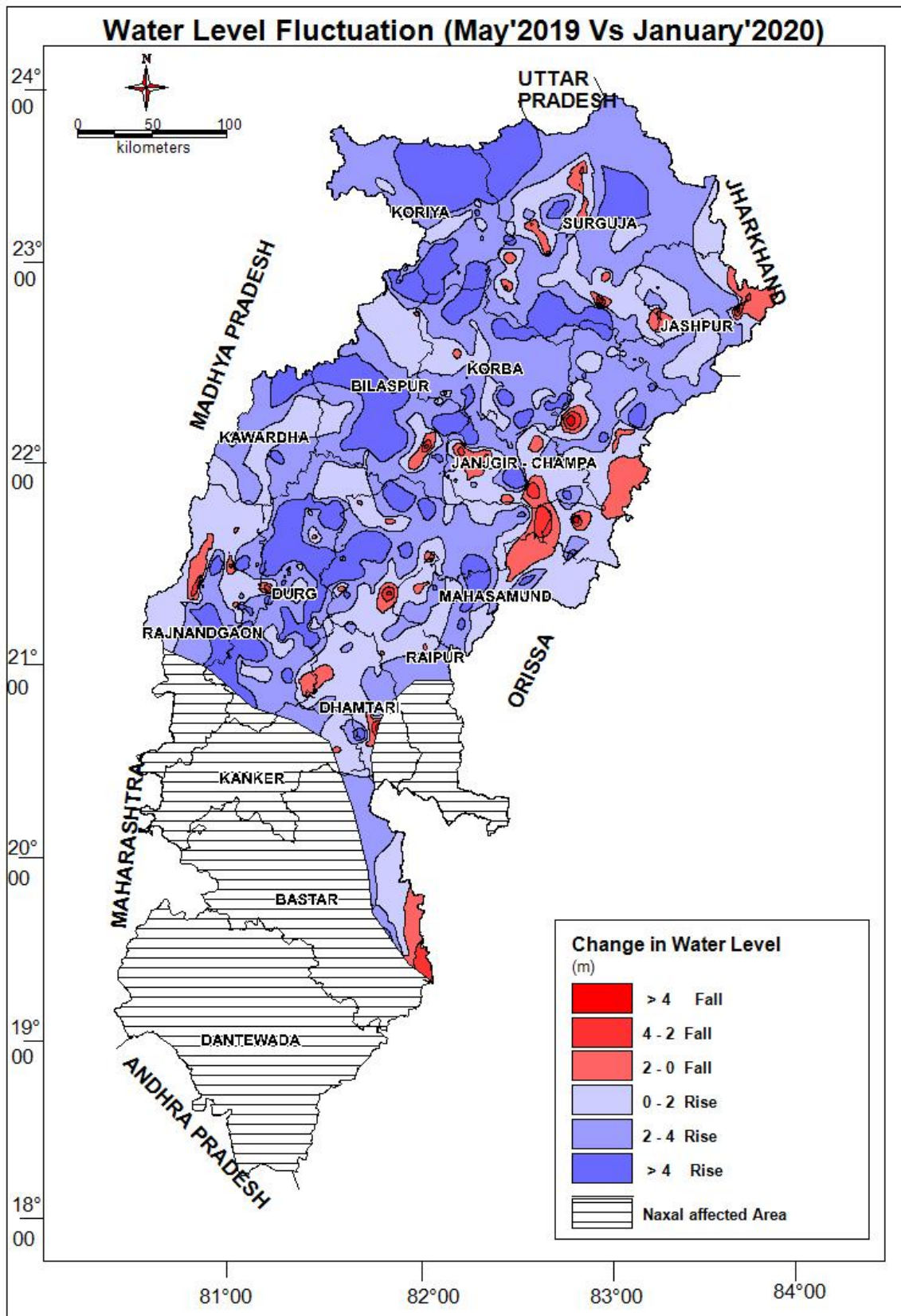


Fig. 7.11 Water Level Fluctuation (May'2019 Vs January' 2020)

7.4 Water Level Fluctuation with Reference to Decadal Mean

7.4.1 Mean of May (May 2009 to May 2018) Vs May 2019

When compared to the decadal mean water level (May' 2009 to May'2018), 56.94% of observation wells are showing a fall in water level in May'2019. Out of the wells monitored, 40.25% of the wells are showing a fall up to 2 m, 12.23% between 2 to 4 m except in Bastar and Kanker district. 4.46% of the monitored wells are showing a fall in water level of more than 4 m. Fall of water level as compared to the decadal mean by more than 4m is observed in almost all the districts except Bastar, Dhamtari, Janjgir-Champa, Jashpur, Kanker. Nearly 40.89% of monitored wells are showing a rise in the water level, mostly in the range of 0-2 meter (24.59%). About 10.57% of the monitored wells are showing a rise in the range of 2-4 metre whereas 5.79% of the monitored wells are showing a rise of more than 4m except in Koriya district. The district wise categorization of decadal change in water level is presented in **Table 7.12**. The decadal range of fluctuation has been shown in the **Fig 7.12**.

7.4.2 Mean of August (August 2009 to August 2018) vs August 2019

When compared to the decadal mean water level (August 2009 to August 2018), 66.91% of observation wells are showing a fall in water level in August 2019. Out of the wells monitored, 44.42% of the wells are showing a fall up to 2 m except in Kanker and Raigarh districts. 12.82% of the wells are showing a fall between 2 to 4 metres except in Raigarh district and 4% of the monitored wells are showing a fall in water level of more than 4 m. Fall of water level as compared to the decadal mean by more than 4m is observed except in Koriya, Mahasamund, Durg, Dhamtari, Bastar, Kawardha, Rajnandgaon, Raigarh and Jashpur districts. Nearly 41% of monitored wells are showing a rise in the water level, mostly in the range of 0-2 meter (34%). About 5% of the monitored wells are showing a rise in the range of 2-4 metre whereas 2% of the monitored wells are showing a rise of more than 4 m.

The district wise categorization of decadal change in water level is presented in **Table 7.13**. The decadal range of fluctuation has been shown in the **Fig 7.13**

7.4.3 Mean of November (November 2009 to November 2018) vs November 2019

When compared to the decadal mean water level (November'2009 to November'2018), 57.77% of monitored wells are showing a rise in the water level, mostly in the range of 0-2 meter (47.87%) and mainly in Raipur (66.67%), Durg (54.26%), Surguja (44.43%) and Korba (60.00%) districts. About 7.62% of the monitored wells are showing a rise in the range of 2-4 metre except in Jashpur district, whereas 2.29% of the monitored wells are showing a rise of more than 4 m only in Bilaspur, Durg, Jashpur, Korba and Koriya districts. Nearly 42.23% of observation wells are showing a fall in water level in November'2019. Out of the wells monitored, 34.60% of the wells are showing a fall up to 2 m except in Kanker district. About 6.10% between 2 to 4 metres except in Bastar, Jshpur and Kanker districts and 3.61% of the monitored wells are showing a fall in water level of more than 4 m restricted only in Bilaspur, Durg, Kawardha, Raipur and Surguja districts. The district wise categorisation of decadal change in water level is presented in **Table 7.14**. The decadal range of fluctuation has been shown in the **Fig 7.14**.

7.4.4 Mean of January (January 2010 to January 2019) Vs January 2020

When compared to the decadal mean water level (January' 2010 to January'2019), 61.94% of monitored wells are showing a rise in the water level, mostly in the range of 0-2 meter (46.95%) and mainly in the Durg (46.39%), Surguja (53.04%), Raipur (50.63%) and Korba (61.11%) districts. About 12.20% of the monitored wells are showing a rise in the range of 2-4 metre whereas 2.79% of the monitored wells are showing a rise of more than 4 m except in Dhamtari, Janjgir-Champa, Jashpur and Koriya districts. Nearly 37.80% of observation wells are showing a fall in water level in January'2020. Out of the wells monitored, 31.70% of the wells are showing a fall upto 2 m except in Kanker district, 4.91% between 2 to 4 metres except in Bastar, Kanker and Koriya district and 1.19% of the monitored wells are showing a fall in water level of more than 4 m. Fall of water level as compared to the decadal mean by more than 4m is observed in Bilaspur, Durg, Janjgir-Champa, Kawardha, Mahasamund, Raigarh and Surguja districts.

Water level fluctuations during January 2014 with respect to the decadal mean (January 2006 to January 2015) are shown in **Fig 7.15**.

Table 7.12 District wise categorization of decadal change in water level (May' 2009- 2018 Vs May' 2019)

District	No. of Wells	Range of Fluctuation (m)				No. of Wells/Percentage Showing Fluctuation						Total No. of Wells	
		Rise		Fall		Rise			Fall			Rise	Fall
		Min	Max	Min	Max	0 to 2	2 to 4	>4	0 to 2	2 to 4	>4		
BASTAR	19	0.01	5.15	0.02	1.41	6 31.58 %	3 15.79 %	2 10.5 3%	8 42.11 %	0	0	11	8
BILASPUR	109	0.04	14.65	0.03	8.77	26 23.85 %	8 7.34 %	8 7.34 %	42 38.53 %	9 8.26 %	7 6.42 %	42	58
DHANTARI	40	0.06	5.42	0.01	3.91	13 32.50 %	2 5.00 %	3 7.50 %	17 42.50 %	5 12.50 %	0	18	22
DURG	93	0.01	6.63	0.05	7.50	22 23.66 %	8 8.60 %	3 3.23 %	31 33.33 %	22 23.66 %	6 6.45 %	33	59
JANJGIR - CHAMPA	49	0.08	7.70	0.19	3.49	18 36.73 %	4 8.16 %	4 8.16 %	19 38.78 %	4 8.16 %	0	26	23
JASHPUR	52	0.02	4.84	0.02	3.36	11 21.15 %	4 7.69 %	2 3.85 %	32 61.54 %	2 3.85 %	0	17	34
KANKER	6	1.79	4.14	0.20	0.66	1 16.67 %	2 33.33 %	1 16.6 7%	2 33.33 %	0	0	4	2
KAWARDHA	15	0.72	6.40	0.50	11.71	1 6.67%	2 13.33 %	1 6.67 %	6 40.00 %	4 26.67 %	1 6.67 %	4	11
KORBA	66	0.01	14.32	0.01	5.97	22 33.33 %	5 7.58 %	3 4.55 %	27 40.91 %	5 7.58 %	2 3.03 %	30	34
KORIYA	39	1.00	3.94	0.15	7.85	1 2.56%	2 5.13 %	0	21 53.85 %	10 25.64 %	4 10.26 %	3	35
MAHASAMUND	31	.00	5.01	0.11	5.36	7 22.58 %	6 19.35 %	1 3.23 %	9 29.03 %	5 16.13 %	2 6.45 %	14	16
RAIGARH	65	0.12	8.91	0.05	4.54	16 24.62 %	12 18.46 %	3 4.62 %	28.43 .08%	3 4.62 %	2 3.08 %	31	33
RAIPUR	74	.00	7.90	0.14	8.29	19 25.68 %	8 10.81 %	7 9.46 %	26 35.14 %	11 14.86 %	3 4.05 %	34	40
RAJNANDGAON	43	0.15	4.77	0.06	8.47	9 20.93 %	8 18.60 %	2 4.65 %	14 32.56 %	5 11.63 %	4 9.30 %	19	23
SURGUJA	84	0.03	8.77	0.02	9.69	21 25.00 %	9 10.71 %	5 5.95 %	34 40.48 %	11 13.10 %	4 4.76 %	35	49
Total	785	3.94	1.79	0.01	11.71	193	83	45	316	96	35	321	447

Table 7.13 District wise categorization of decadal change in water level (Aug' 2009- 2018 Vs Aug' 2019)

District	No. of Wells	Range of Fluctuation (m)				No. of Wells/Percentage Showing Fluctuation						Total No. of Wells	
		Rise		Fall		Rise			Fall			Rise	Fall
		Min	Max	Min	Max	0 to 2	2 to 4	>4	0 to 2	2 to 4	>4		
BASTAR	17	0.32	0.32	0.08	3.35	1 5.88%	0	0	13 76.47%	3 17.65%	0	1	16
BILASPUR	86	0.03	8.47	0.06	10.48	27 31.40%	11 12.79%	5 5.81%	32 37.21%	8 9.30%	3 3.49%	43	43
DHAMTARI	35	0.16	0.68	0.06	8.49	7 20.00%	0	0	21 60.00%	4 11.43%	2 5.71%	7	27
DURG	95	0.02	6.31	0.01	9.30	22 23.16%	4 4.21%	2 2.11%	41 43.16%	18 18.95%	8 8.42%	28	67
JANJGIR - CHAMPA	23	0.09	1.96	0.14	5.23	6 26.09%	0	0	14 60.87%	1 4.35%	2 8.70%	6	17
KANKER	7	1.17	3.08	2.27	3.41	3 42.86%	1 14.29%	0	0	3 42.86%	0	4	3
KAWARDHA	17	0.80	2.29	0.57	12.34	3 17.65%	1 5.88%	0	6 35.29%	4 23.53%	3 17.65%	4	13
KORBA	56	0.20	7.36	0.01	7.65	21 37.50%	4 7.14%	2 3.57%	24 42.86%	3 5.36%	1 1.79%	27	28
KORIYA	26	0.42	7.13	0.13	2.20	7 26.92%	1 3.85%	2 7.69%	14 53.85%	2 7.69%	0	10	16
MAHASAMUND	25	0.06	3.32	0.07	7.60	5 20.00%	1 4.00%	0	13 52.00%	2 8.00%	4 16.00%	6	19
RAIGARH	1	-	-	4.01	4.01	0	0	0	0	0	1 100.0%	0	1
RAIPUR	77	0.01	0.69	0.01	7.79	11 14.29%	0	0	55 71.43%	8 10.39%	3 3.90%	11	66
RAJNANDGAON	42	0.05	2.30	0.19	6.53	10 23.81%	1 2.38%	0	15 35.71%	11 26.19%	5 11.90%	11	31
SURGUJA	31	0.25	10.76	0.06	2.27	13 41.94%	4 12.90%	1 3.23%	11 35.48%	2 6.45%	0	18	13
Total	538	0.32	1.17	0.01	12.34	136	28	12	259	69	32	176	360

Table 7.14 District wise categorization of decadal change in water level (Nov' 2009- 2018 Vs Nov' 2019)

District	No. of Wells	Range of Fluctuation (m)				No. of Wells/Percentage Showing Fluctuation						Total No. of Wells	
		Rise		Fall		Rise			Fall			Rise	Fall
		Min	Max	Min	Max	0 to 2	2 to 4	>4	0 to 2	2 to 4	>4		
BASTAR	18	0.30	6.76	0.38	1.08	13 72.22 %	1 5.56%	2 11.11 %	2 11.11 %	0	0	16	2
BILASPUR	88	0.02	7.73	0.06	8.02	25 28.41 %	6 6.82%	4 4.55 %	38 43.18 %	12 13.64 %	3 3.41%	35	53
DHANTARI	38	0.08	3.51	0.02	3.64	18 47.37 %	4 10.53 %	0	11 28.95 %	5 13.16 %	0	22	16
DURG	94	0.05	5.75	0.15	9.92	51 54.26 %	6 6.38%	6 6.38 %	28 29.79 %	2 2.13%	1 1.06%	63	31
JANJGIR - CHAMPA	42	0.01	3.12	0.14	2.88	9 21.43 %	2 4.76%	0	28 66.67 %	3 7.14%	0	11	31
JASHPUR	30	0.01	4.25	0.08	1.04	21 70.00 %	0	1 3.33 %	8 26.67 %	0	0	22	8
KANKER	3	0.61	2.66	-	-	2 66.67 %	1 33.33 %	0	0	0	0	3	0
KAWARDHA	15	0.35	2.08	0.28	10.48	4 26.67 %	1 6.67%	0	7 46.67 %	1 6.67%	2 13.33 %	5	10
KORBA	50	0.02	4.18	0.01	2.32	30 60.00 %	3 6.00%	1 2.00 %	15 30.00 %	1 2.00%	0	34	16
KORIYA	45	0.03	4.19	0.04	3.43	16 35.56 %	6 13.33 %	1 2.22 %	19 42.22 %	3 6.67%	0	23	22
MAHASAMUND	26	0.40	3.51	0.24	3.98	14 53.85 %	3 11.54 %	0	6 23.08 %	3 11.54 %	0	17	9
RAIPUR	78	0.02	2.56	0.03	5.59	52 66.67 %	2 2.56%	0	22 28.21 %	1 1.28%	1 1.28%	54	24
RAJNANDGAO N	42	0.11	3.62	0.39	2.03	16 38.10 %	9 21.43 %	0	16 38.10 %	1 2.38%	0	25	17
SURGUJA	87	0.03	3.88	0.09	5.05	43 49.43 %	6 6.90%	0	27 31.03 %	8 9.20%	3 3.45%	49	38
Total	656	2.08	0.61	0.00	10.48	314	50	15	227	40	10	379	277

Table 7.15 District wise categorization of decadal change in water level (Jan' 2010- 2019 Vs Jan' 2020)

District	No. of Wells	Range of Fluctuation (m)				No. of Wells/Percentage Showing Fluctuation						Total No. of Wells	
		Rise		Fall		Rise			Fall			Rise	Fall
		Min	Max	Min	Max	0 to 2	2 to 4	>4	0 to 2	2 to 4	>4		
BASTAR	19	0.05	4.21	0.48	1.89	12 63.16 %	4 21.05 %	1 5.26 %	2 10.53 %	0	0	17	2
BILASPUR	60	.0.01	4.22	0.05	6.65	29 48.33 %	13 21.67 %	1 1.67 %	14 23.33 %	2 3.33%	1 1.67%	43	17
DHAMTARI	33	0.18	3.23	0.16	3.85	18 54.55 %	2 6.06%	0	11 33.33 %	2 6.06%	0	20	13
DURG	97	0.02	24.65	0.06	11.21	45 46.39 %	21 21.65 %	6 6.19 %	17 17.53 %	5 5.15%	2 2.06%	72	24
JANJGIR - CHAMPA	38	0.20	3.02	0.07	4.60	17 44.74 %	3 7.89%	0	15 39.47 %	1 2.63%	2 5.26%	20	18
JASHPUR	58	0.05	2.80	0.00	3.66	24 41.38 %	2 3.45%	0	25 43.10 %	7 12.07 %	0	26	32
KANKER	7	0.02	4.11	-	-	4 57.14 %	2 28.57 %	1 14.29 %	0	0	0	7	0
KAWARDHA	16	0.10	4.89	0.46	10.87	5 31.25 %	3 18.75 %	1 6.25 %	5 31.25 %	1 6.25%	1 6.25%	9	7
KORBA	54	0.01	7.22	0.09	2.89	33 61.11 %	6 11.11 %	2 3.70 %	10 18.52 %	3 5.56%	0	41	13
KORIYA	47	0.05	3.84	0.06	1.85	21 44.68 %	4 8.51%	0	22 46.81 %	0	0	25	22
MAHASAMUND	28	0.02	4.89	0.12	4.10	10 35.71 %	1 3.57%	2 7.14 %	13 46.43 %	1 3.57%	1 3.57%	13	15
RAIGARH	75	.00	5.03	0.01	4.20	26 34.67 %	8 10.67 %	2 2.67 %	33 44.00 %	4 5.33%	1 1.33%	36	38
RAIPUR	79	0.02	5.71	0.01	2.99	40 50.63 %	11 13.92 %	1 1.27 %	23 29.11 %	4 5.06%	0	52	27
RAJNANDGAON	47	0.10	5.20	0.03	3.81	21 44.68 %	7 14.89 %	3 6.38 %	13 27.66 %	3 6.38%	0	31	16
SURGUJA	96	0.02	4.07	0.00	10.46	49 51.04 %	5 5.21%	1 1.04 %	36 37.50 %	4 4.17%	1 1.04%	55	41
Total	754	2.80	0.20	0.00	11.21	354	92	21	239	37	9	467	285

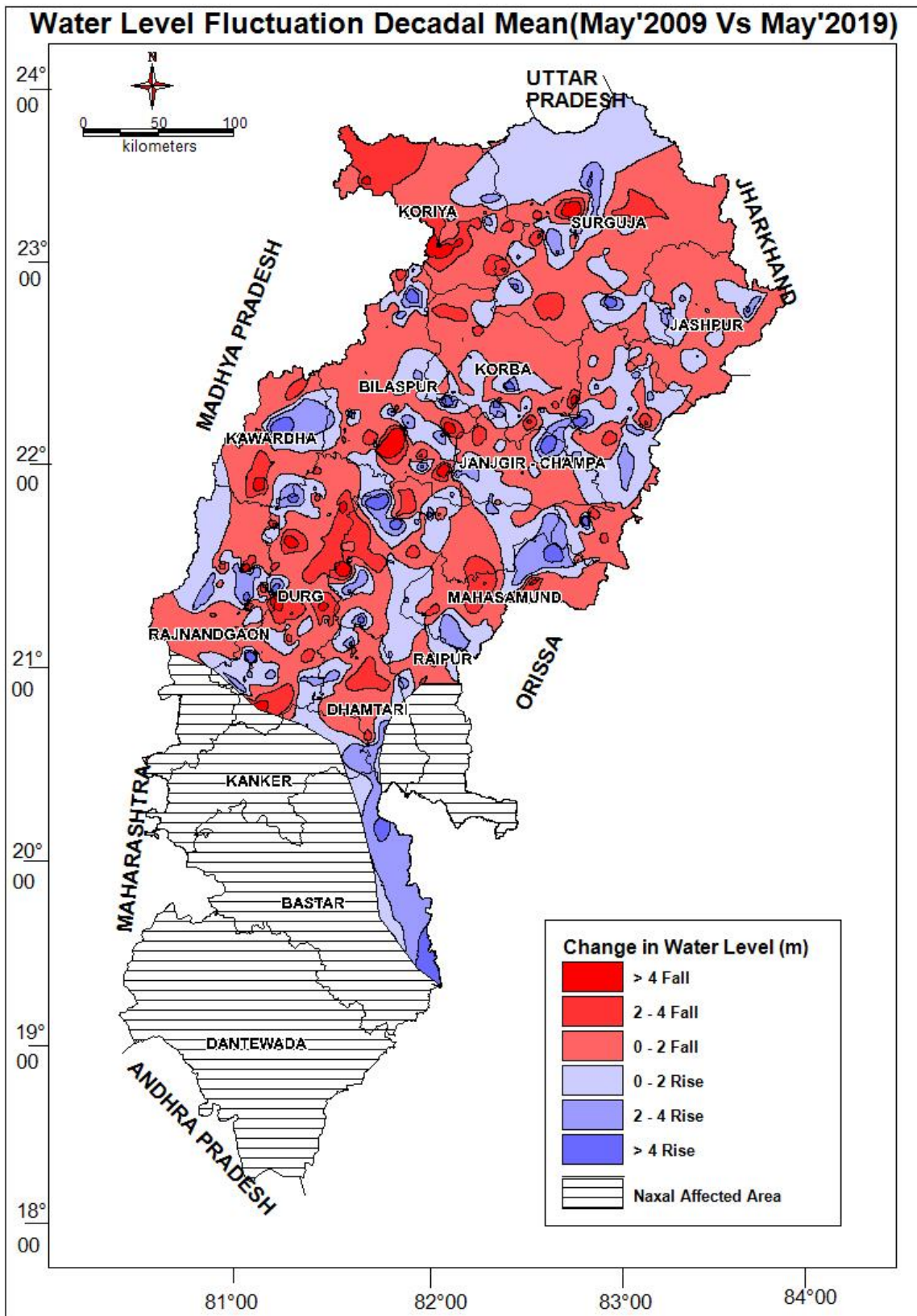


Fig. 7.12 Water Level Fluctuation, Decadal Mean (May'2009 - 2018) Vs May'2019

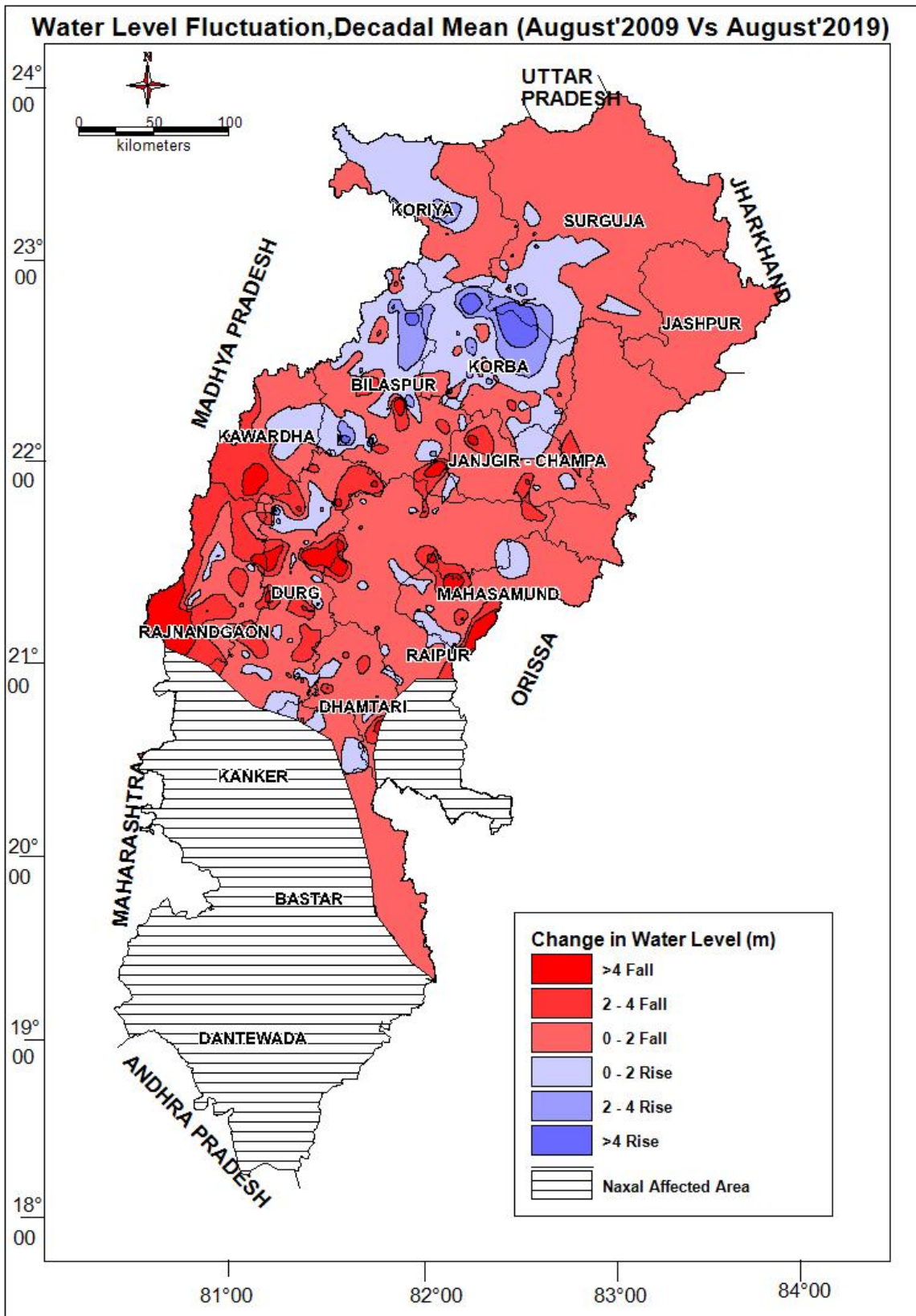


Fig.7.13 Water Level Fluctuation, Decadal mean (August'2009-2018) Vs Aug'2019

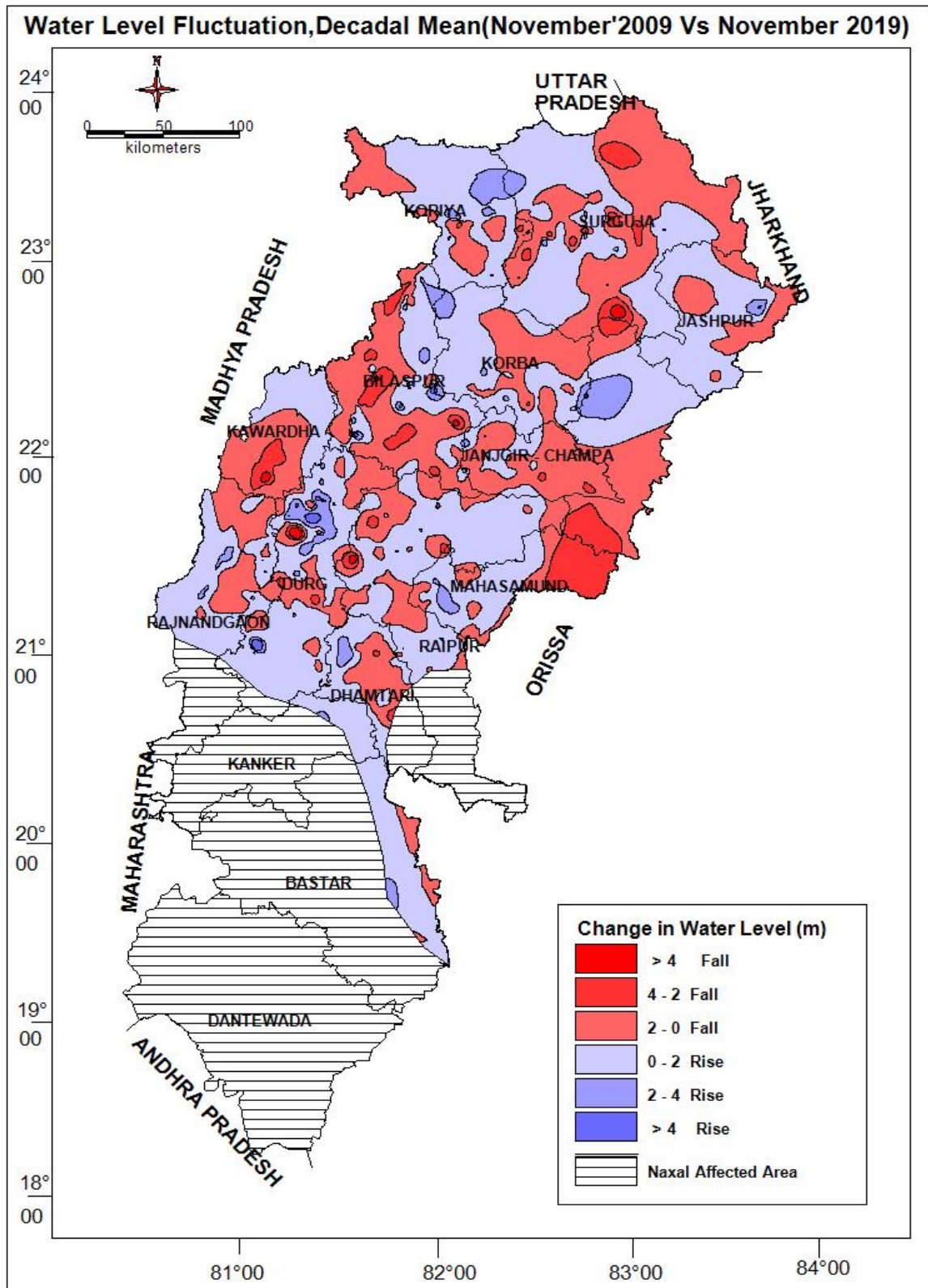


Fig.7.14 Water Level Fluctuation, Decadal mean (November'2009-2018) Vs November'2019

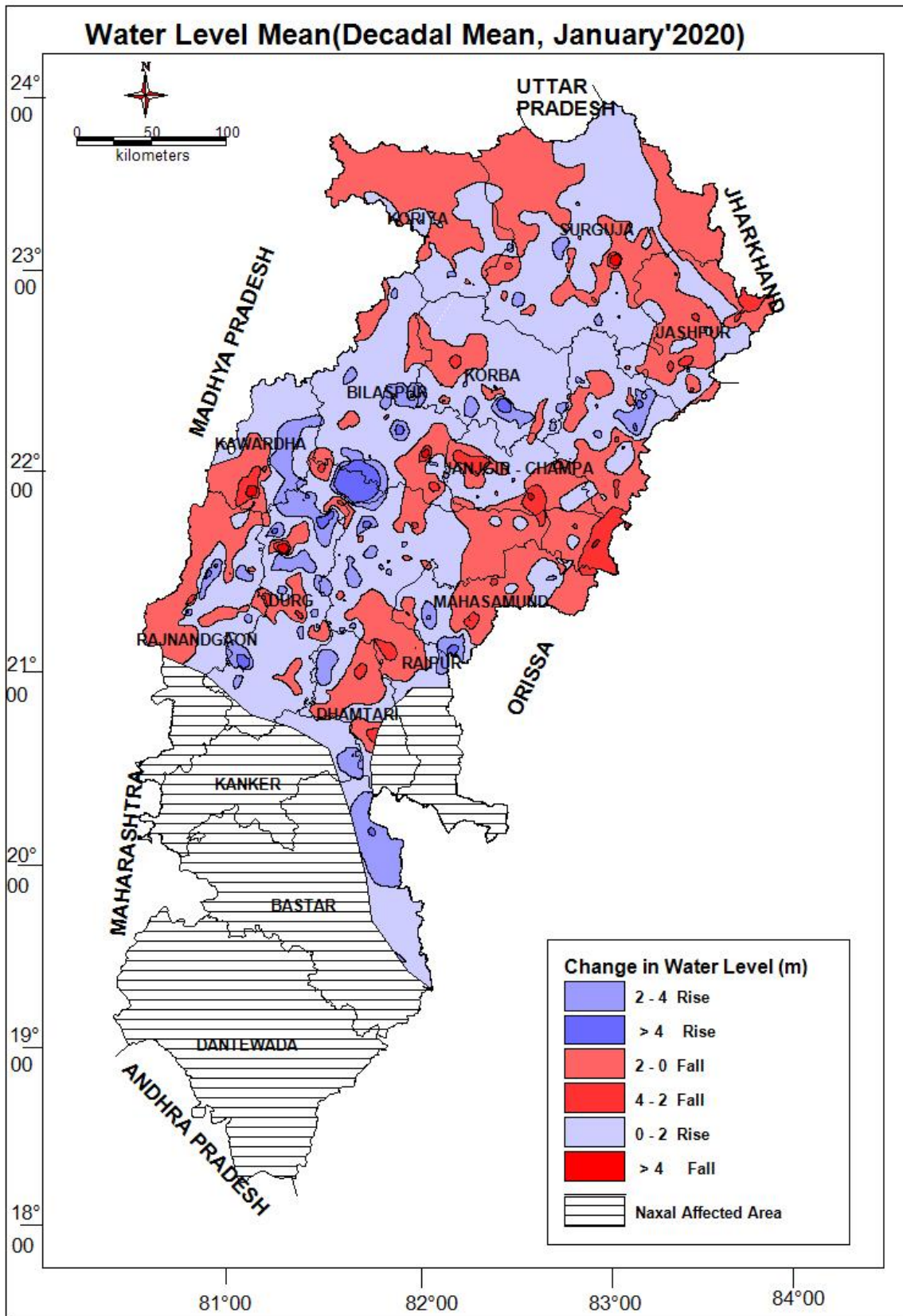


Fig 7.15 Depth to water level fluctuation (Decadal mean Jan 2010-2019 Vs Jan 2020)

7.5 Long Term Water Level Trend (2006-2015)

The long term water level trend (2006-2015) of the phreatic aquifer was plotted for both the pre and post monsoon periods. For the pre monsoon period, the major part of Chhattisgarh shows water level trend between -10 to +10 cm/yr which can be categorized as safe but many parts of Jashpur, Surguja, Korba, Janjgir- Champa, Kawardha, Rajnandgaon show significant falling trend of more than 20 cm/yr which is a cause of concern.

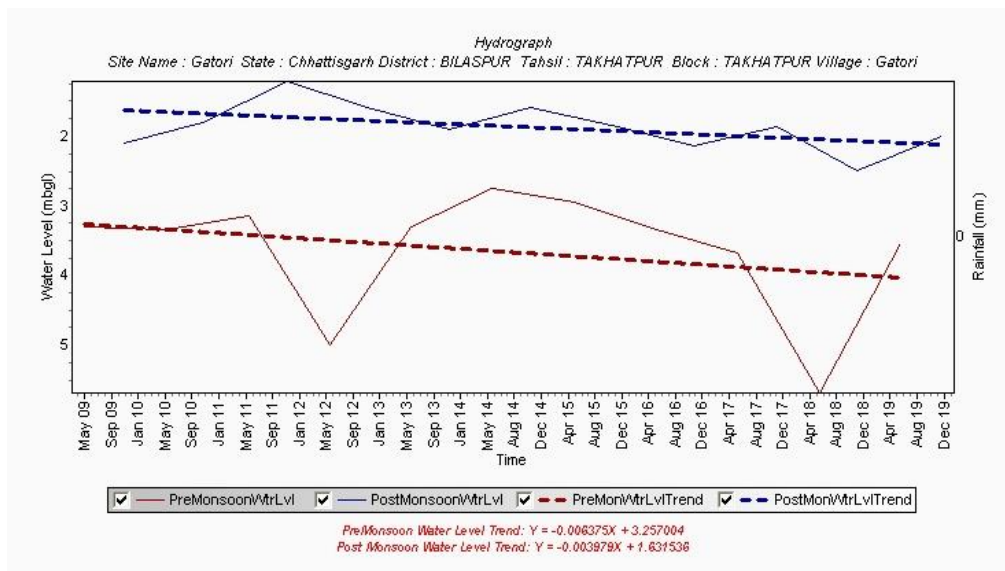


Fig 7.16 Hydrograph of Gatori village Monitoring Station, Bilaspur district

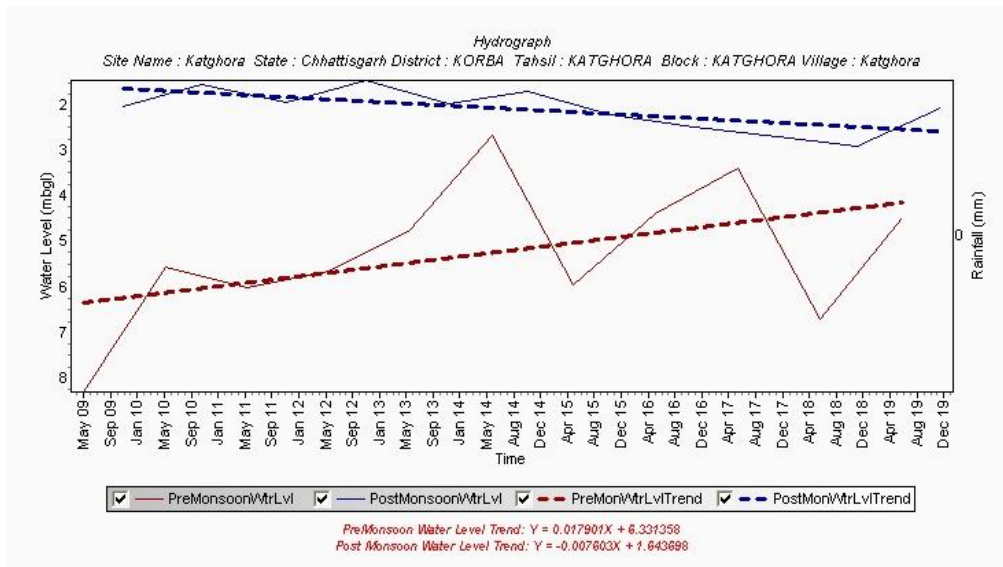


Fig 7.17 Hydrograph of Katghora Monitoring Station, Korba district

The post monsoon decadal water level trend map of the phreatic aquifer presents a more alarming picture (Fig 7.17). It shows large tracts of Surguja, Koriya, Jashpur, Kawardha, Rajnandgaon etc with significant decline in water level of more than 20 cm/yr during the last 10 years. This long term trend is also depicted from the individual hydrographs of network stations. Some representative hydrographs are given above.

8. GROUNDWATER QUALITY MONITORING

8.1 Factors controlling ground water quality

The factors contributing to the ground water quality are the chemical composition of the rainwater, the soil types and the mineralogy of the rock formations. The geochemical processes in the soil zone and in the underlying unsaturated and saturated zones, temperature, pressure, duration of contact of the percolating water and the surrounding media, and other associated factors determine the chemical composition of the ground water. Pollution from near surface sources arising out of the human activities like industrial wastes disposal, use of fertilizers, pesticides also influence the ground water quality.

Climate and precipitation: The temperature and precipitation influence weathering, climate, vegetation, soil types and the composition of the water draining the area. The rainwater containing SiO_2 , CO_2 , O_2 picks up organic acids after reaching the earth's surface and reacts with the minerals, which get dissolved. In humid temperate climate the bicarbonates are predominant and are rather high in arid climate. The wet and dry climate promotes release of considerable soluble inorganic matter through weathering. Very cold climate inhibits weathering and restrict solute concentration in water.

Soil forming process: The geochemical reactions involved in the soil forming processes also dictate the chemical composition of the ground water. In soils dissolution of CO_2 and the H^+ , HCO_3^- , CO_3^{2-} ions in percolation water control pH of water and thereby increasing its capacity to react with rocks and minerals.

Geological factors: The mineral constituents in rock influence the geochemical evolution of water passing through the rock. The mineralogical sources of major ions are listed in **Table 8.1**

Table 8.1: Mineralogical Sources of Major Chemical Constituents

<u>Chemical constituents</u>	<u>Source Minerals</u>
Silica	Feldspars, Feldspathoids, Amphiboles, Pyroxenes, Mica.
Iron	Pyroxenes, Amphiboles, Mica, Pyrites, Chalcopyrite, Magnetite and Haematite.
Mn	Common Mn. bearing minerals in metamorphic & sedimentary rocks as oxides, hydroxides, carbonates, silicates.
Ca	Plagioclase, Pyroxene, Amphibole, among igneous and metamorphic rocks. Limestone, dolomite, gypsum among sedimentary rocks.
Mg	Dunites, Pyroxenites, Amphibolites, Basalt, Talc, Tremolite Schists, Dolomite.
Na	Sodium salts in soils, sea water ingress, ground water, also due to base exchange reactions with clays.
K	Orthoclase, Microcline, Nepheline, Lucite, Biotite in igneous and metamorphic rocks, Evaporites in sedimentary rocks.
HCO ₃ & CO ₃	Dissolved CO ₂ in rains, water charged with CO ₂ dissolves carbonate minerals, in solid rocks to give bicarbonate.
SO ₄	Sulphides of heavy metals igneous and metamorphic rocks. Gypsum and hydrite in sedimentary rocks.
Cl	Atmospheric sources and sea water contamination.

Human activities: The untreated industrial effluents discharged through nearby streams and unlined drains may percolate underground and reaches the aquifers on the downstream side thereby affecting the quality of ground water. The migration of the pollutant to the saturated zone is considerable in sandy strata. The urban areas in India also generate substantial quantity of wastewater and find its way into the natural water courses causing contamination of surface and ground water. The solid waste dumped in low-lying areas becomes a potential source of ground water pollution.

Organic and inorganic fertilizers, pesticides, insecticides and other chemicals used in the agricultural fields are often leached to the ground water. Nitrate, potassium and phosphate are the common fertilizer used in agriculture land and are the potential pollutants in the ground water. The major contaminants associated with the waste disposal practices are summarized in **Table 8.2**.

Table 8.2: Contaminants Associated with the Waste Disposal Practices

Source	Possible contaminants
Landfills:	
Municipal	Heavy metals, chlorides, sodium, calcium
Industrial	Wide variety of inorganic and organic constituents.
Hazardous waste disposal sites	Wide variety of inorganic (particularly heavy metals) and organic compounds (pesticides, priority pollutants, etc).
Liquid waste storage ponds (Lagoons, leaching ponds, compounds reaching basins)	Heavy metals, Solvents, inorganic, Compounds
Subsurface sewage disposal systems	Organic compounds (degreasers, solvents), nitrogen compounds, sulphates, sodium, microbiological contaminants.
Deep-well waste injection.	Variety of inorganic and/or organic compounds.
Agricultural activities.	Fertilizers, herbicides, pesticides.
Land application (sludge, wastewater)	Heavy metals, inorganic compounds, organic compounds.
Urban runoff infiltration.	Inorganic compounds, heavy metals, petroleum products.
Decaying activities.	Chlorides, sodium, calcium radioactivity.
Radioactive wastes.	Radioactive wastes and radionuclides.

8.2 Hydrochemical quality evolution

As ground water moves along the flow paths in the saturated zone, it is enriched with total dissolved solids and with major ions. The shallow zone is characterized by active ground water flushing through relatively well-leached rocks has HCO_3^- as the dominant anion and is low in total dissolved solids. The intermediate zone has less active ground water circulation, and higher total dissolved solids while sulphate is normally the dominant anion in this zone. The lower zone with very little ground water flushing has high Cl^- concentration and high total dissolved solids. The HCO_3^- content in ground water is normally derived from soil zone CO_2 and from dissolution of calcite and dolomite. There are several soluble sedimentary minerals that release SO_4^- or Cl^- upon dissolution. The process of evolution from stage to stage is controlled by the availability of minerals along the ground water flow paths. In some ground water flow system, the water does not evolve past the HCO_3^- stage or past the SO_4^- .

The notable in this regard is the increase in HCO_3^- and decrease in SO_4^- that can occur as a result of biochemical SO_4^- reduction. Large variations in major cations occur in ground water flow systems because of cation exchange process.

8.3 Ground water quality sampling

The purpose of ground water quality sampling is varied viz. evaluation of regional water quality, detection and assessment of the extent of the contaminant release. In this context the important attributes are location and number of monitoring wells for ground water sampling. The information from the ground water sampling network is related to the number of stations to be sampled and the frequency of sampling. Due to slow rate of ground water movement, the ground water quality does not change rapidly. Similarly, in contrast to unconfined aquifers, the quality change in confined aquifer is rather slow.

Sample location: The factors that influence sampling location are site geology, hydrology, source characteristic, contaminant characteristic and size of the area under investigation. The degree and details of temporal and spatial variations, which also characterize sub-surface hydrogeochemical conditions, are also considered. The existing wells may be used to gather information on the regional ground water quality and ambient trends. Disused wells are not selected for water sampling. Hydrogeological information on ground water flow paths and gradients will initially guide the sampling network. The vertical control of sampling location is another important factor for sampling the ground water.

Sampling frequency: More the water quality varies, the more samples will be required to obtain reliable estimate of statistical parameters used to describe its behavior. Variance should determine sampling frequency. The commonly used statistical parameter for water quality variable in selecting sampling frequencies is the “mean”. The approach is to select a sampling frequency, which yields an estimate of the “mean” within a prescribed degree of accuracy (confidence limits). The “population mean” of random variable will lie within a certain interval (the confidence interval) around the “sample mean”. The confidence limit on the mean quantitatively relates sampling frequency to the variation in water quality.

The simplest case of sampling frequency design would be to select the sampling frequency, which results in the desired confidence intervals width about the annual mean for a specified water quality variable at a specified station.

In case of single station and multiple variable separate sampling frequencies for each water quality variable may be computed and then all such values averaged to decide the designed frequency.

In general, changes in the ground water quality take place much slower than the surface water quality. Experience shows that the changes in ground water quality usually can be described satisfactorily by seasonal or annual sampling schedules. Studies corroborate that the quality of the ground water outside the influence of the polluting sources, hardly shows any short-term changes. Hence, the current annual sampling schedule in the month of May serves the purpose of regional background monitoring and for study of long-term quality changes.

8.4 Results and Discussion

The chemical quality of ground water was determined from 933 water samples collected from the National Hydrograph Stations distributed throughout Chhattisgarh. These samples were collected during the month of May 2018 in the pre monsoon period, when the concentrations of ions were maximum. The water samples were analyzed for the major ions viz. pH, EC, CO₃, HCO₃, Cl, SO₄, F, TH, Ca, Mg, Na, K, PO₄ and Si. The obtained chemical analysis results are computed from statistical parameters like minimum, maximum and average value and given in **Table 8.3 and 8.4**.

The Chemical analysis results reveals the lowest pH value 6.1 was recorded at Gunderdehi village of Durg district and highest pH value 8.28 was recorded at Rakhi (Joba) village of Dhamdha block of Durg district. The highest conductivity value 2730 μ S/cm at 25°C was recorded at Patharia village of Bemetra district and lowest conductivity 52 μ S/cm at 25°C was recorded at Samarumi village of Tamnar Block Raigarh district (**Figure 8.1**). The minimum hardness 15 mg/l was recorded at Hanumangarh village of Ramanujnagar of Surguja district and maximum total hardness 1100 mg/l was observed at Jhalam village of Bemetra district. The minimum calcium concentration 04 mg/l was recorded at Hanumangarh village, of Surguja district and maximum calcium concentration 670 mg/l was observed at Sagona village, Saja block of Bemetra district. The highest magnesium concentration 216 mg/l was recorded at Tuman village, Kartala block of Korba district and lower most magnesium

concentration < 1 mg/l was observed at Gariyabandh village, Dharamjaighar block of Raigarh district. The minimum sodium concentration 0.8 mg/l was recorded at Balachhappar village of Jashpur district and maximum sodium concentration 210mg/l was recorded at Patharia village of Mungeli district. The highest potassium concentration 132 mg/l was recorded at Janjgiri village of Durg district and lowest potassium concentration was recorded at Delirajhara of Balod district. The carbonate alkalinity was recorded only at Rakhi village, Dhamdha block of Durg district. The lowest chloride concentration 3.6 mg/l was recorded at Rajpurikhurd village, Ambicapur block of Surguja district. Highest chloride concentration 504 mg/l was recorded at Tarkori village, Dhamdha block of Durg district. The high sulphate content was recorded in some locations of Bilaspur, Bemetra, Kawardha, Korba, Mungeli, Durg and Raigarh district. The highest concentration 1012 mg/l was recorded at Sagona village, Saja block of Bemetra district (**Figure 8.2**). The high fluoride content (> 1.5 mg/l) was observed in 20 ground water samples most of these were collected from of Raighr, Korba, Bilaspur, Mahasamund and Jashpur district. The highest fluoride concentration 3.19 mg/l was recorded at Hamunanghar village, Ramanujnagar of Surguja district (**Figure 8.3**). Around 5.5 % of ground water (51 samples) in the state having nitrate concentration is above the permissible limit (>45 mg/l). The highest nitrate concentration 176.2 mg/l was recorded at Chorbhati village, Pathariya block of Mungeli district.

The Chemical analysis results of heavy metals shows that the no chromium was observed in ground water samples were collected in NHS wells in Chhattisgarh. At 187 locations manganese was recorded in collected water samples. The highest concentration 1.97 was recorded at Khodri village, Sonhat block of Koriya district. In 10% of the locations i.e 92 nos, of water samples, were iron concentrations was recorded above the permissible limit (>1.0 mg/l) in the ground water of Chhattisgarh. At 11 locations zinc concentration was recorded > 5 mg/l. In two locations high concentration > 15 mg/l zinc was recorded at Kanekera and Jhalkhanhariya 19.9 and 20.4 mg/l respectively. Only at one location i.e. Borgaon village, Pharasgaon of Kondagarh district were high copper concentration (0.24 mg/l) has recorded. In 07 location high nickel > 0.02 mg/l recorded in Chhattisgarh State, mainly observed in Raigarh, Koriya and Korba district. The lead contamination was observed in few

locations of Korba, Raigarh, Bilaspur, Kankar and Kondagaon district. High value of arsenic 0.01 mg/l was recorded in 8 locations of Koriya, Raigarh and Raipur district. The highest value was observed at Borgaon village of Pharsagaon block at Kondagaon district. In 12 locations high uranium content > 30 µg/l recommended by The United States Environmental Protection Agency (USEPA 2000) and World Health Organisation (WHO, 2011, 4th ed) for drinking propose is observed in ground water of Bilaspur Kanker, Jashpur, Korba, Mungeli and Surguja districts of Chhattisgarh.

Parameter	Unit	Min	Max	Average	BIS 2012 drinking water range
pH		6.1	8.3	7.3	6.5-8.5
EC	µS/cm at 25 °C	4.3	2730.0	582.2	Not recommended
TH as CaCO ₃	in mg/l	15	1100.0	201.3	300-600
Ca		4	670.0	53.3	75-200
Mg		0	216.0	19.7	30-75
Na		0.8	210.0	35.6	Not recommended
K		0.01	132.4	5.5	Not recommended
TA as CaCO ₃		0	0.3	0.0	250-600
HCO ₃		18	769.0	182.9	Not recommended
Cl		1	504.1	59.0	250-1000
SO ₄		0	1012.3	37.4	200-400
F		0	3.2	0.4	1.0-1.5
Si		0.1	47.3	14.1	Not recommended
PO ₄		0	3.6	0.1	Not recommended

Parameter	Unit	Min	Max	Average	BIS 2012 drinking water range
Cr	ppm	0.0	0.0	0.0	0.05 - No relaxation
Mn		0.0	2.0	0.2	0.1 - 0.3
Fe		0.1	58.7	2.0	0.3 - 1.0
Ni		0.0	0.0	0.0	0.02 - No relaxation
Cu		0.2	0.2	0.2	0.05 - 1.5
Zn		0.5	20.4	2.0	5.0 - 15.0
As	ppb	1.0	35.4	4.4	10.0 - 50.0
Se		0.0	0.0	0.0	10 - No relaxation
Ag		0.0	0.0	0.0	1 - No relaxation
Cd		0.0	0.0	0.0	0.3 - No relaxation
Pb		1.0	45.8	3.8	10 - No relaxation
U ppb		0.0	138.2	2.6	30 - No relaxation

In Balod district little salty water is recorded in few locations and high potassium and iron concentration has also observed in some places. In Rest of the area ground water is portable in Balod district. In Balodabazar district all the analyzed parameters are within the BIS prescribed range for the drinking. In Balrampur district ground water quality is portable. In Baster district ground water quality is portable for analyzed parameters. In Bemetara district high conductivity value has recorded in some of the locations. High sulphate concentration and high degree of hardness has also recorded in some of the locations at Bemetara district. Comparatively high conductivity value has observed in some of the places in Bilaspur district. In this location high degree of total hardness and alkalinity has also observed in groundwater. High fluoride, iron and uranium concentration has also recorded in isolated place in the district. In rest of the area ground water is portable at Bilaspur district. In Dhamtari district ground water is portable for the analyzed parameters in most of the locations except in isolated location were high fluoride, nitrate and iron is recorded in ground water. In Durg district at few locations high conductivity value has observed. At some locations high places high chloride, sulphate, potassium, iron, nitrate and high degree of hardness has recorded in ground water. Over all ground water is portable in most of the locations in Durg district. In Gariyabandh district at some locations high fluoride concentration has observed in ground water in rest of the locations ground water is portable. In Janjgir - Champa district at few locations iron, nitrate and high degree of hardness is observed in ground water. In rest of the locations ground water is portable. In Jashpur district high fluoride, iron concentration is observed in ground water and in rest of the locations ground water is portable. In Kankar district ground water is suitable for drinking purpose in most of the locations for the analyzed parameters except in few location uranium, iron, lead was recorded in ground water. In Kawardha district ground water is portable for drinking in most of the places except in few places were high sulphate concentration and total hardness has observed in groundwater. In Kondagaon district high fluoride and lead concentration is observed in some of the locations, except this the ground water is portable in the district. In Korba district at few place high conductivity value, high fluoride, iron nitrate, lead and uranium concentration and high total hardness is observed in ground water in rest of the locations it is suitable for drinking purpose for the analyzed parameters. In Koriya district high fluoride, iron, arsenic concentration and high hardness is observed in

isolated patches. In rest of the location groundwater is suitable for drinking. In Mahasamund district high iron, nitrate and fluoride concentration is observed in groundwater at isolated patches. Rest of the analyzed parameters is within BIS drinking water prescribed rang at the Mahasamund district. In Mungeli district high total hardness and high alkalinity is observed in some locations. High iron, uranium and nitrate is also recorded at few locations and in rest of the location's groundwater is portable for analyzed parameters. In Raigarh district high fluoride, iron, nitrate, lead concentration is recorded in some of the places and rest of the analyzed parameters are within the BIS prescribed rang. In Raipur district iron, arsenic, fluoride and nitrate was observed in groundwater is portable for the analyzed parameters. In Surguja district high fluoride, iron and uranium concentration is recorded in few of the locations. Other than this all the analyzed parameters are within the BIS prescribed range for the drinking purpose.

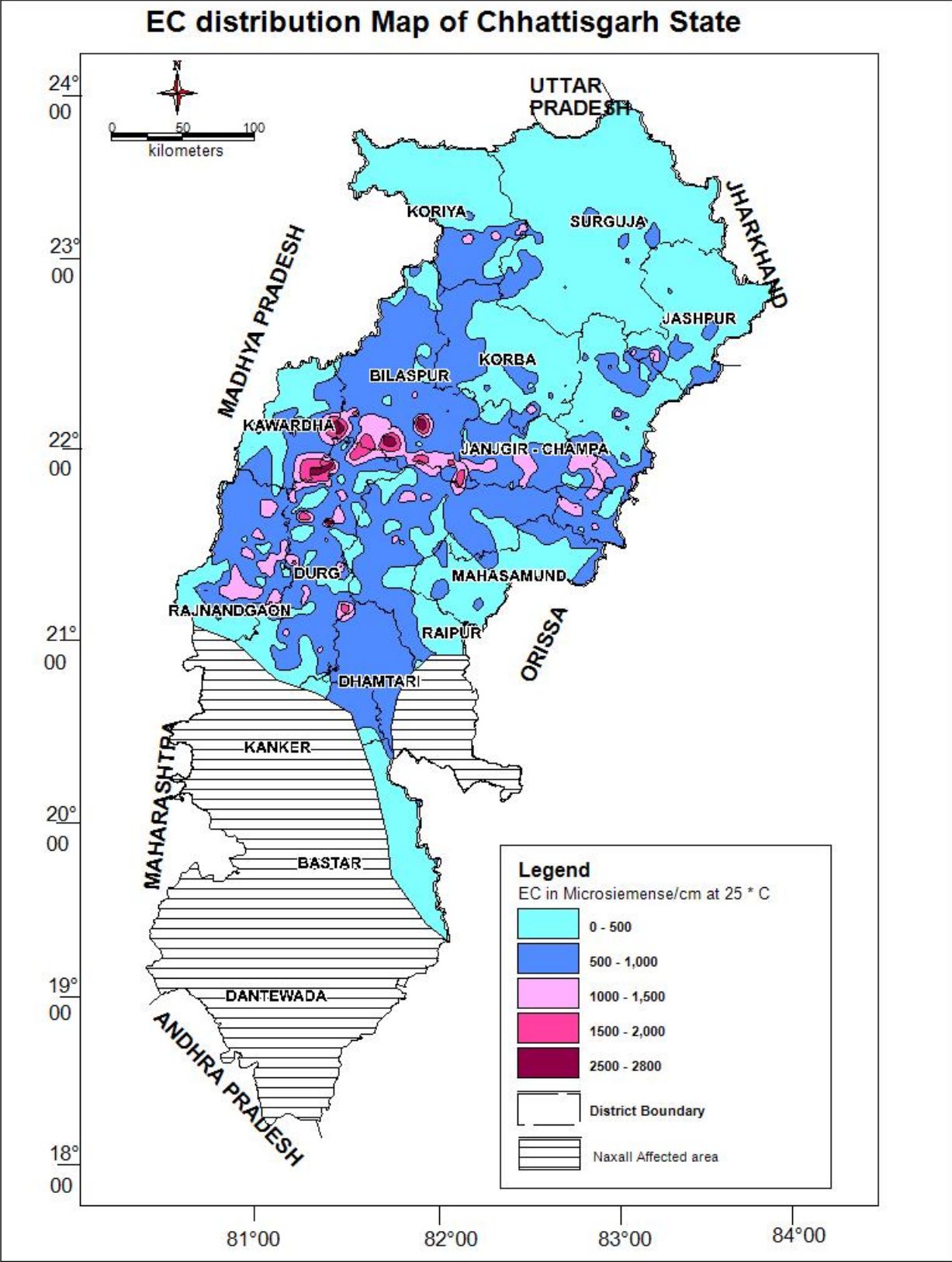


Fig 8.1 EC distribution in Chhattisgarh State

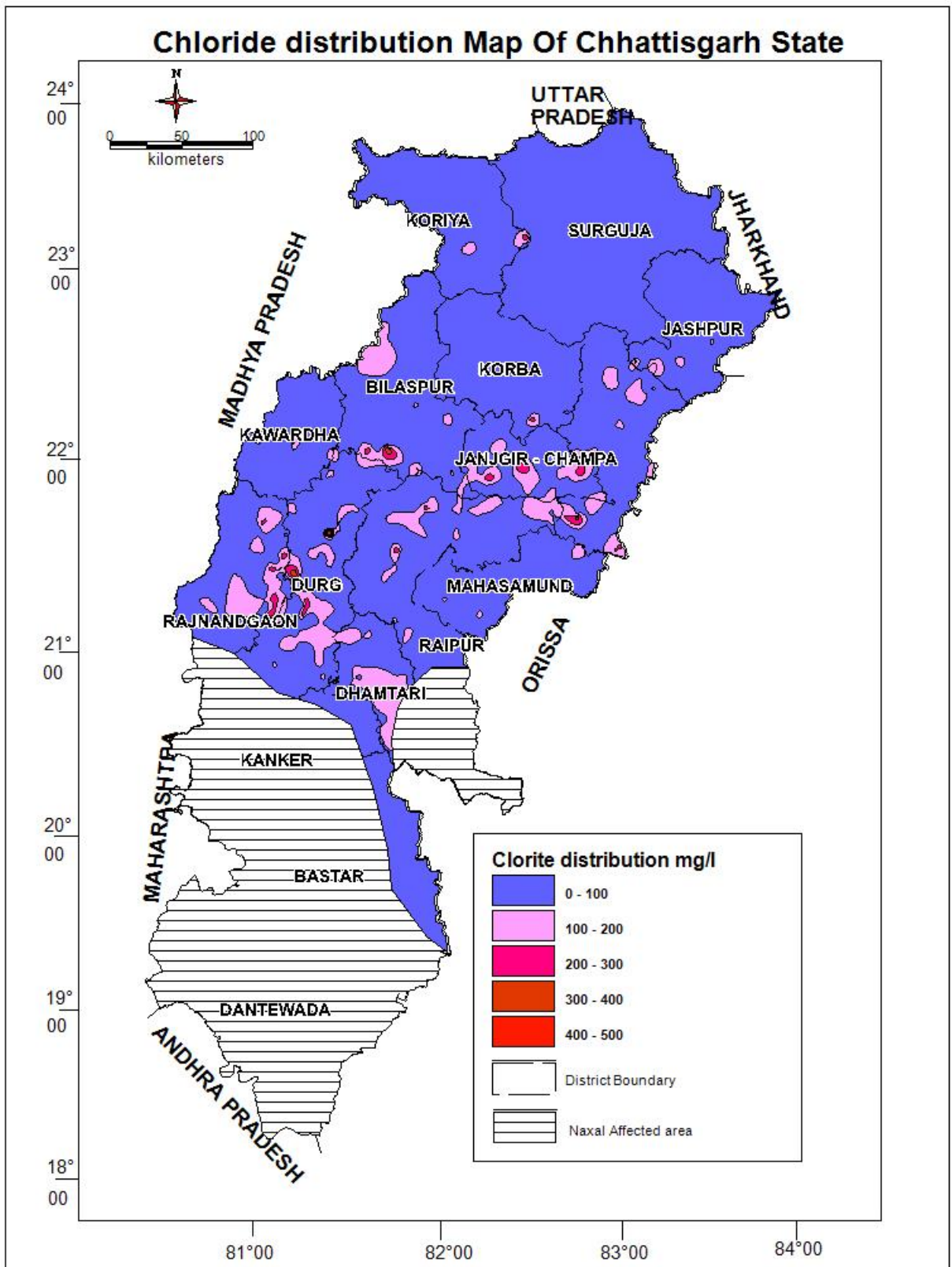


Fig 8.2 Chloride distribution in Chhattisgarh State

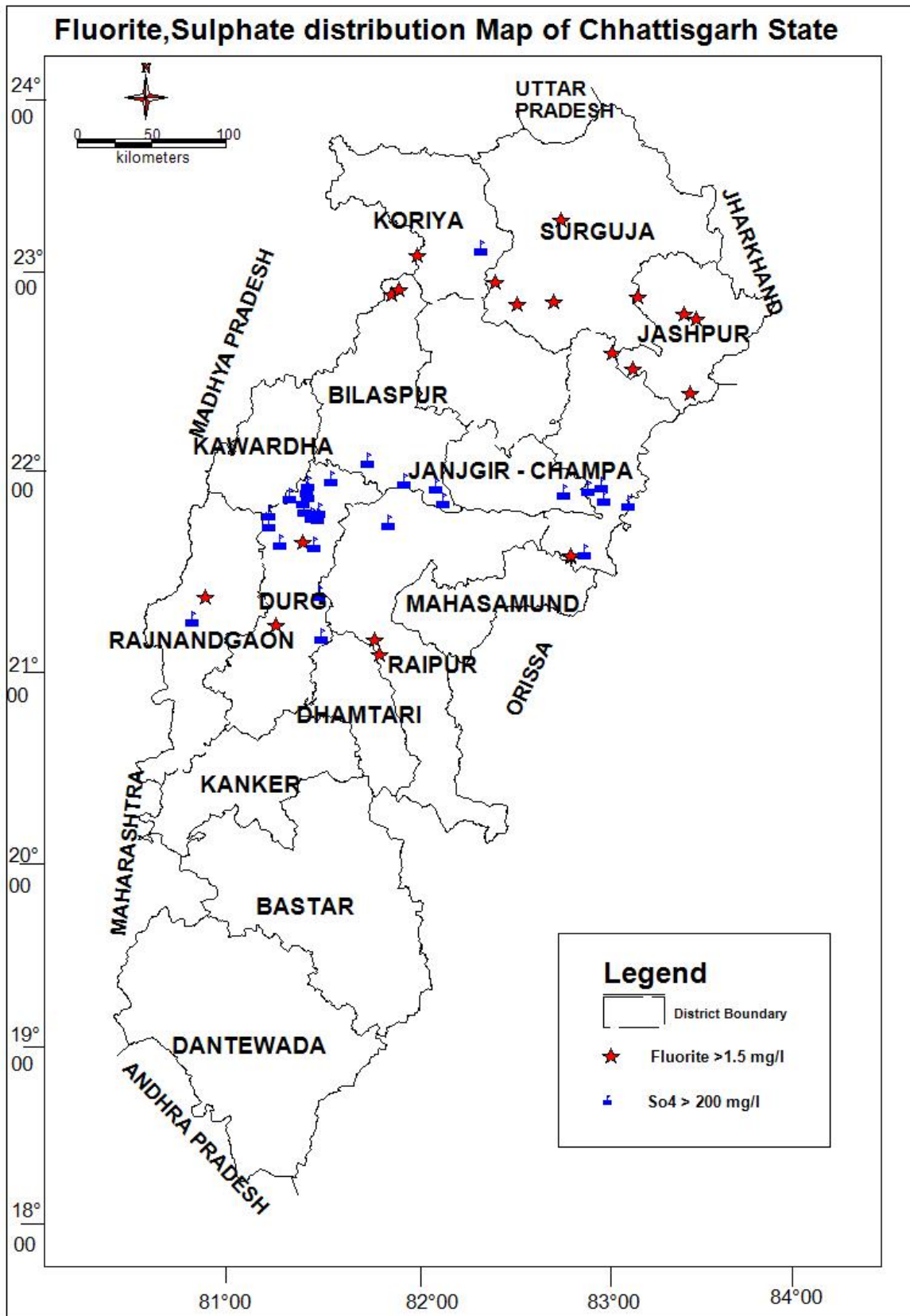


Figure 8.3 Fluorite and Sulfate distribution in Chhattisgarh State

ANNEXURE I DEPTH TO WATER LEVEL (DTW) OF NATIONAL HYDROGRAPH STATIONS

Location	Block	District	Basin	Depth	DTW May 2019	DTW August 2019	DTW November 2019	DTW January 2020	Aquifer
Pharasgaon	Baderajpur	Bastar	Godavari	15	7.15	4.2	2.2	3.1	Basement Gneissic Complex
Jaitpuri	Pharasgaon	Bastar	Mahanadi	10	8.2	4.65	3.56	5	Basement Gneissic Complex
Lanjora	Pharasgaon	Bastar	Godavari	11	9.25	5.2	4	6.1	Basement Gneissic Complex
Kulhadhgaon	Pharasgaon	Bastar	Mahanadi	11	3.55	1.4	—	2.5	Basement Gneissic Complex
Belgaon	Makdi	Bastar	Godavari	7.2	—	—	—	3.1	Basement Gneissic Complex
Dahikonga	Kondagaon	Bastar	Godavari	13.58	12.5	4	3.85	9	Basement Gneissic Complex
Massaukokada	Kondagaon	Bastar	Mahanadi	13	7.3	3.15	2.32	3.3	Basement Gneissic Complex
Borgaon	Kondagaon	Bastar	Mahanadi	14	9.6	4.6	2.43	7.8	Basement Gneissic Complex
Kondagon New	Kondagaon	Bastar	Godavari	9.1	2.7	—	—	2.5	Basement Gneissic Complex
Surkupal	Kondagaon	Bastar	Mahanadi	10	6.35	1.45	1.82	3.8	Basement Gneissic Complex
Joba	Kondagaon	Bastar	Godavari	8	7.8	1.8	2.3	4.4	Sandstone with Shale
Sonarpal	Bastar	Bastar	Godavari	10	5.65	2.45	1.45	2.15	Dolomite/Limestone
Farsaguda	Bastar	Bastar	Mahanadi	12	2.15	1.12	2.38	2.4	Sandstone with Shale
Bhanpuri	Bastar	Bastar	Godavari	6.55	2.8	4.6	—	2.65	Dolomite/Limestone
Chitrakot	Londigura	Bastar	Godavari	9.9	4.7	3.35	2.36	4.6	Sandstone with Shale
Usri Bera	Londigura	Bastar	Godavari	11.7	9.4	4.5	1.19	4.9	Shale with Limestone
Dewargaon	Jagdapur	Bastar	Mahanadi	12.5	4.5	2.2	—	2.05	Basement Gneissic Complex
Kumharwand	Jagdapur	Bastar	Godavari	9.5	1.95	1.2	1.55	1	Shale with Limestone
Bastar	Jagdapur	Bastar	Godavari	14	11.05	2	2.5	4.75	Shale with Limestone
Jagdapur-s PZ	Jagdapur	Bastar	Godavari	28.07	10.9	—	—	—	Shale with Limestone
Jagdapur	Jagdapur	Bastar	Godavari	11	4.7	2.6	4.7	2.15	Shale with Limestone
Markel	Jagdapur	Bastar	Godavari	9.86	2.1	0.85	2.6	4.45	Shale with Limestone
Chhapan Bhanpuri	Tokapal	Bastar	Godavari	10.2	—	—	1.83	—	Shale with Limestone
Bare arapur	Darbha	Bastar	Godavari	20	—	—	2.5	—	Sandstone, conglomerate
Chapra Bhanpuri	Keshkal	Bastar	Mahanadi	9	3.3	—	0.93	—	Dolomite/Limestone
Garaka	Keshkal	Bastar	Mahanadi	9.54	8.85	6.8	—	4.7	Basement Gneissic Complex
Batrail	Keshkal	Bastar	Mahanadi	9.07	7.2	2	2.25	—	Basement Gneissic Complex
Keskal New	Keshkal	Bastar	Mahanadi	21	9.4	—	—	—	Basement Gneissic Complex
Keskal	Keshkal	Bastar	Mahanadi	9	—	2.8	3	5.8	Basement Gneissic Complex
Adbhar	Gourela (Pendarod)	Bilaspur	Mahanadi	11	7.12	3.14	4.82	—	Sand Stone with Shale
Dam Dam	Gourela (Pendarod)	Bilaspur	Mahanadi	10	7.19	—	—	7.8	Basement Gneissic Complex
Dharhar	Gourela (Pendarod)	Bilaspur	Mahanadi	12.35	10.81	—	—	—	Basement Gneissic Complex
Keonchi	Gourela (Pendarod)	Bilaspur	Mahanadi	10.56	7.45	2.45	5.08	4.45	Basement Gneissic Complex
Rupandand	Gourela (Pendarod)	Bilaspur	Mahanadi	4.8	4.7	4.7	—	—	Basement Gneissic Complex
Pendra Road	Gourela (Pendarod)	Bilaspur	Lower Ganges	50	8.9	—	—	—	Basement Gneissic Complex
Piparkhuti	Gourela (Pendarod)	Bilaspur	Mahanadi	7	7	2.34	4.11	—	Basement Gneissic Complex
Gaurela	Gourela (Pendarod)	Bilaspur	Lower Ganges	8.79	7.8	2.18	3.15	—	Basement Gneissic Complex
Sewra	Gourela (Pendarod)	Bilaspur	Lower Ganges	8.8	—	—	—	6.14	Basement Gneissic Complex
Amadob	Lormi	Bilaspur	Mahanadi	9.15	3.64	2.34	4.92	—	Limestone with Shale
Rajpur	Lormi	Bilaspur	Mahanadi	7.2	7.2	2.68	3.61	—	Limestone with Shale
Chandli	Lormi	Bilaspur	Mahanadi	9.3	9.2	5.64	6.36	7.38	Limestone with Shale
Jhupal	Lormi	Bilaspur	Mahanadi	11	4.5	2.07	3.38	—	Limestone with Shale
Pali	Lormi	Bilaspur	Mahanadi	9.8	9	3.12	4.76	—	Limestone with Shale
Godkhami	Lormi	Bilaspur	Mahanadi	9.2	9.2	4.48	5.2	—	Limestone with Shale
Achanakmar PZ	Lormi	Bilaspur	Mahanadi	40.25	40	—	—	—	Undifferentiated metasedimentaries
Bindabal	Lormi	Bilaspur	Mahanadi	13.5	10.12	6.48	8.1	4.72	Undifferentiated metasedimentaries
Tilaidabra	Lormi	Bilaspur	Mahanadi	10.8	7.06	1.15	4.5	2.28	Undifferentiated metasedimentaries
Attaria	Lormi	Bilaspur	Mahanadi	11.5	8.18	3.14	5.61	3.35	Basement Gneissic Complex
Lamni	Lormi	Bilaspur	Mahanadi	16	15	—	—	8.3	Basement Gneissic Complex
Achanakmar1	Lormi	Bilaspur	Mahanadi	10.3	10.2	5.48	6.71	3.92	Undifferentiated metasedimentaries

Location	Block	District	Basin	Depth	DTW May 2019	DTW August 2019	DTW November 2019	DTW January 2020	Aquifer
Barighat	Lormi	Bilaspur	Mahanadi	13.08	11.93	5.1	6.11	6.9	Undifferentiated metasedimentaries
Lormi1	Lormi	Bilaspur	Mahanadi	4.95	4.95	3.16	4.65	3.75	Limestone with Shale
Tenduwa	Kota	Bilaspur	Mahanadi	11.1	8.37	–	3.26	–	Limestone with Shale
Jhingatpur	Kota	Bilaspur	Mahanadi	9.1	6.26	1.81	3.41	3	Basement Gneissic Complex
Khaira New	Kota	Bilaspur	Mahanadi	10	5.28	–	–	1.6	Basement Gneissic Complex
Ghansipur-Sainik Camp	Kota	Bilaspur	Mahanadi	23	4.43	2.52	2.9	–	Basement Gneissic Complex
Shripara	Kota	Bilaspur	Mahanadi	12	9.86	2.1	3.8	4.44	Basement Gneissic Complex
Shivtarai New	Kota	Bilaspur	Mahanadi	10.5	8.64	–	–	–	Basement Gneissic Complex
Saraipalli	Kota	Bilaspur	Mahanadi	11.3	10.15	3.35	4.11	3.47	Basement Gneissic Complex
Banabel	Kota	Bilaspur	Mahanadi	15	4.18	1.7	2.46	3.1	Undifferentiated metasedimentaries
Belgahana	Kota	Bilaspur	Mahanadi	11	6.36	1.85	4.18	–	Undifferentiated metasedimentaries
Nawapara	Kota	Bilaspur	Mahanadi	9.82	4.71	1.52	2.87	0.5	Undifferentiated metasedimentaries
Pandra Patha	Kota	Bilaspur	Mahanadi	7.31	6.11	2.1	3.44	–	Undifferentiated metasedimentaries
Nawadih	Kota	Bilaspur	Mahanadi	10.8	6.1	1.36	4.9	2.66	Undifferentiated metasedimentaries
Mendrapara Ratanpur	Kota	Bilaspur	Mahanadi	12	10	–	–	4.85	Basement Gneissic Complex
Bansajhal	Kota	Bilaspur	Mahanadi	8.33	2.52	1.16	3.2	2.3	Basement Gneissic Complex
Kanchanpur	Kota	Bilaspur	Mahanadi	15	8.71	1.45	3.94	2.35	Basement Gneissic Complex
Kenda	Kota	Bilaspur	Mahanadi	10.9	7.31	1.2	3.38	6.95	Basement Gneissic Complex
Saudhakhurd	Kota	Bilaspur	Mahanadi	7.9	4.41	1.96	3.42	1.6	Basement Gneissic Complex
Jogipur	Kota	Bilaspur	Mahanadi	12.1	12	3.09	7.39	–	Basement Gneissic Complex
Kota(kargi)	Kota	Bilaspur	Mahanadi	19.82	6.3	11.46	1.45	1.94	Sandstone, conglomerate
Ratanpur	Kota	Bilaspur	Mahanadi	10.78	10	4.7	3.17	–	Basement Gneissic Complex
Kargikhurud	Kota	Bilaspur	Mahanadi	13.1	13	3.44	4.18	8.4	Limestone with Shale
Chhatauna	Kota	Bilaspur	Mahanadi	6	6	1.8	3.48	–	Dolomite/Limestone
Pendari	Takhatpur	Bilaspur	Mahanadi	12.55	11.47	–	6.69	–	Shale with Limestone
Takhatpur	Takhatpur	Bilaspur	Mahanadi	13.5	13.5	4.66	4.12	2.9	Shale with Limestone
Khamharia1	Takhatpur	Bilaspur	Mahanadi	17	15	4.18	5.9	3.66	Shale with Limestone
Takhatpur.1	Takhatpur	Bilaspur	Mahanadi	10	5.82	2.42	3.9	–	Shale with Limestone
Ganiyari new	Takhatpur	Bilaspur	Mahanadi	89	36.43	–	28.55	–	Limestone with Shale
Ganiyari.2	Takhatpur	Bilaspur	Mahanadi	11.4	4.46	2.27	4.64	–	Limestone with Shale
Ganiyari	Takhatpur	Bilaspur	Mahanadi	22	5.2	8.35	4.42	2.85	Limestone with Shale
Sipat	Takhatpur	Bilaspur	Mahanadi	16.4	11	5.25	6.94	3.5	Limestone with Shale
Kuli	Takhatpur	Bilaspur	Mahanadi	9.32	9	2.13	3.81	4.15	Undifferentiated metasedimentaries
Gatori	Takhatpur	Bilaspur	Mahanadi	6.45	3.53	1.26	2	2.18	Limestone with Shale
Jaroundha	Takhatpur	Bilaspur	Mahanadi	12	7.1	4.5	5.27	–	Limestone with Shale
Udaypur	Takhatpur	Bilaspur	Mahanadi	7.8	7.7	3.14	5.1	–	Limestone with Shale
Beltara	Takhatpur	Bilaspur	Mahanadi	9.65	5.48	1.17	1.6	–	Undifferentiated metasedimentaries
Neora	Takhatpur	Bilaspur	Mahanadi	12.6	6.32	2.3	3.42	–	Limestone with Shale
Chhapparwa	Mungeli	Bilaspur	Mahanadi	9.1	9	6.1	7	–	Undifferentiated metasedimentaries
Chirhula	Mungeli	Bilaspur	Mahanadi	16	4.05	2.19	4.1	1	Shale with Limestone
Mungeli	Mungeli	Bilaspur	Mahanadi	13.5	13.5	–	–	7.47	Shale with Limestone
Khamaria	Mungeli	Bilaspur	Mahanadi	10.04	8.72	3.1	7.32	–	Shale with Limestone
Daukapa	Mungeli	Bilaspur	Mahanadi	10.55	10.5	3.11	4.36	3.57	Shale with Limestone
Surada	Mungeli	Bilaspur	Mahanadi	13.5	13	2.26	7.19	–	Shale with Limestone
Sitalkunda	Mungeli	Bilaspur	Mahanadi	9.4	9.4	3.16	5.1	–	Shale with Limestone
Chatarkhar	Mungeli	Bilaspur	Mahanadi	13.5	13.5	4.9	5.31	–	Shale with Limestone
Kanteli.1	Mungeli	Bilaspur	Mahanadi	11.2	–	4.2	6.11	–	Limestone with Shale
Kanteli	Mungeli	Bilaspur	Mahanadi	10.95	10.81	–	–	–	Limestone with Shale
Chattan	Mungeli	Bilaspur	Mahanadi	9.2	9	4.35	6.2	–	Limestone with Shale
Matiyari	Mungeli	Bilaspur	Mahanadi	13.35	3.37	3.9	5.1	3.9	Limestone with Shale
Deori	Mungeli	Bilaspur	Mahanadi	9.3	9.2	3.51	5.13	7.15	Shale with Limestone
Fulwari	Mungeli	Bilaspur	Mahanadi	8.72	8.7	5.17	6.1	–	Limestone with Shale
Bartoli	Bilha	Bilaspur	Mahanadi	9.45	9.45	5.1	5.32	6.08	Dolomite/Limestone
Bohardi	Bilha	Bilaspur	Mahanadi	8	3.41	1.26	2.45	5.35	Shale with Limestone

Location	Block	District	Basin	Depth	DTW May 2019	DTW August 2019	DTW November 2019	DTW January 2020	Aquifer
Bilha	Bilha	Bilaspur	Mahanadi	13.7	11.52	5.03	5.02	8.5	Dolomite/Limestone
Chakarbhata	Bilha	Bilaspur	Mahanadi	18	18	-	-	-	Shale with Limestone
Bilaspur Lalkhadan	Bilha	Bilaspur	Mahanadi	16	7.87	-	-	12.84	Shale with Limestone
Madhanpur	Bilha	Bilaspur	Mahanadi	14.31	14.3	-	-	-	Shale with Limestone
Narmada Khapri	Bilha	Bilaspur	Mahanadi	9	9	-	-	-	Shale with Limestone
Hirri	Bilha	Bilaspur	Mahanadi	11.15	5.1	2.12	5.02	5.08	Dolomite/Limestone
Bitkuli	Bilha	Bilaspur	Mahanadi	13.2	13.2	-	-	-	Dolomite/Limestone
Amerikapa Tala	Bilha	Bilaspur	Mahanadi	8.44	8.4	4.97	4.18	-	Shale with Limestone
Dagauri	Bilha	Bilaspur	Mahanadi	11.38	7.02	4.65	4.62	4.61	Shale with Limestone
Chilhathi	Masturi	Bilaspur	Mahanadi	10.2	6.58	1.78	3.87	5.015	Dolomite/Limestone
Panchpedi	Masturi	Bilaspur	Mahanadi	10.4	10.4	3.48	4.5	-	Dolomite/Limestone
Kahronda	Masturi	Bilaspur	Mahanadi	10	10	1.97	0.48	-	Dolomite/Limestone
bakarkuda	Masturi	Bilaspur	Mahanadi	50	19.26	-	3.3	-	Dolomite/Limestone
Tikari	Masturi	Bilaspur	Mahanadi	12.2	6.36	2.35	4.78	1.19	Dolomite/Limestone
Bothidih	Masturi	Bilaspur	Mahanadi	13.1	9.28	3.14	4.15	4.32	Dolomite/Limestone
Masturi	Masturi	Bilaspur	Mahanadi	12	6.3	1.21	3.56	2.1	Dolomite/Limestone
Koni	Masturi	Bilaspur	Mahanadi	10.2	10	-	-	7.25	Dolomite/Limestone
Bakarkuda new	Masturi	Bilaspur	Mahanadi	11.05	-	11	3.77	6.1	Dolomite/Limestone
Malhar	Masturi	Bilaspur	Mahanadi	7.85	7.8	5.11	3.45	3.74	Dolomite/Limestone
Bisauri	Masturi	Bilaspur	Mahanadi	9.14	9.1	-	-	5.52	Dolomite/Limestone
Baitalpur	Pathariya	Bilaspur	Mahanadi	14.99	4.15	1.1	2.04	-	Shale with Limestone
Barcha	Pathariya	Bilaspur	Mahanadi	11.7	11.7	4.1	5.94	2.36	Shale with Limestone
Chandargarhi	Pathariya	Bilaspur	Mahanadi	8.9	5.75	2.65	3.42	2.3	Shale with Limestone
Patharia (chorbhatti)	Pathariya	Bilaspur	Mahanadi	15.4	4.18	1.48	3.91	2.78	Shale with Limestone
Larkeni	Marwahi	Bilaspur	Mahanadi	15	5.17	2.11	3.43	3.85	Shale with Limestone
Kotmi.1	Marwahi	Bilaspur	Mahanadi	17.75	17	3.2	-	-	Basement Gneissic Complex
Danikundi	Marwahi	Bilaspur	Lower Ganges	20	9.2	-	-	-	Basement Gneissic Complex
Tendumuda	Marwahi	Bilaspur	Lower Ganges	13.2	11.36	3.29	4.48	4.5	Sand Stone with Shale
Marwahi	Marwahi	Bilaspur	Lower Ganges	14.12	14.1	4.56	4.24	-	Sand Stone with Shale
Marwahi	Marwahi	Bilaspur	Lower Ganges	15	15	-	-	7.3	Sand Stone with Shale
Chchgohana	Marwahi	Bilaspur	Lower Ganges	8.93	6.52	2.35	5.09	4.9	Sand Stone with Shale
Seoni	Marwahi	Bilaspur	Lower Ganges	11.6	10.05	4.21	5.4	-	Basement Gneissic Complex
Pandri	Marwahi	Bilaspur	Mahanadi	6.09	6	3.65	4.3	0.9	Basement Gneissic Complex
Nimdha	Marwahi	Bilaspur	Lower Ganges	8.5	4.52	1.73	5.62	4.6	Basement Gneissic Complex
Lekhani	Marwahi	Bilaspur	Mahanadi	6.09	6	3.06	4.22	-	Basement Gneissic Complex
Dhanpur	Marwahi	Bilaspur	Lower Ganges	10.8	6.76	1.49	6.16	-	Basement Gneissic Complex
Tikthi	Marwahi	Bilaspur	Lower Ganges	12	7.8	2.1	4.56	6.2	Sand Stone with Shale
Shekhwa	Marwahi	Bilaspur	Lower Ganges	9	9	4.46	6.03	7.05	Basement Gneissic Complex
Sewra	Marwahi	Bilaspur	Lower Ganges	8.8	8.5	2.28	4.21	-	Basement Gneissic Complex
Singhpur	Magarlod	Dhamtari	Mahanadi	10.68	10	5.4	5.53	-	Sandstone,conglomerate
Budarao	Magarlod	Dhamtari	Mahanadi	8	5.25	1.77	2.26	4.2	Sandstone,conglomerate
Magarlod	Magarlod	Dhamtari	Mahanadi	12	8.06	3	4.52	5.84	Sandstone,conglomerate
Mulgaon	Magarlod	Dhamtari	Mahanadi	12	9.6	3.47	4.72	5.78	Sandstone,conglomerate
Banraud - I	Magarlod	Dhamtari	Mahanadi	7	7	2.48	2.57	5.1	Sandstone,conglomerate
Chhati	Dhamtari	Dhamtari	Mahanadi	10.65	2.06	0.82	0.86	1.58	Dolomite/Limestone
Puri	Dhamtari	Dhamtari	Mahanadi	7.45	4.65	0.82	0.65	3.04	Dolomite/Limestone
Shankarda	Dhamtari	Dhamtari	Mahanadi	7	0.92	0.74	1.8	2.57	Dolomite/Limestone
Rudri Chowk	Dhamtari	Dhamtari	Mahanadi	10	10	-	1.4	-	Sandstone,conglomerate
Bhoyana	Dhamtari	Dhamtari	Mahanadi	8.7	5.5	1.54	2.3	4.15	Sandstone,conglomerate
Seadei	Dhamtari	Dhamtari	Mahanadi	7.6	6.75	3.42	4.6	5.48	Sandstone,conglomerate
Gangrel	Dhamtari	Dhamtari	Mahanadi	11	3.3	10.38	2.46	2.82	Sandstone,conglomerate

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Marradev	Dhamtari	Dhamtari	Mahanadi	14	3.38	1.61	3.2	2.54	Sandstone,conglomerate
Arjuni	Sihawa (Nagri)	Dhamtari	Mahanadi	12.5	6.87	–	8.3	–	Basement Gneissic Complex
Belar Bahar	Sihawa (Nagri)	Dhamtari	Mahanadi	14	7.05	–	–	–	Basement Gneissic Complex
Arsi-kanhar	Sihawa (Nagri)	Dhamtari	Mahanadi	12	8	–	5.1	–	Basement Gneissic Complex
Dorgardula	Sihawa (Nagri)	Dhamtari	Mahanadi	11.21	3.2	9.68	6.9	8.82	Basement Gneissic Complex
Banspani	Sihawa (Nagri)	Dhamtari	Mahanadi	12.54	11.35	3.77	2.45	4.2	Basement Gneissic Complex
Nagri1	Sihawa (Nagri)	Dhamtari	Mahanadi	10.05	–	2.3	2.95	2.98	Basement Gneissic Complex
Farsiya	Sihawa (Nagri)	Dhamtari	Mahanadi	20	–	1.3	3.61	3.51	Basement Gneissic Complex
Birgudi	Sihawa (Nagri)	Dhamtari	Mahanadi	11	5	5.72	3.05	6.04	Basement Gneissic Complex
Amali	Sihawa (Nagri)	Dhamtari	Mahanadi	20	6.94	1.43	1.9	2.1	Basement Gneissic Complex
Kumhada	Sihawa (Nagri)	Dhamtari	Mahanadi	8.2	8	2.31	3.56	5.57	Sandstone,conglomerate
Keregaon	Sihawa (Nagri)	Dhamtari	Mahanadi	8	5.32	3.76	4	4.45	Sandstone,conglomerate
Jabarra	Sihawa (Nagri)	Dhamtari	Mahanadi	6.1	5.1	1.19	4	2.18	Basement Gneissic Complex
Dugli	Sihawa (Nagri)	Dhamtari	Mahanadi	7.8	7	1.32	–	3.56	Basement Gneissic Complex
Kouhabahara	Sihawa (Nagri)	Dhamtari	Mahanadi	12.65	5.17	1.62	3.8	5.45	Basement Gneissic Complex
Gattasilli	Sihawa (Nagri)	Dhamtari	Mahanadi	9.1	6.79	1.29	2.45	5.69	Basement Gneissic Complex
Sihawa	Sihawa (Nagri)	Dhamtari	Mahanadi	7.12	6.39	2.47	3.75	5.7	Basement Gneissic Complex
Sankra	Sihawa (Nagri)	Dhamtari	Mahanadi	11.5	7.9	2.34	2.55	5.57	Basement Gneissic Complex
Lilanj	Sihawa (Nagri)	Dhamtari	Mahanadi	12	4.88	–	8.1	–	Basement Gneissic Complex
Basin	Sihawa (Nagri)	Dhamtari	Mahanadi	13.3	6.95	–	–	–	Basement Gneissic Complex
Tumribahar	Sihawa (Nagri)	Dhamtari	Mahanadi	13	4.5	–	–	–	Basement Gneissic Complex
Mechka Sondur	Sihawa (Nagri)	Dhamtari	Mahanadi	10	6.92	–	7.18	–	Basement Gneissic Complex
Mega	Kurud	Dhamtari	Mahanadi	10	10	4.46	6.65	8.55	Dolomite/Limestone
Kosmarra	Kurud	Dhamtari	Mahanadi	5.12	3.18	1.18	0.92	1.89	Shale with Sandstone
Aouri	Kurud	Dhamtari	Mahanadi	30	–	1.72	2.13	2.89	Dolomite/Limestone
Kurud.1	Kurud	Dhamtari	Mahanadi	9.4	3.1	1.82	2.27	2.4	Dolomite/Limestone
Gadadih	Kurud	Dhamtari	Mahanadi	7	7	5.07	4.53	–	Dolomite/Limestone
Marod	Kurud	Dhamtari	Mahanadi	10.66	2.4	1.42	1.38	2.1	Shale with Sandstone
Bhatagoan	Kurud	Dhamtari	Mahanadi	10	4.98	1.11	0.91	1.23	Shale with Sandstone
Darba	Kurud	Dhamtari	Mahanadi	10	3.2	1.52	1.77	3.03	Shale with Sandstone
Kondapar	Kurud	Dhamtari	Mahanadi	10.6	8.6	1.74	2.35	4.85	Shale with Sandstone
Andhiyarkhor	Navagarh	Durg	Mahanadi	15	–	–	–	9.59	Shale with Limestone
Sambalpur Pz I	Navagarh	Durg	Mahanadi	151.9	–	–	–	3.29	Shale with Limestone
Temri	Navagarh	Durg	Mahanadi	12	10.61	5.79	5.39	–	Shale with Limestone
Rakhi Joba	Saja	Durg	Mahanadi	19.4	19	5.96	13.11	14.29	Shale with Limestone
Jamgaon	Saja	Durg	Mahanadi	9.5	9.5	2.82	2.5	3.28	Dolomite/Limestone
Gatapar	Saja	Durg	Mahanadi	9.5	6.79	3.16	3.61	4.82	Dolomite/Limestone
Mouhabhata	Saja	Durg	Mahanadi	8.8	6.88	1.09	1.35	1.73	Shale with Limestone
Beeja	Saja	Durg	Mahanadi	14.8	14	6.27	5.82	6.51	Shale with Limestone
Jata	Saja	Durg	Mahanadi	13.5	13	5.26	4.78	6.49	Dolomite/Limestone
Piparia	Saja	Durg	Mahanadi	12.5	12	–	–	–	Dolomite/Limestone
Kanhera	Saja	Durg	Mahanadi	9.5	8.75	4.24	3.4	5.03	Shale with Limestone
Suwartola Nq	Saja	Durg	Mahanadi	16.1	7.69	3.67	–	–	Dolomite/Limestone
Parpoda	Saja	Durg	Mahanadi	12.19	12.19	5.63	10.1	–	Dolomite/Limestone
Bortara	Saja	Durg	Mahanadi	9	8.27	5.22	6.12	6.89	Dolomite/Limestone
Rampur Bhand	Berla	Durg	Mahanadi	14.4	4.65	2.12	2.26	5.42	Shale with Limestone
Jeora	Berla	Durg	Mahanadi	10.5	10.5	–	–	–	Dolomite/Limestone
Parpoda	Berla	Durg	Mahanadi	14	–	5.63	2.71	11.42	Dolomite/Limestone
Kharra	Berla	Durg	Mahanadi	8.4	8.06	2.12	3.29	4.7	Shale with Limestone
Sondh	Berla	Durg	Mahanadi	15	7.13	2.56	2.71	–	Shale with Limestone
Dhamda	Dhamdha	Durg	Mahanadi	12.43	12	–	–	–	Shale with Limestone
Mohrenga	Dhamdha	Durg	Mahanadi	13.3	8.97	2.26	3.26	4.51	Shale with Limestone
Dargaon	Dhamdha	Durg	Mahanadi	8.65	8.29	3.42	2.4	3.63	Shale with Limestone
Tarkori	Dhamdha	Durg	Mahanadi	9.4	9.4	5.07	5.29	5.82	Shale with Limestone
Pendri	Dhamdha	Durg	Mahanadi	9.3	–	–	–	7.79	Shale with Limestone
Dhaba	Dhamdha	Durg	Mahanadi	8.5	5.89	1.04	1.53	2.04	Dolomite/Limestone
Karanja Bhilai	Dhamdha	Durg	Mahanadi	7.8	5.72	2.67	3.15	4.01	Dolomite/Limestone

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Litia	Dhamdha	Durg	Mahanadi	14	14	6.49	2.36	4.84	Dolomite/Limestone
Ravelidih	Dhamdha	Durg	Mahanadi	9.3	3.9	1.12	1.39	2.32	Dolomite/Limestone
Mummunda	Dhamdha	Durg	Mahanadi	7	7	–	–	–	Dolomite/Limestone
Barhapur	Dhamdha	Durg	Mahanadi	15.5	15	5.81	4.29	5.17	Shale with Limestone
Pathariya	Dhamdha	Durg	Mahanadi	9	9	4.59	3.12	4.06	Dolomite/Limestone
Girhola	Dhamdha	Durg	Mahanadi	20.5	19.35	11.9	3.45	7.98	Dolomite/Limestone
Ahiwara	Dhamdha	Durg	Mahanadi	10.55	5.82	3.22	3.5	4.24	Dolomite/Limestone
Kodiya	Dhamdha	Durg	Mahanadi	13.3	8.98	3.61	3.88	4.67	Charnockite
Pathratola	Durg	Durg	Mahanadi	12	12	–	–	–	Charnockite
Danganiya	Durg	Durg	Mahanadi	15	4.71	1.29	1.32	–	Shale with Sandstone
Janjgiri	Durg	Durg	Mahanadi	10	7.89	3.65	2.47	2.71	Dolomite/Limestone
Paowara	Durg	Durg	Mahanadi	9.45	7.81	–	–	–	Dolomite/Limestone
Utai-Adarshnagar	Durg	Durg	Mahanadi	6	6	3.82	3.12	3.78	Dolomite/Limestone
Selud2	Durg	Durg	Mahanadi	27.03	–	6.49	7.26	8.37	Dolomite/Limestone
Selud	Durg	Durg	Mahanadi	9.07	9.035	–	–	–	Dolomite/Limestone
Durg	Durg	Durg	Mahanadi	10.23	4.39	2.27	3.1	2.29	Dolomite/Limestone
Anda	Durg	Durg	Mahanadi	7.12	5.36	1.7	2.33	2.41	Dolomite/Limestone
Binayakpur	Durg	Durg	Mahanadi	10	7.26	3.26	4.22	5.23	Shale with Sandstone
Vinayakpur New	Durg	Durg	Mahanadi	5.5	–	3.26	–	1.78	Shale with Sandstone
Bhailai	Durg	Durg	Mahanadi	8.2	4.85	3.02	4.22	5.23	Dolomite/Limestone
Ganiyari	Durg	Durg	Mahanadi	13.1	6.21	5.24	6.91	10.04	Dolomite/Limestone
Nagpura	Durg	Durg	Mahanadi	23	4.59	2.77	3.28	4.15	Dolomite/Limestone
Jeora Sirsa	Durg	Durg	Mahanadi	9.8	8.03	3.52	2.71	3.35	Dolomite/Limestone
Kharra	Patan	Durg	Mahanadi	13.5	5.63	2.52	2.87	3.48	Dolomite/Limestone
Bodal	Patan	Durg	Mahanadi	8	6.29	2.82	2.23	2.94	Dolomite/Limestone
Kashi	Patan	Durg	Mahanadi	11.5	4.59	2.34	2.84	4.21	Dolomite/Limestone
Sikola	Patan	Durg	Mahanadi	9.4	6.92	2.87	3.03	3.49	Dolomite/Limestone
Zhit	Patan	Durg	Mahanadi	12	6.2	2.57	3.29	3.65	Dolomite/Limestone
Tarra	Patan	Durg	Mahanadi	12	12	1.71	2.5	3.18	Dolomite/Limestone
Funda	Patan	Durg	Mahanadi	9.44	–	5.07	1.82	2.34	Dolomite/Limestone
Dewada	Patan	Durg	Mahanadi	9.5	5.02	1.97	1.89	2.42	Dolomite/Limestone
Nikum	Patan	Durg	Mahanadi	12.75	6.31	2.23	2.01	2.91	Shale with Sandstone
Motipur	Patan	Durg	Mahanadi	9.83	8.42	2.73	2.59	3.16	Dolomite/Limestone
Sankra	Patan	Durg	Mahanadi	6.5	4.2	2.21	1.84	–	Dolomite/Limestone
Marra	Patan	Durg	Mahanadi	11.2	8.83	3.28	1.8	2.16	Dolomite/Limestone
Patan	Patan	Durg	Mahanadi	14.4	6.29	2.72	2.98	4.26	Dolomite/Limestone
Kumhli	Patan	Durg	Mahanadi	11	9.53	3.71	1.9	3.02	Dolomite/Limestone
Darbarmukhli	Patan	Durg	Mahanadi	6	4.59	1.88	2.71	3.94	Dolomite/Limestone
Ashoga	Patan	Durg	Mahanadi	10.95	–	–	–	5.76	Shale with Limestone
Karela	Patan	Durg	Mahanadi	14	8.71	3.54	2.37	2.78	Dolomite/Limestone
Chichalgondi	Gunderdehi	Durg	Mahanadi	8.7	5.96	2.58	2.31	4.7	Shale with Sandstone
Machod	Gunderdehi	Durg	Mahanadi	13.2	7.89	3.17	2.84	3.48	Shale with Sandstone
Jhafra	Gunderdehi	Durg	Mahanadi	6	4.66	–	1.52	1.84	Shale with Sandstone
Gunderdehi	Gunderdehi	Durg	Mahanadi	10.3	10.2	1.77	1.3	3.03	Shale with Sandstone
Arjunda	Gunderdehi	Durg	Mahanadi	17.25	3.66	2.03	1.89	2.6	Shale with Sandstone
Kalangpur	Gunderdehi	Durg	Mahanadi	12	2	0.98	0.73	1.02	Shale with Sandstone
Sikosa	Gunderdehi	Durg	Mahanadi	6.14	1.67	0.82	0.82	1.21	Dolomite/Limestone
Sankri	Gunderdehi	Durg	Mahanadi	10	10	–	6.32	–	Dolomite/Limestone
Kachundur	Gunderdehi	Durg	Mahanadi	8.9	–	–	–	1.59	Shale with Sandstone
Bharda Kalan	Gunderdehi	Durg	Mahanadi	12.2	9.35	1.97	2.93	8	Shale with Sandstone
Jeortala	Dondilohara	Durg	Mahanadi	5.4	5.3	3.47	2.41	2.2	Dolomite/Limestone
Bharnabhat	Dondilohara	Durg	Mahanadi	15.22	7.62	3.31	2.61	2	Dolomite/Limestone
Mudkhura New	Dondilohara	Durg	Mahanadi	12.1	12	6.79	3.27	4.02	Dolomite/Limestone
Sambalpur2	Dondilohara	Durg	Mahanadi	42.49	–	19.18	–	–	Sandstone,conglomerate
Sambalpur	Dondilohara	Durg	Mahanadi	25.5	16.09	4.28	7.5	3.29	Sandstone,conglomerate
Lohara	Dondilohara	Durg	Mahanadi	7.5	4.84	2.89	2.18	3.22	Sandstone,conglomerate
Jatadah	Dondilohara	Durg	Mahanadi	5.5	–	–	–	2.51	Sandstone,conglomerate

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Bhalukohna	Dondilohara	Durg	Mahanadi	9.5	2.03	1.29	1.01	1.42	Sandstone,conglomerate
Markatola	Gurur	Durg	Mahanadi	10.27	6.35	2.2	2.05	–	Sandstone,conglomerate
Jagtara	Gurur	Durg	Mahanadi	12.45	4.1	2.2	3.25	4.61	Sandstone,conglomerate
Armarikalan	Gurur	Durg	Mahanadi	8.18	8.1	5.63	3.89	4.63	Dolomite/Limestone
Chirchari	Gurur	Durg	Mahanadi	9.03	9	3.72	3.17	3.75	Sandstone,conglomerate
Tarri	Gurur	Durg	Mahanadi	14.2	8.26	3.74	3.49	–	Sandstone,conglomerate
Kuliya	Gurur	Durg	Mahanadi	10.2	1.4	0.45	1.4	2	Sandstone,conglomerate
Gurur	Gurur	Durg	Mahanadi	12.17	3.82	3.6	1.72	4.3	Sandstone,conglomerate
Balod Gahan	Gurur	Durg	Mahanadi	7.1	2.45	0.9	2.2	3.35	Sandstone,conglomerate
Sankara	Sanjari Balod	Durg	Mahanadi	11.8	7.22	–	–	3.44	Charnockite
Batera	Sanjari Balod	Durg	Mahanadi	5.43	5.4	–	–	3.26	Sandstone,conglomerate
Umradah	Sanjari Balod	Durg	Mahanadi	12.5	8.78	2.85	2.5	5.82	Sandstone,conglomerate
Balod	Sanjari Balod	Durg	Mahanadi	11.65	3.86	1.41	2.88	3.29	Sandstone,conglomerate
Kusumkasa	Sanjari Balod	Durg	Mahanadi	9.3	9	–	–	–	Charnockite
Talgaon	Sanjari Balod	Durg	Mahanadi	16.9	16	–	–	–	Sandstone,conglomerate
Baklitola	Doundi	Durg	Mahanadi	8	7.53	3.92	2.83	3.54	Charnockite
Delli Rajhara	Doundi	Durg	Mahanadi	3.55	3.55	–	–	–	Charnockite
Accholi	Doundi	Durg	Mahanadi	12	12	–	–	–	Basement Gneissic Complex
Narratola	Doundi	Durg	Mahanadi	15	15	–	–	–	Basement Gneissic Complex
Dadhi	Bemetara	Durg	Mahanadi	13.6	8.11	5.4	4.54	5.63	Shale with Limestone
Chilphi	Bemetara	Durg	Mahanadi	11.3	6.84	3.62	–	4.52	Shale with Limestone
Nawagarh Matapara	Bemetara	Durg	Mahanadi	10.8	–	–	5.63	6.13	Shale with Limestone
Nawagarh1	Bemetara	Durg	Mahanadi	8.5	8.5	6.19	5.32	7.24	Shale with Limestone
Nawagarh	Bemetara	Durg	Mahanadi	8.82	–	5.84	–	–	Shale with Limestone
Jhalam	Bemetara	Durg	Mahanadi	9	8.28	4.26	4.07	4.9	Shale with Limestone
Arsnara	Bemetara	Durg	Mahanadi	11	9.72	3.74	4.07	4.89	Dolomite/Limestone
Bijabhat	Bemetara	Durg	Mahanadi	14	9.78	2.6	5.74	3.86	Dolomite/Limestone
Bemetara New	Bemetara	Durg	Mahanadi	12.68	12	3.69	3.78	5.25	Shale with Limestone
Bhurki	Bemetara	Durg	Mahanadi	9.6	6.72	3.82	4.29	5.67	Dolomite/Limestone
Dunra	Bemetara	Durg	Mahanadi	13.3	12.24	6.17	6.32	7.76	Shale with Limestone
Khilora	Bemetara	Durg	Mahanadi	10.8	10.5	–	–	–	Dolomite/Limestone
Baba Mohtara	Bemetara	Durg	Mahanadi	11.5	8.19	2	2.31	5.62	Shale with Limestone
Jewari	Bemetara	Durg	Mahanadi	16	6.75	6.7	4.49	3.18	Shale with Limestone
Khurmuri	Bemetara	Durg	Mahanadi	14	11.66	2.28	–	4.29	Shale with Limestone
Pendri	Bemetara	Durg	Mahanadi	12	10.29	7.32	6.51	–	Shale with Limestone
Kusmi	Bemetara	Durg	Mahanadi	13.8	9.12	–	1.61	3.89	Shale with Limestone
Bitkuli	Bemetara	Durg	Mahanadi	8.8	8.7	5.59	5.72	8	Shale with Limestone
Bahera	Bemetara	Durg	Mahanadi	8.85	7.32	1.62	2.25	2.24	Shale with Limestone
Baiji	Bemetara	Durg	Mahanadi	11.7	3.21	0.3	1.98	2.19	Shale with Limestone
Khati	Bemetara	Durg	Mahanadi	8.23	6.92	3.44	3.52	4.54	Shale with Limestone
Sagona	Bemetara	Durg	Mahanadi	10	3.62	0.72	1.4	0.92	Shale with Limestone
Ninwa	Bemetara	Durg	Mahanadi	11.32	9.82	–	–	8.29	Shale with Limestone
Farri Nq	Bemetara	Durg	Mahanadi	15	15	2.65	2.71	11.98	Dolomite/Limestone
Bamnidih	Bamhndih	Janjgir - Champa	Mahanadi	10	7.4	–	5.41	–	Shale with Limestone
Champa	Bamhndih	Janjgir - Champa	Mahanadi	12.3	12	–	1.67	–	Shale with Limestone
Afrid	Bamhndih	Janjgir - Champa	Mahanadi	12.8	8.28	–	4.15	5.6	Shale with Limestone
Somthi	Bamhndih	Janjgir - Champa	Mahanadi	10.9	8.28	–	–	8.08	Shale with Limestone
Saragaon2	Bamhndih	Janjgir - Champa	Mahanadi	13.12	6.61	–	–	–	Shale with Limestone
Dhurkot Nhs	Nawagarh	Janjgir - Champa	Mahanadi	12.8	7.92	–	–	3	Shale with Limestone
Jhulan Pakariya	Nawagarh	Janjgir - Champa	Mahanadi	11.8	4.98	1.68	1.2	6.3	Shale with Limestone
Budena	Nawagarh	Janjgir - Champa	Mahanadi	13.1	2.36	–	2.4	1.95	Shale with Limestone
Semra	Nawagarh	Janjgir - Champa	Mahanadi	15.4	8.42	–	3.28	6.1	Shale with Limestone
Janjgir	Nawagarh	Janjgir - Champa	Mahanadi	19.95	7.18	3.74	3.22	9.6	Dolomite/Limestone
Kera	Nawagarh	Janjgir - Champa	Mahanadi	8.73	4.6	–	2.98	5.75	Shale with Limestone
Lachhmanbhata	Nawagarh	Janjgir - Champa	Mahanadi	8	2.92	1.45	3.61	2.26	Shale with Limestone
Negurdi	Nawagarh	Janjgir - Champa	Mahanadi	15	4.61	–	3.14	2.76	Shale with Limestone
Khartal	Nawagarh	Janjgir - Champa	Mahanadi	10.72	4.91	–	2.86	3.8	Shale with Limestone

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Dhardei	Nawagarh	Janjgir - Champa	Mahanadi	11.48	4.12	–	3.09	2.9	Shale with Sandstone
Loharsi	Nawagarh	Janjgir - Champa	Mahanadi	10.2	3.85	–	2.66	–	Shale with Sandstone
Seorinarayan	Nawagarh	Janjgir - Champa	Mahanadi	11.4	10.49	–	7.2	9.36	Shale with Sandstone
Ghoghari	Malkharoda	Janjgir - Champa	Mahanadi	8.52	8.5	3.42	4.61	6.6	Dolomite/Limestone
Adbhar	Malkharoda	Janjgir - Champa	Mahanadi	9.8	3.72	1.85	2.43	–	Shale with Limestone
Dongakahrod	Pamgarh	Janjgir - Champa	Mahanadi	13.9	2.68	–	2.87	1.64	Dolomite/Limestone
Vyasnagar	Pamgarh	Janjgir - Champa	Mahanadi	8.3	3.91	1.81	2.26	–	Dolomite/Limestone
Kosa	Pamgarh	Janjgir - Champa	Mahanadi	13.5	4.23	2.38	4.11	3.12	Dolomite/Limestone
Bhaiso	Pamgarh	Janjgir - Champa	Mahanadi	15	5.4	2.32	1.68	5.9	Dolomite/Limestone
Jewara	Pamgarh	Janjgir - Champa	Mahanadi	12.14	5.1	2.11	4.07	3	Dolomite/Limestone
Pamgarh	Pamgarh	Janjgir - Champa	Mahanadi	18.33	2.86	–	1.94	2.34	Dolomite/Limestone
Meubhata	Pamgarh	Janjgir - Champa	Mahanadi	10.68	5.3	–	4.18	5.91	Dolomite/Limestone
Mudpar	Pamgarh	Janjgir - Champa	Mahanadi	7.5	5.42	–	2.53	–	Shale with Sandstone
Sasaha	Pamgarh	Janjgir - Champa	Mahanadi	6.9	6.7	3.15	4.45	5.24	Shale with Sandstone
Loharsi	Pamgarh	Janjgir - Champa	Mahanadi	10.2	–	–	–	2.18	Shale with Sandstone
Mehandi	Pamgarh	Janjgir - Champa	Mahanadi	12	6.9	–	3.91	4.2	Shale with Sandstone
Hasoud	Jaijapur	Janjgir - Champa	Mahanadi	9.54	9.5	5.06	7.1	–	Dolomite/Limestone
Oreker	Jaijapur	Janjgir - Champa	Mahanadi	10.66	3.03	1.65	3.09	6.7	Shale with Limestone
Jaijapur	Jaijapur	Janjgir - Champa	Mahanadi	12.13	10.2	6.19	7.55	5.26	Shale with Limestone
Darrabhata	Jaijapur	Janjgir - Champa	Mahanadi	18.28	9.8	–	3.32	–	Dolomite/Limestone
Dabra	Dabhra	Janjgir - Champa	Mahanadi	9.87	7.51	2.48	4.07	2.3	Dolomite/Limestone
Latesara	Dabhra	Janjgir - Champa	Mahanadi	10.52	5.18	2.16	4.1	–	Shale with Limestone
Kamrid	Baloda	Janjgir - Champa	Mahanadi	7.11	5.79	–	3.71	3.28	Shale with Limestone
Baloda -r	Baloda	Janjgir - Champa	Mahanadi	14.83	13.75	–	–	–	Undifferentiated metasedimentaries
Saliabhata	Shakti	Janjgir - Champa	Mahanadi	13.1	13	2.09	3.43	3.4	Shale with Limestone
Damau	Shakti	Janjgir - Champa	Mahanadi	7.92	6.1	3.1	5.13	5.47	Sandstone,conglomerate
Asonda	Shakti	Janjgir - Champa	Mahanadi	10	2.3	1.19	–	3.8	Shale with Limestone
Sakti	Shakti	Janjgir - Champa	Mahanadi	20.81	6.12	1.98	2.85	2.5	Shale with Limestone
Thathari	Shakti	Janjgir - Champa	Mahanadi	11.3	3.52	–	2.9	2.27	Shale with Limestone
Konargarh	Akaltara	Janjgir - Champa	Mahanadi	6.36	4.18	2.18	3.47	1.67	Dolomite/Limestone
Bamhani	Akaltara	Janjgir - Champa	Mahanadi	15.4	15	7.7	9.22	9	Undifferentiated metasedimentaries
Jairamnagar	Akaltara	Janjgir - Champa	Mahanadi	9	7.08	3.46	4.25	–	Dolomite/Limestone
Akaltara S	Akaltara	Janjgir - Champa	Mahanadi	50	1.97	–	–	–	Dolomite/Limestone
Akaltara	Akaltara	Janjgir - Champa	Mahanadi	13.76	2.1	1.32	1.47	5.3	Dolomite/Limestone
Amora	Akaltara	Janjgir - Champa	Mahanadi	9	6.18	2.11	3.98	3.46	Dolomite/Limestone
Mulmula	Akaltara	Janjgir - Champa	Mahanadi	10	5.68	–	3.2	2.97	Dolomite/Limestone
Nariyara	Akaltara	Janjgir - Champa	Mahanadi	10	4.23	–	4.01	3.55	Dolomite/Limestone
Fathepur	Manora	Jashpur	Mahanadi	8	8	–	–	5.24	Basement Gneissic Complex
Sarkardih	Manora	Jashpur	Mahanadi to Ganges Water Resources	9.93	6.75	–	–	4.45	Basement Gneissic Complex
Bahora	Jashpur	Jashpur	Mahanadi	8.5	–	–	–	7.8	Basement Gneissic Complex
Rupsera	Jashpur	Jashpur	Mahanadi to Ganges Water Resources	20	6.65	–	3.51	–	Basement Gneissic Complex
Jakba	Jashpur	Jashpur	Mahanadi to Ganges Water Resources	20	6.16	–	3.36	8.29	Laterite/Ferruginous concretions
Jashpurnagar	Jashpur	Jashpur	Mahanadi to Ganges Water Resources	10.35	8.9	–	–	5.14	Basement Gneissic Complex
Balachhappar	Jashpur	Jashpur	Mahanadi to Ganges Water Resources	12.25	4.55	–	3.17	9.45	Basement Gneissic Complex
Chariadand	Jashpur	Jashpur	Mahanadi	11	11	–	–	6.15	Basement Gneissic Complex
Loro Bagicha	Jashpur	Jashpur	Mahanadi	7	6.75	–	4.06	4.4	Basement Gneissic Complex
Shabmunda	Kasavel	Jashpur	Mahanadi	13	8.65	–	3.9	7.92	Basement Gneissic Complex
Garibandh	Kasavel	Jashpur	Mahanadi	7.75	6.2	–	–	3.24	Basement Gneissic Complex
Tangargaon	Kasavel	Jashpur	Mahanadi	10	8.75	–	–	5.8	Basement Gneissic Complex
Saraiyani	Kasavel	Jashpur	Mahanadi	8.3	4.25	–	–	6.3	Basement Gneissic Complex
Bataikela	Kasavel	Jashpur	Mahanadi	8.87	–	–	–	6.55	Basement Gneissic Complex
Khutera	Kasavel	Jashpur	Mahanadi	15	–	–	–	3.8	Basement Gneissic Complex
Narayanbaheli	Kasavel	Jashpur	Mahanadi	8.25	7.74	–	4.05	4.75	Basement Gneissic Complex
Kansabel	Kasavel	Jashpur	Mahanadi	12.3	10.95	–	–	7.92	Basement Gneissic Complex

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Dokra	Kasavel	Jashpur	Mahanadi	15	6.24	–	3.72	–	Basement Gneissic Complex
Mahuadih	Kasavel	Jashpur	Mahanadi	8	3.75	–	–	6.58	Basement Gneissic Complex
Muskuti	Kasavel	Jashpur	Mahanadi	7.99	6.99	–	–	3.8	Basement Gneissic Complex
Budadand	Kasavel	Jashpur	Mahanadi	6.3	5.77	–	–	–	Basement Gneissic Complex
Phoodih	Kasavel	Jashpur	Mahanadi	15	4.95	–	–	1.65	Basement Gneissic Complex
Bewartoli	Kasavel	Jashpur	Mahanadi	15	7.15	–	–	7.1	Basement Gneissic Complex
Narayanpur	Kunkuri	Jashpur	Mahanadi	8	7.21	–	3.72	4.42	Basement Gneissic Complex
Matasi	Kunkuri	Jashpur	Mahanadi	8	7.23	–	3.71	–	Basement Gneissic Complex
Bandarchuwa	Kunkuri	Jashpur	Mahanadi	10.75	8.35	–	4.02	5.8	Basement Gneissic Complex
Farsakanhi	Kunkuri	Jashpur	Mahanadi	8.44	7.16	–	5.5	6.85	Basement Gneissic Complex
Kunkuri S	Kunkuri	Jashpur	Mahanadi	50	–	–	–	12.3	Basement Gneissic Complex
Binjapur	Kunkuri	Jashpur	Mahanadi	7.5	–	–	–	4.4	Basement Gneissic Complex
Chhapartoli	Kunkuri	Jashpur	Mahanadi	7.5	7	–	2.92	6.5	Basement Gneissic Complex
Ghatmunda	Kunkuri	Jashpur	Mahanadi	9.4	9.16	–	–	6.86	Basement Gneissic Complex
Dhodidand	Kunkuri	Jashpur	Mahanadi	8.6	6.65	–	2.43	4.65	Basement Gneissic Complex
Raikera(Kunkuri)	Kunkuri	Jashpur	Lower Ganges	9.5	7.42	–	3.92	6.15	Basement Gneissic Complex
Kandora	Kunkuri	Jashpur	Mahanadi	10.5	7.05	–	3.39	4.15	Basement Gneissic Complex
Kunkuri1	Kunkuri	Jashpur	Mahanadi	7.4	5.875	–	4.02	4.93	Basement Gneissic Complex
Kersai	Duldula	Jashpur	Mahanadi	7.98	5.5	–	3.4	4.35	Basement Gneissic Complex
Kunjara	Duldula	Jashpur	Mahanadi	9	5.8	–	4.8	5.55	Basement Gneissic Complex
Bangaon B	Pathalgaon	Jashpur	Mahanadi	50	–	–	–	6.89	Basement Gneissic Complex
Surangpani New	Pathalgaon	Jashpur	Mahanadi	8.4	6.5	–	1.89	3.4	Basement Gneissic Complex
Kotba	Pathalgaon	Jashpur	Mahanadi	6.85	6.3	–	2.66	3.2	Basement Gneissic Complex
Bagh Bahar	Pathalgaon	Jashpur	Mahanadi	7.5	–	–	–	6.9	Basement Gneissic Complex
Pathalgaon	Pathalgaon	Jashpur	Mahanadi	14.23	12.1	–	–	9.7	Basement Gneissic Complex
Palidih	Pathalgaon	Jashpur	Mahanadi	10.5	9.4	–	–	5.19	Basement Gneissic Complex
Bangaon	Pathalgaon	Jashpur	Mahanadi	8.24	–	–	–	7.05	Basement Gneissic Complex
Nawaguda	Pathalgaon	Jashpur	Mahanadi	9.6	6.15	–	–	4.4	Basement Gneissic Complex
Kachhor	Pathalgaon	Jashpur	Mahanadi	9.8	8.4	–	–	6.94	Basement Gneissic Complex
Ludeg	Pathalgaon	Jashpur	Mahanadi	6.99	6.73	–	–	3.92	Basement Gneissic Complex
Amatolli	Pathalgaon	Jashpur	Mahanadi	5.2	5	–	2.32	4	Basement Gneissic Complex
Lavakera	Farsabahr	Jashpur	Mahanadi	9.25	9.08	–	5.08	6.5	Basement Gneissic Complex
Farsabahr	Farsabahr	Jashpur	Mahanadi	4.65	3.25	–	0.52	2.14	Basement Gneissic Complex
Tapkara	Farsabahr	Jashpur	Mahanadi	11	–	–	4.62	5.7	Basement Gneissic Complex
Amdiha	Farsabahr	Jashpur	Mahanadi	10	5.35	–	2.19	2	Basement Gneissic Complex
Jharmunda	Farsabahr	Jashpur	Mahanadi	10	5.6	–	3.28	5.08	Basement Gneissic Complex
Khutsera	Farsabahr	Jashpur	Mahanadi	7.45	6.1	–	2.48	2.45	Basement Gneissic Complex
Bangaon	Farsabahr	Jashpur	Mahanadi	15	–	–	–	3.85	Basement Gneissic Complex
Srishringa	Farsabahr	Jashpur	Mahanadi	8.2	–	–	3.48	5.25	Basement Gneissic Complex
Kandaibahr	Farsabahr	Jashpur	Mahanadi	6.1	5.65	–	3.05	3.35	Basement Gneissic Complex
Kanpoda	Bagicha	Jashpur	Mahanadi	7	5.85	–	2.86	–	Basement Gneissic Complex
Pandrapat (Kondapara)	Bagicha	Jashpur	Mahanadi	6.5	4.15	–	–	–	Basement Gneissic Complex
Maini	Bagicha	Jashpur	Mahanadi	9	7.2	–	–	6.6	Basement Gneissic Complex
Bagicha	Bagicha	Jashpur	Mahanadi	6.82	4.15	–	–	4.5	Basement Gneissic Complex
Peta	Bagicha	Jashpur	Mahanadi	8	8	–	–	5.8	Basement Gneissic Complex
Raikera	Bagicha	Jashpur	Mahanadi	7	6.95	–	–	4.6	Basement Gneissic Complex
Sanna	Bagicha	Jashpur	Lower Ganges	15	14.15	–	–	10.5	Basement Gneissic Complex
Raoni	Bagicha	Jashpur	Mahanadi	15	5.95	–	–	4.35	Basic Rock(Basalt)
Murpar	Sarana(Narharpur)	Kanker	Mahanadi	9.65	3.05	2.6	2.55	3.35	Basement Gneissic Complex
Dudhawa	Sarana(Narharpur)	Kanker	Mahanadi	9.9	1.5	1.05	–	0.8	Basement Gneissic Complex
Kulgaon	Kanker	Kanker	Mahanadi	9.9	6.5	4.2	–	4.75	Basement Gneissic Complex
Govindpur	Kanker	Kanker	Mahanadi	7.15	6.85	4.6	–	2.75	Basement Gneissic Complex
Markatola1	Kanker	Kanker	Mahanadi	12.09	–	2.2	–	4.4	Basement Gneissic Complex
Urkura	Charama	Kanker	Mahanadi	15	2.7	1.05	–	–	Basement Gneissic Complex
Lakhanpuri	Charama	Kanker	Mahanadi	12.68	5.15	1	1	2.3	Basement Gneissic Complex
Jhipatota	Charama	Kanker	Mahanadi	13	8.95	4.8	2.42	5.05	Basement Gneissic Complex

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Mahrajpur	Bodla	Kawardha	Mahanadi	5	5	4.93	4.82	5	Dolomite/Limestone
Chilpi	Bodla	Kawardha	Narmada	9.85	9.24	6.36	5.1	6.32	Basic Rock(Basalt)
Kharoda Kalan	Bodla	Kawardha	Mahanadi	12	—	—	—	4.26	Limestone with Shale
Banjari	Bodla	Kawardha	Mahanadi	8	7.73	4.33	4.28	5.41	Phyllite
Bodla	Kawardha	Kawardha	Mahanadi	14.5	6.16	3.81	—	—	Limestone with Shale
Rajnanwagaon	Kawardha	Kawardha	Mahanadi	5.52	—	4.82	5.49	5	Basic Rock(Dolerite,Anorthosite etc.)
Rengakharkhurd	Kawardha	Kawardha	Mahanadi	10.3	8.16	5.72	6.77	7.89	Basic Rock(Dolerite,Anorthosite etc.)
Kawardha S	Kawardha	Kawardha	Mahanadi	50	—	—	—	15.46	Dolomite/Limestone
Kawardha2	Kawardha	Kawardha	Mahanadi	42.91	—	10.39	12.29	—	Dolomite/Limestone
Danganiya	Kawardha	Kawardha	Mahanadi	10.3	10	6.72	6.48	7.66	Dolomite/Limestone
Kawardha1	Kawardha	Kawardha	Mahanadi	11	7.1	1.57	1.38	1.78	Dolomite/Limestone
Sahaspur Lohara.1	Sahaspur Lohara	Kawardha	Mahanadi	11.15	—	3.98	3.91	5.24	Dolomite/Limestone
Uria Khurud	Sahaspur Lohara	Kawardha	Mahanadi	9	9	6.62	6.72	7.93	Dolomite/Limestone
Bija Bairangi	Sahaspur Lohara	Kawardha	Mahanadi	9.6	9	4.87	5.12	7.63	Dolomite/Limestone
Sahaspur lohara	Sahaspur Lohara	Kawardha	Mahanadi	6.39	6.38	—	—	—	Dolomite/Limestone
Lohara-d PZ	Sahaspur Lohara	Kawardha	Mahanadi	52	19.64	15.68	14.48	16.16	Dolomite/Limestone
Biroda	Sahaspur Lohara	Kawardha	Mahanadi	10	10	7.28	5.94	6.91	Dolomite/Limestone
Kui	Pandariya	Kawardha	Mahanadi	9.75	9.75	3.49	3.28	4.82	Basement Gneissic Complex
Munmuna	Pandariya	Kawardha	Mahanadi	9.8	5.29	2.87	2.64	4.2	Basement Gneissic Complex
Kapada	Pandariya	Kawardha	Mahanadi	10	6.12	3.41	3.27	4.68	Limestone with Shale
Kothari Naka	Korba	Korba	Mahanadi	10.2	9	—	4.47	—	Shale with Limestone
Barpali Junadhi	Korba	Korba	Mahanadi	8	6.9	2.36	4.17	—	Basement Gneissic Complex
Bhaisma	Korba	Korba	Mahanadi	10	6.1	3.05	4.21	4.08	Basement Gneissic Complex
Korba	Korba	Korba	Mahanadi	14.47	14.46	—	—	6.14	Sand Stone with Shale/Coal beds
Naktikhar	Korba	Korba	Mahanadi	10.27	7.1	3.85	4.13	4.42	Sand Stone with Shale/Coal beds
Chachiya	Korba	Korba	Mahanadi	6.03	6	3.45	4.11	4.14	Sand Stone with Shale/Coal beds
Basin	Korba	Korba	Mahanadi	8.9	8.9	3.48	4.22	—	Sand Stone with Shale/Coal beds
Shuklakhhar	Korba	Korba	Mahanadi	11.3	—	3.11	4.56	—	Sand Stone with Shale/Coal beds
Kolga	Korba	Korba	Mahanadi	8.2	6.52	1.86	2.62	3.52	Sand Stone with Shale/Coal beds
Kerwa	Korba	Korba	Mahanadi	7.15	6.35	1.9	3.42	—	Sand Stone with Shale/Coal beds
Rishdi	Korba	Korba	Mahanadi	7.29	7.29	—	—	—	Sand Stone with Shale/Coal beds
Dumardih New	Korba	Korba	Mahanadi	8.86	6.72	3.14	—	—	Sand Stone with Shale/Coal beds
Pasarkhet	Korba	Korba	Mahanadi	7.6	5.52	3.4	4.78	4.42	Sand Stone with Shale/Coal beds
Batati Junction	Korba	Korba	Mahanadi	11.27	9.67	4.1	5.37	—	Sand Stone with Shale/Coal beds
Dhegurdih Manzipara	Korba	Korba	Mahanadi	9.4	9.4	4.1	5.3	—	Sand Stone with Shale/Coal beds
Bahanpath	Korba	Korba	Mahanadi	10	10	—	—	—	Sand Stone with Shale/Coal beds
Mudiyandar	Korba	Korba	Mahanadi	15	5.4	3.46	4.4	4.71	Sand Stone with Shale/Coal beds
Urga.1	Korba	Korba	Mahanadi	7.05	6.72	4.44	5.1	—	Basement Gneissic Complex
Urga	Korba	Korba	Mahanadi	4	—	—	—	4	Basement Gneissic Complex
Rajkamma	Pali	Korba	Mahanadi	12.1	—	—	—	2.9	Sand Stone with Shale/Coal beds
Banbandha	Pali	Korba	Mahanadi	5.36	5.08	1.14	1.1	1.86	Basement Gneissic Complex
Dumarkachhar	Pali	Korba	Mahanadi	14	8.36	2.36	2.77	5.22	Basement Gneissic Complex
Makhanpur	Pali	Korba	Mahanadi	12	7.9	2.45	3.2	5.24	Basement Gneissic Complex
Dhourabhata	Pali	Korba	Mahanadi	8.37	8.37	4.46	5.63	—	Basement Gneissic Complex
Ponri	Pali	Korba	Mahanadi	6.95	6.95	2.48	2.14	3.8	Sand Stone with Shale/Coal beds
Pali	Pali	Korba	Mahanadi	10.25	4.1	1.16	1.74	—	Sand Stone with Shale/Coal beds
Bandhakhar	Pali	Korba	Mahanadi	6.82	6.15	2.19	3.24	3.36	Sand Stone with Shale/Coal beds
Nonbirra	Pali	Korba	Mahanadi	10.5	7.18	5.19	3.95	4.06	Sand Stone with Shale/Coal beds
Mungadih	Pali	Korba	Mahanadi	15	7.1	2.05	3.43	4.42	Basement Gneissic Complex
Numera	Pali	Korba	Mahanadi	12.17	12.15	4.1	4.9	7.77	Sand Stone with Shale/Coal beds
Rahadih	Pali	Korba	Mahanadi	15	6.11	9.45	2.92	7	Sand Stone with Shale/Coal beds
Baksahi	Pali	Korba	Mahanadi	20	5.68	1.78	3.11	4.2	Basement Gneissic Complex
Katghora	Katghora	Korba	Mahanadi	11.65	4.47	1.72	2.06	2.3	Sand Stone with Shale
Kasania	Katghora	Korba	Mahanadi	9	6.15	2.35	2.92	3.7	Sand Stone with Shale
Sutarra	Katghora	Korba	Mahanadi	11.68	6.9	3.2	—	4.42	Sand Stone with Shale/Coal beds
Lakhanpur	Katghora	Korba	Mahanadi	9.46	8.13	2.45	3.45	4.55	Sand Stone with Shale/Coal beds

Location	Block	District	Basin	Depth	DTW May 2019	DTW August 2019	DTW November 2019	DTW January 2020	Aquifer
Jamchuwa	Katghora	Korba	Mahanadi	9.5	–	–	–	7.1	Sand Stone with Shale/Coal beds
Gopalpur	Katghora	Korba	Mahanadi	12.71	8.25	1.68	3.25	4.28	Basement Gneissic Complex
Chaitama	Katghora	Korba	Mahanadi	15	6.8	1.96	2.96	3.92	Basement Gneissic Complex
Churi	Katghora	Korba	Mahanadi	12.8	3.66	2.38	2.84	2.65	Sand Stone with Shale
Gajra	Katghora	Korba	Mahanadi	9.33	7.48	3.04	5.37	7.4	Sand Stone with Shale/Coal beds
Naraibodh	Katghora	Korba	Mahanadi	7.5	7.5	4.11	5.08	–	Sand Stone with Shale/Coal beds
Champa Mode	Katghora	Korba	Mahanadi	7.5	–	–	–	2.64	Sand Stone with Shale/Coal beds
Kurtha	Katghora	Korba	Mahanadi	12	–	–	–	6	Sand Stone with Shale
Tuman	Kartala	Korba	Mahanadi	11.5	11.5	3.91	4.48	3.4	Basement Gneissic Complex
Purena	Kartala	Korba	Mahanadi	7.2	7.2	2.66	4.22	5.34	Undifferentiated metasedimentaries
Sargundia	Kartala	Korba	Mahanadi	10	7.55	–	–	5.4	Basement Gneissic Complex
Sendripali	Kartala	Korba	Mahanadi	10	7.14	2.92	3.85	4.11	Sand Stone with Shale/Coal beds
Tikeja	Kartala	Korba	Mahanadi	10.6	8.2	2	3.17	3.85	Basement Gneissic Complex
Sakdukala	Kartala	Korba	Mahanadi	8.61	7.86	3.09	5.4	6.52	Sand Stone with Shale/Coal beds
Nonbirra	Kartala	Korba	Mahanadi	8.2	8.2	3.48	–	–	Sand Stone with Shale/Coal beds
Nonbirra New	Kartala	Korba	Mahanadi	13.2	6.35	3.6	–	2.4	Sand Stone with Shale/Coal beds
Sailhabhata	Kartala	Korba	Mahanadi	7.7	7.55	1.7	3.27	–	Sand Stone with Shale/Coal beds
Champa Mode	Kartala	Korba	Mahanadi	7.5	5.6	2.15	3.99	–	Sand Stone with Shale/Coal beds
Kartala	Kartala	Korba	Mahanadi	13.8	13.6	4.26	5.16	8.88	Sand Stone with Shale/Coal beds
Charmar	Kartala	Korba	Mahanadi	9.4	9.4	–	–	–	Sand Stone with Shale/Coal beds
Kudmura	Kartala	Korba	Mahanadi	15.5	14.76	3.26	4.18	4	Sand Stone with Shale/Coal beds
Jogipali	Kartala	Korba	Mahanadi	10.4	7.86	3.18	4.1	4.9	Sand Stone with Shale/Coal beds
Amaldina	Pondi	Korba	Mahanadi	15.2	5.64	1.5	2.96	4.5	Sand Stone with Shale
Khodri	Pondi	Korba	Mahanadi	8	4.25	1.9	2.36	4.82	Sand Stone with Shale
Gurasiya	Pondi	Korba	Mahanadi	12.2	12.2	4	7.19	9.42	Basement Gneissic Complex
Nagai	Pondi	Korba	Mahanadi	11.77	10.35	4.61	4.97	8.44	Sand Stone with Shale
Nawapara	Pondi	Korba	Mahanadi	7.3	5.06	2	4.67	3.68	Sand Stone with Shale/Coal beds
Lenga	Pondi	Korba	Mahanadi	9.98	9.58	2.36	3.4	6.48	Basement Gneissic Complex
Morga	Pondi	Korba	Mahanadi	14	13	–	–	8.19	Sand Stone with Shale/Coal beds
Lamna	Pondi	Korba	Mahanadi	4.55	4.54	0.89	2.11	2.23	Basement Gneissic Complex
Madai	Pondi	Korba	Mahanadi	8.73	8.725	4.85	5.13	6.24	Basement Gneissic Complex
Jatgan	Pondi	Korba	Mahanadi	11.4	10.37	2.46	3.9	7.1	Sand Stone with Shale
Pondi	Pondi	Korba	Mahanadi	12.98	4.93	–	–	4.56	Sand Stone with Shale
Tuman	Pondi	Korba	Mahanadi	15.55	7.84	1.75	2.19	–	Sand Stone with Shale
Kurtha New	Pondi	Korba	Mahanadi	11.2	10.1	4.39	5.18	6	Basement Gneissic Complex
Rewa	Pondi	Korba	Mahanadi	11.1	10.92	3.2	4.15	6.08	Sand Stone with Shale
Pasan	Pondi	Korba	Mahanadi	13.88	13.18	5.46	4.96	9.45	Basement Gneissic Complex
Korbi	Pondi	Korba	Mahanadi	15	11.6	4.13	6.17	6.33	Sand Stone with Shale
Chutki	Bharatpur (Janakpur)	Koriya	Lower Ganges	7	7	1.9	4.1	5.69	Sand Stone with Shale
Ara	Bharatpur (Janakpur)	Koriya	Lower Ganges	9.9	9.8	3.86	4.1	6.58	Sand Stone with Shale
Kiwarpur	Bharatpur (Janakpur)	Koriya	Lower Ganges	9.35	9.34	–	–	–	Sand Stone with Shale
Baharsi.1	Bharatpur (Janakpur)	Koriya	Lower Ganges	5.52	–	1.15	4.29	4.17	Sand Stone with Shale
Janakpur	Bharatpur (Janakpur)	Koriya	Lower Ganges	10	9	2.34	4	5.47	Sand Stone with Shale
Kailashpur	Sonhat	Koriya	Mahanadi	8.5	8.4	–	4	4.47	Sand Stone with Shale/Coal beds
Sonhat	Sonhat	Koriya	Mahanadi	7	2.26	1.45	2	2.2	Sand Stone with Shale
Bhainswar	Sonhat	Koriya	Mahanadi	5	–	–	3	4.17	Sand Stone with Shale
Bikrampur	Sonhat	Koriya	Mahanadi	6.4	6.3	–	2	3.11	Sand Stone with Shale
Mendrakala	Sonhat	Koriya	Lower Ganges	13.5	13.4	3.11	4	4.48	Sand Stone with Shale
Sarbhoka	Manendragarh	Koriya	Mahanadi	8.89	8.88	2.11	3.06	4.17	Sand Stone with Shale/Coal beds
Piparia	Manendragarh	Koriya	Mahanadi	7.9	7.8	3.08	5.1	7.16	Sand Stone with Shale
Belbehra	Manendragarh	Koriya	Mahanadi	7.28	7.27	4.1	5.37	7.15	Sand Stone with Shale
Dondki	Manendragarh	Koriya	Mahanadi	7.65	7.64	1.9	4.11	5.47	Sand Stone with Shale/Coal beds
Shripur	Manendragarh	Koriya	Lower Ganges	4.3	–	–	2	2.54	Sand Stone with Shale/Coal beds

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Kelhari	Manendragarh	Koriya	Lower Ganges	11.52	11.5	2.1	6.19	9.84	Sand Stone with Shale/Coal beds
Tarabahara	Manendragarh	Koriya	Lower Ganges	8.83	_	2.75	2.78	2.17	Sand Stone with Shale/Coal beds
Biharpur	Manendragarh	Koriya	Mahanadi	15.3	15.2	2.5	6.17	10.67	Sand Stone with Shale/Coal beds
Garundol	Manendragarh	Koriya	Mahanadi	11	10	3.14	5.17	8	Sand Stone with Shale/Coal beds
Pendri	Manendragarh	Koriya	Mahanadi	8.36	8.34	1.45	4.19	6.27	Sand Stone with Shale/Coal beds
Ujiyarpur1	Manendragarh	Koriya	Mahanadi	10.36	10.34	_	5.06	8	Sand Stone with Shale/Coal beds
Rojhi	Manendragarh	Koriya	Mahanadi	7.9	_	1.85	2	2.49	Sand Stone with Shale
Tilokhan	Manendragarh	Koriya	Lower Ganges	10	10	3	4.37	6.47	Sand Stone with Shale
Nagpur	Manendragarh	Koriya	Mahanadi	8.9	8.9	4.5	6.17	8	Sand Stone with Shale/Coal beds
Chainpur	Manendragarh	Koriya	Mahanadi	9.5	9.4	_	4.61	7.11	Sand Stone with Shale
Manendragarh	Manendragarh	Koriya	Mahanadi	10.48	10	_	_	_	Sand Stone with Shale
Patna	Baikunthpur	Koriya	Lower Ganges	9	9	_	8.11	6.19	Sand Stone with Shale
Mohra	Baikunthpur	Koriya	Mahanadi	8	8	_	3.19	5.17	Charnockite
Girjapur	Baikunthpur	Koriya	Mahanadi	3	2	1	1.21	1.87	Sand Stone with Shale
Jamgahana	Baikunthpur	Koriya	Mahanadi	6.5	6.4	_	2	3.2	Sand Stone with Shale
Nagar Station	Baikunthpur	Koriya	Mahanadi	11.7	10	_	6.27	9.16	Sand Stone with Shale/Coal beds
Tengri	Baikunthpur	Koriya	Mahanadi	7	7	3.14	4.29	6.29	Sand Stone with Shale/Coal beds
Nagar Tilwander New	Baikunthpur	Koriya	Mahanadi	10.4	9.5	_	_	7.19	Sand Stone with Shale/Coal beds
Khodri	Baikunthpur	Koriya	Mahanadi	8.4	8.3	_	4.19	7.18	Sand Stone with Shale/Coal beds
Ghugra	Baikunthpur	Koriya	Mahanadi	12.4	12.3	_	4.1	7.14	Sand Stone with Shale/Coal beds
Khatgori	Baikunthpur	Koriya	Mahanadi	15.74	4.36	_	4	3.5	Sand Stone with Shale/Coal beds
Chharchha Basti	Baikunthpur	Koriya	Mahanadi	5.5	4.5	_	4.17	2.67	Sand Stone with Shale/Coal beds
Ranai	Baikunthpur	Koriya	Lower Ganges	13.06	_	3.85	6.48	11	Sand Stone with Shale
Dumaria	Baikunthpur	Koriya	Mahanadi	8.6	8.5	1.5	3.67	2.49	Sand Stone with Shale
Baikunthpur	Baikunthpur	Koriya	Mahanadi	7	7	_	4.37	4.32	Sand Stone with Shale
Mansukha	Baikunthpur	Koriya	Mahanadi	12	11	_	6.26	8	Sand Stone with Shale
Patrapali	Baikunthpur	Koriya	Mahanadi	8.1	8	_	3.4	5.47	Sand Stone with Shale
Akhradand	Khadgawan	Koriya	Mahanadi	10.7	10.6	2	3.19	4.32	Sand Stone with Shale
Banjaridand	Khadgawan	Koriya	Mahanadi	7.6	6.06	_	3.67	2.84	Sand Stone with Shale
Khadgawan	Khadgawan	Koriya	Mahanadi	8.1	8	2	3	5.26	Basement Gneissic Complex
Khadgaon	Khadgawan	Koriya	Mahanadi	13.2	13.1	1.98	_	5	Basement Gneissic Complex
Podidih	Khadgawan	Koriya	Mahanadi	6	6	2.14	3	4.27	Sand Stone with Shale
Jilda	Khadgawan	Koriya	Mahanadi	10.1	10	_	3.17	4.69	Sand Stone with Shale
Pouri	Khadgawan	Koriya	Mahanadi	11.8	11	_	3	4.56	Sand Stone with Shale
Jagdishpur	Pithora	Mahasamund	Mahanadi	10.76	5	2.35	2.99	6.67	Basement Gneissic Complex
Balididih	Pithora	Mahasamund	Mahanadi	9.75	_	_	_	8.11	Charnockite
Deori	Pithora	Mahasamund	Mahanadi	10	5	_	_	5.4	Basement Gneissic Complex
Pithora - 1	Pithora	Mahasamund	Mahanadi	13.5	12.35	3.78	2.63	5.23	Basement Gneissic Complex
Badesara	Saraipali	Mahasamund	Mahanadi	10.2	8.1	_	_	2.9	Basement Gneissic Complex
Patsenduri	Saraipali	Mahasamund	Mahanadi	9.59	3.7	_	_	3.75	Basement Gneissic Complex
Saraipalli-S PZ	Saraipali	Mahasamund	Mahanadi	30.58	_	_	_	10.55	Sandstone,conglomerate
Saraipali	Saraipali	Mahasamund	Mahanadi	12.48	_	_	_	1.3	Sandstone,conglomerate
Jhalkhamhariya	Mahasamund	Mahasamund	Mahanadi	15	8	1.18	_	_	Sandstone,conglomerate
Lavarakhurud	Mahasamund	Mahasamund	Mahanadi	12.11	8	3.2	4.39	5.13	Sandstone,conglomerate
Jamli Nawadih	Mahasamund	Mahasamund	Mahanadi	9.5	_	2.65	2.95	5.6	Basement Gneissic Complex
Boriya Jhar	Mahasamund	Mahasamund	Mahanadi	7.6	5.5	1.33	1.97	2.42	Basement Gneissic Complex
Hadabundh	Mahasamund	Mahasamund	Mahanadi	10.9	_	_	_	2.03	Basement Gneissic Complex
Tumgaon	Mahasamund	Mahasamund	Mahanadi	11.31	5.4	1.62	3.4	5	Sandstone,conglomerate
Belsunda	Mahasamund	Mahasamund	Mahanadi	14.85	3.94	1.69	2.2	3.34	Sandstone,conglomerate
Marod	Mahasamund	Mahasamund	Mahanadi	6	5.1	1.68	2.82	3.45	Sandstone,conglomerate
Mahasamund.1	Mahasamund	Mahasamund	Mahanadi	14.32	13.62	4.4	6.52	8.45	Sandstone,conglomerate
Lakhanpur	Mahasamund	Mahasamund	Mahanadi	8.4	8	3.57	4.13	7.87	Basement Gneissic Complex
Kowajhar	Mahasamund	Mahasamund	Mahanadi	12.4	2.86	1.34	1.79	3.66	Sandstone,conglomerate
Pasid	Mahasamund	Mahasamund	Mahanadi	12	8	6.66	7.28	10.43	Sandstone,conglomerate

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Sirpur	Mahasamund	Mahasamund	Mahanadi	13.15	10.04	8.67	–	–	Dolomite/Limestone
Jalki	Mahasamund	Mahasamund	Mahanadi	12	1.74	0.67	1.81	1.85	Sandstone,conglomerate
Jogidipa	Mahasamund	Mahasamund	Mahanadi	10.65	9.39	4.73	4.21	5.16	Basement Gneissic Complex
Jhalap	Mahasamund	Mahasamund	Mahanadi	9.35	8	9.34	6.7	–	Basement Gneissic Complex
Amlor	Mahasamund	Mahasamund	Mahanadi	7	7	–	2.75	4.97	Sandstone,conglomerate
Jhalap S	Mahasamund	Mahasamund	Mahanadi	32.8	–	–	–	17.27	Basement Gneissic Complex
Palsipani	Bagbahara	Mahasamund	Mahanadi	10.65	8	1.89	5.2	4.51	Basement Gneissic Complex
Suarmar	Bagbahara	Mahasamund	Mahanadi	13.95	8.795	9.49	4.08	7.03	Basement Gneissic Complex
Moulimuda	Bagbahara	Mahasamund	Mahanadi	7	7	1.82	2.25	2.55	Basement Gneissic Complex
Bag bahera	Bagbahara	Mahasamund	Mahanadi	11.26	–	5.9	5.49	8.26	Basement Gneissic Complex
Tendukonda	Bagbahara	Mahasamund	Mahanadi	12.98	10.37	1.74	2.4	5.2	Basement Gneissic Complex
Hadabandh	Bagbahara	Mahasamund	Mahanadi	17	8	1.74	1.59	–	Basement Gneissic Complex
Khallari	Bagbahara	Mahasamund	Mahanadi	5.35	3.05	1.06	1.75	1.92	Basement Gneissic Complex
Samhar	Bagbahara	Mahasamund	Mahanadi	11	9.95	1.8	2.74	8.33	Basement Gneissic Complex
Bhimkhoj	Bagbahara	Mahasamund	Mahanadi	9	5	–	1.27	–	Basement Gneissic Complex
Sagrapali	Basna	Mahasamund	Mahanadi	8.5	4.635	–	–	–	Basement Gneissic Complex
Barbaspur	Basna	Mahasamund	Mahanadi	8.55	8	–	5.72	–	Basement Gneissic Complex
Basna	Basna	Mahasamund	Mahanadi	11.65	8	1.45	2.63	2.94	Basement Gneissic Complex
Lailunga1	Lailunga	Raigarh	Mahanadi	11.22	8.96	–	–	5.5	Basement Gneissic Complex
Rajpur.1	Lailunga	Raigarh	Mahanadi	10	7.16	–	–	4.25	Basement Gneissic Complex
Salkhiya	Lailunga	Raigarh	Mahanadi	7.8	5.95	–	–	3.8	Basement Gneissic Complex
Pakargaon	Lailunga	Raigarh	Mahanadi	5.8	5.7	–	–	1.2	Basement Gneissic Complex
Gosaidih	Lailunga	Raigarh	Mahanadi	9.3	–	–	–	4.8	Basement Gneissic Complex
Jegarpur	Lailunga	Raigarh	Mahanadi	15	6.56	–	–	3.3	Basement Gneissic Complex
Chimtapani	Gharghoda	Raigarh	Mahanadi	14.15	8.8	–	–	7.05	Sand Stone with Shale/Coal beds
Kotrimal	Gharghoda	Raigarh	Mahanadi	8	5.94	–	–	4.15	Sand Stone with Shale
Dumarpali	Gharghoda	Raigarh	Mahanadi	9.3	–	–	–	5.3	Sand Stone with Shale/Coal beds
Amlidih	Gharghoda	Raigarh	Mahanadi	14	11.15	–	–	6.15	Sand Stone with Shale/Coal beds
Bhalumar	Gharghoda	Raigarh	Mahanadi	7	6.85	–	–	3.22	Sand Stone with Shale/Coal beds
Chukimar	Gharghoda	Raigarh	Mahanadi	12	–	–	–	8.74	Sand Stone with Shale/Coal beds
Bhangari	Gharghoda	Raigarh	Mahanadi	11.5	–	–	–	6.6	Sand Stone with Shale/Coal beds
Samaruma	Gharghoda	Raigarh	Mahanadi	10	7.1	–	–	–	Sand Stone with Shale/Coal beds
Taraimal1.1	Tamnar	Raigarh	Mahanadi	8	4.6	–	–	5.3	Sand Stone with Shale/Coal beds
Milupara	Tamnar	Raigarh	Mahanadi	15	13.8	–	–	6.1	Sand Stone with Shale
Barkaspali	Tamnar	Raigarh	Mahanadi	10	4.16	–	–	–	Sand Stone with Shale
Padigaon	Tamnar	Raigarh	Mahanadi	9	5.68	–	–	3.9	Sand Stone with Shale/Coal beds
Gare Nhs	Tamnar	Raigarh	Mahanadi	10	4.84	–	–	5.7	Sand Stone with Shale/Coal beds
Devgarh	Tamnar	Raigarh	Mahanadi	15	7.25	–	–	7.93	Sand Stone with Shale
Libra	Tamnar	Raigarh	Mahanadi	7.5	–	–	–	4.05	Sand Stone with Shale
Tamnar	Tamnar	Raigarh	Mahanadi	10.5	7.69	–	–	6.25	Sand Stone with Shale
Samaruma	Tamnar	Raigarh	Mahanadi	6.67	–	–	–	5	Sand Stone with Shale/Coal beds
Taraimal	Tamnar	Raigarh	Mahanadi	8.5	–	–	–	5.18	Sand Stone with Shale/Coal beds
Araimuda	Tamnar	Raigarh	Mahanadi	7	6.14	–	–	3.1	Sand Stone with Shale
Koknara	Tamnar	Raigarh	Mahanadi	15	6	–	–	3.35	Sand Stone with Shale
Gidha	Kharsia	Raigarh	Mahanadi	8	5.4	–	–	–	Shale with Limestone
Farkanara	Kharsia	Raigarh	Mahanadi	11.25	–	–	–	4.4	Sandstone,conglomerate
Kharasia S	Kharsia	Raigarh	Mahanadi	50	12	11.9	–	–	Shale with Limestone
Kharsia	Kharsia	Raigarh	Mahanadi	17.63	–	–	–	3.8	Shale with Limestone
Jamgaon	Raigarh	Raigarh	Mahanadi	9	–	–	–	3.5	Sandstone,conglomerate
Chiraipani	Raigarh	Raigarh	Mahanadi	10	6.75	–	–	6.6	Sand Stone with Shale/Coal beds
Bangursian	Raigarh	Raigarh	Mahanadi	10	–	–	–	4.55	Sand Stone with Shale/Coal beds
Sambalpur New	Raigarh	Raigarh	Mahanadi	6.5	–	–	–	3.85	Basement Gneissic Complex
Raigarh	Raigarh	Raigarh	Mahanadi	17.66	3.55	–	–	5.25	Shale with Limestone
Kotarliya	Raigarh	Raigarh	Mahanadi	8.9	–	–	–	3.45	Basement Gneissic Complex
Kerajhar	Raigarh	Raigarh	Mahanadi	12.36	5.75	–	–	4.7	Shale with Limestone
Gerwani	Raigarh	Raigarh	Mahanadi	18	–	–	–	6.6	Sand Stone with Shale/Coal beds
Kotra	Raigarh	Raigarh	Mahanadi	9.46	–	–	–	2.3	Shale with Limestone

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Tadola	Pusaur	Raigarh	Mahanadi	6.8	–	–	–	4.8	Shale with Limestone
Tetla	Pusaur	Raigarh	Mahanadi	13.17	2.64	–	–	2.05	Shale with Limestone
Koshmanda	Pusaur	Raigarh	Mahanadi	71	2.2	–	–	4.2	Shale with Limestone
Aurda	Pusaur	Raigarh	Mahanadi	8	3.7	–	–	5.3	Shale with Limestone
Rengalpalli	Pusaur	Raigarh	Mahanadi	8	–	–	–	3.9	Shale with Limestone
Kushal Nagar	Sarangarh	Raigarh	Mahanadi	15	4.9	–	–	4.42	Shale with Limestone
Bataupali	Sarangarh	Raigarh	Mahanadi	9	4.8	–	–	2.93	Sandstone,conglomerate
Godam	Sarangarh	Raigarh	Mahanadi	10	6.5	–	–	–	Shale with Limestone
Pindri	Sarangarh	Raigarh	Mahanadi	7.97	3.7	–	–	3.99	Shale with Limestone
Rera	Sarangarh	Raigarh	Mahanadi	8.5	5.73	–	–	4.25	Shale with Sandstone
Hirri1	Sarangarh	Raigarh	Mahanadi	9.72	0.6	–	–	7.2	Shale with Limestone
Chhind	Sarangarh	Raigarh	Mahanadi	9	3.7	–	–	–	Dolomite/Limestone
Kedar	Sarangarh	Raigarh	Mahanadi	12	3.6	–	–	–	Dolomite/Limestone
Malda B	Sarangarh	Raigarh	Mahanadi	9.27	–	–	–	6.89	Sandstone,conglomerate
Kanakbira	Sarangarh	Raigarh	Mahanadi	12.2	9.3	–	–	–	Sandstone,conglomerate
Damdarha	Sarangarh	Raigarh	Mahanadi	9.85	–	–	–	8.5	Sandstone,conglomerate
Kargipali Kargidipa	Sarangarh	Raigarh	Mahanadi	9.9	8.9	–	–	7.65	Basement Gneissic Complex
Jhikipali	Sarai Lengha [Baram	Raigarh	Mahanadi	9	9	–	–	–	Sandstone,conglomerate
Malda-B	Sarai Lengha [Baram	Raigarh	Mahanadi	10	10	–	–	–	Sandstone,conglomerate
Bonda	Sarai Lengha [Baram	Raigarh	Mahanadi	10	–	–	–	4.12	Shale with Limestone
Lendhara	Sarai Lengha [Baram	Raigarh	Mahanadi	9	9	–	–	–	Shale with Limestone
Baramkela	Sarai Lengha [Baram	Raigarh	Mahanadi	15.5	8.5	–	–	7.1	Shale with Limestone
Edu	Dharmjaigarh	Raigarh	Mahanadi	9.5	8	–	–	5.65	Sand Stone with Shale/Coal beds
Auranar	Dharmjaigarh	Raigarh	Mahanadi	13.9	–	–	–	5.9	Sand Stone with Shale/Coal beds
Chhal	Dharmjaigarh	Raigarh	Mahanadi	7.9	6.8	–	–	–	Sand Stone with Shale/Coal beds
Bojja	Dharmjaigarh	Raigarh	Mahanadi	9.2	–	–	–	5.8	Sand Stone with Shale/Coal beds
Katangdih	Dharmjaigarh	Raigarh	Mahanadi	10	–	–	–	4.3	Sand Stone with Shale/Coal beds
Kurekela	Dharmjaigarh	Raigarh	Mahanadi	14.55	3.25	–	–	8.95	Sand Stone with Shale/Coal beds
Kapu	Dharmjaigarh	Raigarh	Mahanadi	9.75	8.62	–	–	4.6	Basement Gneissic Complex
Derpani	Dharmjaigarh	Raigarh	Mahanadi	6.2	4.8	–	–	1.9	Basement Gneissic Complex
Golabuda	Dharmjaigarh	Raigarh	Mahanadi	10.2	10.2	–	–	7.2	Basement Gneissic Complex
Lipti	Dharmjaigarh	Raigarh	Mahanadi	7.5	5.35	–	–	3.9	Basement Gneissic Complex
Khamhar	Dharmjaigarh	Raigarh	Mahanadi	15	8.95	–	–	–	Sand Stone with Shale/Coal beds
Boro	Dharmjaigarh	Raigarh	Mahanadi	12	–	–	–	7.45	Sand Stone with Shale/Coal beds
Kandadand	Dharmjaigarh	Raigarh	Mahanadi	10.4	7.9	–	–	–	Basement Gneissic Complex
Bakaruma	Dharmjaigarh	Raigarh	Mahanadi	11.25	10.55	–	–	6.7	Basement Gneissic Complex
Lakshmpur	Dharmjaigarh	Raigarh	Mahanadi	4.4	4.3	–	–	4.05	Basement Gneissic Complex
Pordahi	Dharmjaigarh	Raigarh	Mahanadi	15	4.65	–	–	–	Sand Stone with Shale/Coal beds
Bayasi	Dharmjaigarh	Raigarh	Mahanadi	7.5	6.3	–	–	6.29	Sand Stone with Shale/Coal beds
Tendumar New	Dharmjaigarh	Raigarh	Mahanadi	15	–	–	–	4.95	Sand Stone with Shale/Coal beds
Duliamuda	Dharmjaigarh	Raigarh	Mahanadi	9.4	–	–	–	7.78	Sand Stone with Shale/Coal beds
Gersa	Dharmjaigarh	Raigarh	Mahanadi	12.5	6.85	–	–	4.1	Sand Stone with Shale/Coal beds
Dharamjaigarh PZ	Dharmjaigarh	Raigarh	Mahanadi	29.91	6.53	–	–	3.45	Sand Stone with Shale/Coal beds
Sisringa	Dharmjaigarh	Raigarh	Mahanadi	13.6	–	–	–	6.12	Basement Gneissic Complex
Dharamjaygarh	Dharmjaigarh	Raigarh	Mahanadi	10.6	8.55	–	–	4.05	Sand Stone with Shale/Coal beds
Sirsinga Temple	Dharmjaigarh	Raigarh	Mahanadi	8.2	7.15	–	–	–	Sand Stone with Shale/Coal beds
Bamsjer	Dharmjaigarh	Raigarh	Mahanadi	7.8	–	–	–	4.09	Basement Gneissic Complex
Durgapur	Dharmjaigarh	Raigarh	Mahanadi	9.7	–	–	–	5.05	Sand Stone with Shale/Coal beds
Shahpur Colony	Dharmjaigarh	Raigarh	Mahanadi	12	11	–	–	5.3	Sand Stone with Shale/Coal beds
Karramarra	Dharmjaigarh	Raigarh	Mahanadi	5	3.1	–	–	–	Sand Stone with Shale
Choranga	Dharmjaigarh	Raigarh	Mahanadi	15	6.45	–	–	–	Basement Gneissic Complex
Bartapali	Dharmjaigarh	Raigarh	Mahanadi	11.4	–	–	–	8.09	Sand Stone with Shale/Coal beds
Barpali	Dharmjaigarh	Raigarh	Mahanadi	11.48	9.48	–	–	6.7	Sand Stone with Shale/Coal beds
Hati	Dharmjaigarh	Raigarh	Mahanadi	9.56	8.35	–	–	6.8	Sand Stone with Shale/Coal beds
Amgaon	Dharmjaigarh	Raigarh	Mahanadi	11.3	7.6	–	–	6.9	Sand Stone with Shale/Coal beds
Khadgaon1	Dharmjaigarh	Raigarh	Mahanadi	14	14	–	–	12.95	Sand Stone with Shale/Coal beds
Amapali	Dharmjaigarh	Raigarh	Mahanadi	10.5	–	–	–	5.4	Sand Stone with Shale/Coal beds

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Mumund	Dharmajgarh	Raigarh	Mahanadi	6.2	5.7	–	–	–	Sand Stone with Shale/Coal beds
Udela	Simga	Raipur	Mahanadi	11.6	2.9	1.48	2.38	2.9	Dolomite/Limestone
Simga	Simga	Raipur	Mahanadi	10.43	–	0.96	2.23	2.98	Shale with Limestone
Suhela	Simga	Raipur	Mahanadi	13.5	2.15	1.14	–	3.02	Dolomite/Limestone
Darchura	Simga	Raipur	Mahanadi	10.7	2.44	1.19	2.08	2.58	Dolomite/Limestone
Dhamarkhera	Simga	Raipur	Mahanadi	11.36	4.705	2.76	2.11	3.65	Shale with Limestone
Khapri	Simga	Raipur	Mahanadi	13.5	10.38	2.78	5.4	7.04	Dolomite/Limestone
Hathband	Simga	Raipur	Mahanadi	9	–	1.8	3.4	3.17	Dolomite/Limestone
Hadabandh	Simga	Raipur	Mahanadi	15	7.1	–	–	–	Shale with Sandstone
Pahangaon	Balodabazar	Raipur	Mahanadi	15	9.05	2.24	3.24	5.03	Basement Gneissic Complex
Amera	Balodabazar	Raipur	Mahanadi	8	6.11	0.91	1.45	2.42	Shale with Sandstone
Chandi	Balodabazar	Raipur	Mahanadi	7	5	0.82	0.9	4.68	Dolomite/Limestone
Lahaud	Balodabazar	Raipur	Mahanadi	10.9	7.11	1.2	2.18	3.45	Shale with Sandstone
Baloda bazar	Balodabazar	Raipur	Mahanadi	15.4	7	5.76	4.15	–	Shale with Sandstone
Bitkuli	Balodabazar	Raipur	Mahanadi	10	7.13	0.96	1.1	1.62	Shale with Sandstone
Arjuni	Balodabazar	Raipur	Mahanadi	10.8	9.97	1.4	3	4.96	Dolomite/Limestone
Rawan	Balodabazar	Raipur	Mahanadi	8.25	4.8	0.64	1.4	1.73	Dolomite/Limestone
Lawan	Balodabazar	Raipur	Mahanadi	9.69	3.46	1.66	1.9	2.09	Shale with Sandstone
Risda	Balodabazar	Raipur	Mahanadi	12	9.25	2.73	2.12	7.07	Shale with Sandstone
Kanki New	Balodabazar	Raipur	Mahanadi	10.29	–	–	–	2.66	Dolomite/Limestone
Dhabadih	Balodabazar	Raipur	Mahanadi	11.06	7.96	2.49	3.19	4.73	Shale with Sandstone
Aouri	Kasdol	Raipur	Mahanadi	9.8	7	1.75	2.35	5.52	Sandstone, conglomerate
Mudhipar	Kasdol	Raipur	Mahanadi	6.9	–	1.61	2.85	3.47	Dolomite/Limestone
Haswa	Kasdol	Raipur	Mahanadi	14.83	5	1.98	–	–	Shale with Sandstone
Sel	Kasdol	Raipur	Mahanadi	9.3	3.58	0.67	1.5	2.68	Shale with Sandstone
Tundei	Kasdol	Raipur	Mahanadi	10.45	–	–	–	2.83	Dolomite/Limestone
Charched	Kasdol	Raipur	Mahanadi	11.21	8	2.42	2.45	4.02	Shale with Sandstone
Kasdol	Kasdol	Raipur	Mahanadi	9.27	6.05	1.12	1.77	2.92	Shale with Sandstone
Bilaigarh	Bilaigarh	Raipur	Mahanadi	5.35	5	0.93	1.46	1.88	Dolomite/Limestone
Bhatgaon	Bilaigarh	Raipur	Mahanadi	9.05	7	4.34	2.03	2.33	Dolomite/Limestone
Tundri	Bilaigarh	Raipur	Mahanadi	7.8	4.08	1.85	1.98	–	Dolomite/Limestone
Sarsiwa	Bilaigarh	Raipur	Mahanadi	10.14	5	4.24	6.43	9.01	Dolomite/Limestone
Pandan Bhata	Tilda	Raipur	Mahanadi	10.45	7.5	8.96	2.42	5.2	Dolomite/Limestone
Chicholi	Tilda	Raipur	Mahanadi	15.5	13.26	0.95	2.51	2.32	Dolomite/Limestone
Biladi	Tilda	Raipur	Mahanadi	10	10	3.47	5.8	6.84	Dolomite/Limestone
Tilda S	Tilda	Raipur	Mahanadi	50	–	–	–	7.42	Dolomite/Limestone
Tarpongi	Tilda	Raipur	Mahanadi	8.25	6.52	3.25	1.82	3.22	Dolomite/Limestone
Saragaon	Tilda	Raipur	Mahanadi	7.2	5.61	2.1	2.38	2.43	Dolomite/Limestone
Raita Satna Ni Para	Tilda	Raipur	Mahanadi	10	9.66	2.24	1.9	2.53	Dolomite/Limestone
Kanki S	Tilda	Raipur	Mahanadi	50	–	–	–	2.82	Shale with Sandstone
Math	Tilda	Raipur	Mahanadi	10	7.79	1.6	2.45	3.74	Dolomite/Limestone
Kharora	Tilda	Raipur	Mahanadi	12.1	8	2.2	3.2	2.98	Dolomite/Limestone
Godhi	Arang	Raipur	Mahanadi	12.7	6.14	2.25	4.2	10.9	Shale with Sandstone
Umaria station	Arang	Raipur	Mahanadi	8.84	8.36	1.88	2.41	6.12	Shale with Sandstone
Bhatia	Arang	Raipur	Mahanadi	9.1	–	–	2.03	4.02	Dolomite/Limestone
Kanki	Arang	Raipur	Mahanadi	7.25	5.63	2	2.21	3.55	Shale with Sandstone
Ghivera	Arang	Raipur	Mahanadi	10.05	1.9	0.56	0.77	0.65	Shale with Sandstone
Kasarangi New	Arang	Raipur	Mahanadi	9.1	2.74	–	1.21	1.32	Shale with Sandstone
Kusrangi	Arang	Raipur	Mahanadi	7.85	–	0.55	–	–	Shale with Sandstone
Ranisagar	Arang	Raipur	Mahanadi	7.85	3.52	0.68	0.82	1.44	Dolomite/Limestone
Navagaon	Arang	Raipur	Mahanadi	9	4.285	1.29	3.36	3.82	Dolomite/Limestone
Baihar	Arang	Raipur	Mahanadi	13.4	–	6.5	7.45	7.17	Shale with Sandstone
Piperhatta	Arang	Raipur	Mahanadi	7.96	5.13	2.4	2.47	3.22	Dolomite/Limestone
Manabasti	Dharsiwa	Raipur	Mahanadi	12.2	8.2	2.2	3.65	4.52	Dolomite/Limestone
Devri	Dharsiwa	Raipur	Mahanadi	15	5.3	4.58	2.825	3.52	Dolomite/Limestone
Tatibandh MVM	Dharsiwa	Raipur	Mahanadi	13.1	–	–	–	5.38	Dolomite/Limestone
Ravi Shankar University Raipur	Dharsiwa	Raipur	Mahanadi	10.4	6.23	2.28	3.45	1.83	Dolomite/Limestone

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Panderbhata S	Dharsiwa	Raipur	Mahanadi	50	–	–	–	5.14	Dolomite/Limestone
Dharsiwa	Dharsiwa	Raipur	Mahanadi	13	9.88	2.42	–	3.5	Dolomite/Limestone
Charauda	Dharsiwa	Raipur	Mahanadi	7.8	2.22	1.85	2	2.2	Dolomite/Limestone
Sakara	Dharsiwa	Raipur	Mahanadi	21.55	18.54	9.8	10	4.8	Dolomite/Limestone
Mandhar	Dharsiwa	Raipur	Mahanadi	7.2	6.19	3.9	2.75	–	Dolomite/Limestone
Semariya	Dharsiwa	Raipur	Mahanadi	11.15	8	1.38	1.59	1.5	Dolomite/Limestone
Devpuri	Dharsiwa	Raipur	Mahanadi	14.04	8	2.6	3.7	10.1	Dolomite/Limestone
Dumartarai	Dharsiwa	Raipur	Mahanadi	11.2	8.86	1.5	2.13	3.24	Dolomite/Limestone
Bajrangpur	Abhanpur	Raipur	Mahanadi	12.45	2.92	1.18	1.4	2.12	Shale with Sandstone
Gotiadih	Abhanpur	Raipur	Mahanadi	7.6	3.82	1.57	1.85	2.69	Shale with Sandstone
Nawagaon	Abhanpur	Raipur	Mahanadi	7	–	2.1	3.22	4.785	Shale with Sandstone
Kurra	Abhanpur	Raipur	Mahanadi	25.9	3.62	1.62	2.5	3.16	Shale with Sandstone
Kendri	Abhanpur	Raipur	Mahanadi	17.2	6.87	2.44	3.47	5.02	Shale with Sandstone
Kurru	Abhanpur	Raipur	Mahanadi	14	–	2.25	3.11	3.7	Shale with Sandstone
Abhanpur	Abhanpur	Raipur	Mahanadi	19.9	5.25	2.05	3.5	4.63	Shale with Sandstone
Pond	Chhura	Raipur	Mahanadi	6.3	–	1.59	2.49	2.67	Sandstone,conglomerate
Kharkhara	Chhura	Raipur	Mahanadi	8	5.82	1.3	1.8	2.21	Basement Gneissic Complex
Baruka	Chhura	Raipur	Mahanadi	8	4.7	–	–	–	Sandstone,conglomerate
Kaseru	Chhura	Raipur	Mahanadi	10	10	7.48	3.9	7.24	Basement Gneissic Complex
Sarkada	Chhura	Raipur	Mahanadi	8.6	–	–	–	3.57	Basement Gneissic Complex
Amethi	Chhura	Raipur	Mahanadi	6.4	6	–	–	5.27	Basement Gneissic Complex
Kurud	Chhura	Raipur	Mahanadi	13.2	–	–	2.17	–	Sandstone,conglomerate
Gariaband	Chhura	Raipur	Mahanadi	10	10	4.98	3.95	6.53	Basement Gneissic Complex
Baronda	Chhura	Raipur	Mahanadi	9.45	–	–	–	7.1	Dolomite/Limestone
Kirwai-Fokatpara Fingeshwar	Gariyaband	Raipur	Mahanadi	8.66	–	1.7	3.15	–	Dolomite/Limestone
Malgaon	Gariyaband	Raipur	Mahanadi	8	–	1.78	2.15	2.46	Basement Gneissic Complex
Devri	Gariyaband	Raipur	Mahanadi	11.5	–	–	–	7.85	Dolomite/Limestone
Mundagaon	Deobhog	Raipur	Mahanadi	8.7	–	–	–	2.34	Charnockite
Sandi	Palari	Raipur	Mahanadi	10.9	9.75	2.1	2.65	4.59	Shale with Sandstone
Devsundari	Palari	Raipur	Mahanadi	15	5	1.6	2.4	1.87	Shale with Sandstone
Palari	Palari	Raipur	Mahanadi	11.5	5.7	1.35	1.85	3.17	Shale with Sandstone
Bhatia	Palari	Raipur	Mahanadi	9.1	5.3	1.36	2.3	–	Shale with Sandstone
Panduka	Rajim	Raipur	Mahanadi	10.77	6.88	2.12	3.3	4.23	Sandstone,conglomerate
Chhura	Rajim	Raipur	Mahanadi	10	4.885	1.21	3.35	4.34	Basement Gneissic Complex
Sursabandha	Rajim	Raipur	Mahanadi	8.16	5	–	1.21	–	Dolomite/Limestone
Parsakhurd	Rajim	Raipur	Mahanadi	10	5.14	2.18	3	3.51	Basement Gneissic Complex
Kopra	Rajim	Raipur	Mahanadi	11.27	1.85	0.5	1.21	2.06	Dolomite/Limestone
Kirwai	Rajim	Raipur	Mahanadi	8.58	7.1	–	–	4.51	Dolomite/Limestone
Fingeshwar	Rajim	Raipur	Mahanadi	11.65	–	3.63	4.32	–	Sandstone,conglomerate
Rajim	Rajim	Raipur	Mahanadi	10.95	10	8.7	8.1	9.13	Dolomite/Limestone
Tarenga	Bhatapara	Raipur	Mahanadi	17.11	7	–	–	–	Shale with Limestone
Kedar	Bhatapara	Raipur	Mahanadi	12	6.89	1.04	1.75	2.08	Shale with Limestone
Khairagarh	Khairagarh	Rajnandgaon	Mahanadi	9	7.735	6.48	6.33	8.19	Dolomite/Limestone
Dhaneli	Khairagarh	Rajnandgaon	Mahanadi	9	7.52	–	3.77	5.48	Dolomite/Limestone
Salhe Bara	Khairagarh	Rajnandgaon	Mahanadi	12.45	7.86	2.36	2.19	3.16	Basic Rock(Dolerite,Anorthosite etc.)
Madrauhi	Khairagarh	Rajnandgaon	Mahanadi	9.5	9.13	5.09	2.95	4.22	Dolomite/Limestone
Rangkathera	Khairagarh	Rajnandgaon	Mahanadi	10.81	–	6.32	4.28	6.29	Dolomite/Limestone
Jalbanda	Khairagarh	Rajnandgaon	Mahanadi	5.7	5.26	–	2.8	3.65	Dolomite/Limestone
Khursipar	Khairagarh	Rajnandgaon	Mahanadi	15.2	–	3.94	2.91	4.63	Phyllite
Badaitola	Khairagarh	Rajnandgaon	Mahanadi	14.3	8.25	4.17	4.34	11	Dolomite/Limestone
Baigatola	Khairagarh	Rajnandgaon	Mahanadi	8.3	3.89	1.29	1.56	2.2	Acid Rocks (Granite, Pegmatite, Syenite, Rhyolite etc.)
Talagaon	Khairagarh	Rajnandgaon	Mahanadi	13	7.91	3.84	3.95	6.1	Quartzite
Salgapat	Khairagarh	Rajnandgaon	Mahanadi	10.18	8.29	–	–	–	Dolomite/Limestone
Pipariya	Khairagarh	Rajnandgaon	Mahanadi	12.19	–	–	–	7.16	Acid Rocks (Granite, Pegmatite, Syenite, Rhyolite etc.)
Ranitarai	Rajnandgaon	Rajnandgaon	Mahanadi	10.1	7.3	3.92	2.95	2.22	Shale with Sandstone
Joratarai	Rajnandgaon	Rajnandgaon	Mahanadi	7	7	–	–	–	Dolomite/Limestone

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Nawagaon	Rajnandgaon	Rajnandgaon	Mahanadi	12.3	5.89	3.26	–	–	Dolomite/Limestone
Anjora	Rajnandgaon	Rajnandgaon	Mahanadi	10	10	6.26	3.74	4.96	Dolomite/Limestone
Talai	Rajnandgaon	Rajnandgaon	Mahanadi	15	6.72	3.62	3.02	4.54	Shale with Sandstone
Dewada	Rajnandgaon	Rajnandgaon	Mahanadi	9	–	–	–	4.97	Dolomite/Limestone
Bori	Rajnandgaon	Rajnandgaon	Mahanadi	10	5.92	2.19	2.37	4.18	Shale with Sandstone
Somni	Rajnandgaon	Rajnandgaon	Mahanadi	13.88	8	4.75	4.29	5.21	Shale with Sandstone
Ravagahan	Rajnandgaon	Rajnandgaon	Mahanadi	9.1	3.31	2.39	2.01	4.65	Shale with Sandstone
Singhola	Rajnandgaon	Rajnandgaon	Mahanadi	6.5	2.63	1.03	1.06	1.5	Shale with Sandstone
Rajnandgaon-S PZ	Rajnandgaon	Rajnandgaon	Mahanadi	30.46	15.12	8.18	4.61	6.76	Shale with Sandstone
Sundara	Rajnandgaon	Rajnandgaon	Mahanadi	12	6.4	–	1.83	1.98	Shale with Sandstone
Rajnandgaon	Rajnandgaon	Rajnandgaon	Mahanadi	11.8	2.66	1.37	1.48	1.78	Shale with Sandstone
Reevadih	Rajnandgaon	Rajnandgaon	Mahanadi	12	7.53	3.92	3.64	5.27	Shale with Sandstone
Maladabri	Rajnandgaon	Rajnandgaon	Mahanadi	15.1	15	3.16	5.37	3.55	Dolomite/Limestone
Patewa	Rajnandgaon	Rajnandgaon	Mahanadi	17	6.49	1.82	1.93	2.74	Dolomite/Limestone
Saloni	Rajnandgaon	Rajnandgaon	Mahanadi	12.25	5.89	2.64	2.84	3.71	Dolomite/Limestone
Gidhwah	Rajnandgaon	Rajnandgaon	Mahanadi	8.5	7.26	6.45	3.4	5.5	Dolomite/Limestone
Uperwahi	Rajnandgaon	Rajnandgaon	Mahanadi	10	6.74	1.98	–	–	Dolomite/Limestone
Bhaistara Bhatapara	Rajnandgaon	Rajnandgaon	Mahanadi	9.3	6.77	7.2	7.06	6	Dolomite/Limestone
Reevagaon	Dongargarh	Rajnandgaon	Mahanadi	10.75	5.96	–	–	–	Acid Rocks (Granite, Pegmatite, Syenite, Rhyolite etc.)
Sahaspur Dalli	Dongargarh	Rajnandgaon	Mahanadi	15	14	2.62	2.85	4.63	Acid Rocks (Granite, Pegmatite, Syenite, Rhyolite etc.)
Dhara	Dongargarh	Rajnandgaon	Mahanadi	9.3	7.69	4.73	5.11	5.3	Acid Rocks (Granite, Pegmatite, Syenite, Rhyolite etc.)
Devkatta	Dongargarh	Rajnandgaon	Mahanadi	9.1	9	–	–	4.75	Acid Rocks (Granite, Pegmatite, Syenite, Rhyolite etc.)
Bharritola	Dongargarh	Rajnandgaon	Mahanadi	11	5.57	2.47	2.69	11	Acid Rocks (Granite, Pegmatite, Syenite, Rhyolite etc.)
Tappa	Dongargarh	Rajnandgaon	Mahanadi	12.71	12.7	6.39	5.49	7.25	Acid Rocks (Granite, Pegmatite, Syenite, Rhyolite etc.)
Uraidabritola	Dongargarh	Rajnandgaon	Mahanadi	12.05	10.2	6.58	4.29	5.84	Acid Rocks (Granite, Pegmatite, Syenite, Rhyolite etc.)
Dongargarh	Dongargarh	Rajnandgaon	Mahanadi	11.4	4.89	2.21	2.73	6.43	Acid Rocks (Granite, Pegmatite, Syenite, Rhyolite etc.)
Kalyanpur	Dongargarh	Rajnandgaon	Mahanadi	5.5	5.4	2.81	3.14	4.51	Acid Rocks (Granite, Pegmatite, Syenite, Rhyolite etc.)
Ramatola	Dongargarh	Rajnandgaon	Mahanadi	13.5	7.53	3.45	2.45	3.56	Acid Rocks (Granite, Pegmatite, Syenite, Rhyolite etc.)
Lal bhadurnagar	Dongargarh	Rajnandgaon	Mahanadi	12.02	7.86	4.29	3.12	5.38	Acid Rocks (Granite, Pegmatite, Syenite, Rhyolite etc.)
Govindpur	Dongargarh	Rajnandgaon	Mahanadi	8	6.16	3.22	2.79	3.18	Acid Rocks (Granite, Pegmatite, Syenite, Rhyolite etc.)
Chinohola	Dongargarh	Rajnandgaon	Mahanadi	11.7	–	–	–	6.29	Acid Rocks (Granite, Pegmatite, Syenite, Rhyolite etc.)
Gandatola	Chhuriya	Rajnandgaon	Mahanadi	9.5	9.4	–	–	–	Charnockite
Chhuria	Chhuriya	Rajnandgaon	Mahanadi	15	–	–	–	6.29	Acid Rocks (Granite, Pegmatite, Syenite, Rhyolite etc.)
Chirchari	Chhuriya	Rajnandgaon	Mahanadi	12.02	–	8.59	–	7.92	Acid Rocks (Granite, Pegmatite, Syenite, Rhyolite etc.)
Chichola	Chhuriya	Rajnandgaon	Mahanadi	13.5	6.87	6.39	4.51	–	Acid Rocks (Granite, Pegmatite, Syenite, Rhyolite etc.)
Bija Bhata	Dongargaon	Rajnandgaon	Mahanadi	14.5	13.1	7.61	5.28	7.25	Sandstone,conglomerate
Konhari	Dongargaon	Rajnandgaon	Mahanadi	10.2	5.25	2.13	2.02	3.85	Sandstone,conglomerate
Dongargaon.1	Dongargaon	Rajnandgaon	Mahanadi	10.52	–	1.61	1.52	2.71	Sandstone,conglomerate
Jangalpur	Chhuikhadan	Rajnandgaon	Mahanadi	12	7.21	4.56	4.81	6.03	Dolomite/Limestone
Narmada	Chhuikhadan	Rajnandgaon	Mahanadi	9.65	5.65	3.28	3.52	5.16	Dolomite/Limestone
Mohgaon	Chhuikhadan	Rajnandgaon	Mahanadi	13	6.63	3.94	4.22	5.62	Phyllite
Pailimeta	Chhuikhadan	Rajnandgaon	Mahanadi	12	5.98	3.71	3.84	5.31	Phyllite
Bhorampur	Chhuikhadan	Rajnandgaon	Mahanadi	8.3	8	6.39	6.68	8.13	Basic Rock(Dolerite,Anorthosite etc.)
Ganeshpur	Ramanujnagar	Surguja	Mahanadi	14.06	11.66	4.13	5.46	8	Sand Stone with Shale
Ramanuj nagar	Ramanujnagar	Surguja	Mahanadi	12.05	8	6.88	8.14	10	Charnockite
Jagatpur Podipara	Ramanujnagar	Surguja	Mahanadi	12.9	12	3.89	6.47	8	Charnockite
Parasrampur	Ramanujnagar	Surguja	Mahanadi	10	9	3.19	4	6.37	Sand Stone with Shale/Coal beds
Mahewa	Wadrafnagar	Surguja	Lower Ganges	9.85	–	–	4.19	–	Sand Stone with Shale/Coal beds
Wadrafnagar	Wadrafnagar	Surguja	Lower Ganges	14	11	–	10.86	8.9	Sand Stone with Shale
Odigi	Odgi	Surguja	Lower Ganges	8	8	–	–	–	Sand Stone with Shale/Coal beds

Location	Block	District	Basin	Depth	DTW May 2019	DTW August 2019	DTW November 2019	DTW January 2020	Aquifer
Dharampur	Pratappur	Surguja	Mahanadi	14	8	–	–	–	Sand Stone with Shale/Coal beds
Pratappur	Pratappur	Surguja	Lower Ganges	12	8	–	6.71	8.44	Basement Gneissic Complex
Darhora	Pratappur	Surguja	Mahanadi	9	9	–	5.61	7	Basement Gneissic Complex
Gonda	Pratappur	Surguja	Lower Ganges	16.47	16.46	–	4.11	6.34	Sand Stone with Shale/Coal beds
Dawankera	Pratappur	Surguja	Mahanadi	7.8	7	–	6.16	5.26	Basement Gneissic Complex
Podi	Pratappur	Surguja	Mahanadi	8	8	–	3.17	4.37	Laterite/Ferruginous concretions
Chanchi-Dand	Pratappur	Surguja	Mahanadi	10.5	9	–	5	5.44	Sand Stone with Shale/Coal beds
Reonti	Pratappur	Surguja	Lower Ganges	13.05	7	–	9	10.21	Sand Stone with Shale/Coal beds
Dhondha	Pratappur	Surguja	Mahanadi	8	8	–	5	6.13	Sand Stone with Shale/Coal beds
Bhediya	Pratappur	Surguja	Lower Ganges	10	4.91	–	5.6	7	Basement Gneissic Complex
Karajwar	Pratappur	Surguja	Mahanadi	10.3	10	–	–	7.21	Basement Gneissic Complex
Chandora	Pratappur	Surguja	Lower Ganges	7.01	7	–	4	5.27	Basement Gneissic Complex
Durti	Pratappur	Surguja	Mahanadi	9.5	8	–	3	3.67	Sand Stone with Shale/Coal beds
Jagannathpur	Pratappur	Surguja	Lower Ganges	8.35	3.16	–	2	4.19	Sand Stone with Shale/Coal beds
Banshipur	Pratappur	Surguja	Mahanadi	11.7	10.6	–	8	10	Sand Stone with Shale/Coal beds
Songara	Pratappur	Surguja	Lower Ganges	15	7	–	11	6	Sand Stone with Shale/Coal beds
Dwarikanagar	Pratappur	Surguja	Lower Ganges	7.3	5.7	–	2.18	3.56	Sand Stone with Shale/Coal beds
Pasta	Balrampur	Surguja	Lower Ganges	12	12	–	–	4.68	Basement Gneissic Complex
Dalbahara	Bhaiyathan	Surguja	Mahanadi	6	6	1.56	2	3.28	Sand Stone with Shale/Coal beds
Khandapara	Bhaiyathan	Surguja	Lower Ganges	7.5	4.62	1.97	3.59	4.47	Sand Stone with Shale
Samouli	Bhaiyathan	Surguja	Mahanadi	9.5	9.4	4.11	5	6.39	Sand Stone with Shale/Coal beds
Sotipara Bhaingamunda	Bhaiyathan	Surguja	Lower Ganges	10	7.66	–	4	4.48	Basement Gneissic Complex
Chaimpur	Bhaiyathan	Surguja	Lower Ganges	6	6	2.9	2	2	Sand Stone with Shale/Coal beds
Ghorghadi	Rajpur	Surguja	Mahanadi	8	–	–	4	5.17	Basement Gneissic Complex
Makanpur	Rajpur	Surguja	Lower Ganges	12.2	12.2	–	4.66	7	Basement Gneissic Complex
Alkadih	Rajpur	Surguja	Mahanadi	8	8	–	3.42	4.16	Basement Gneissic Complex
Parsagudi	Rajpur	Surguja	Mahanadi	11.3	11.1	–	9.18	8	Sand Stone with Shale/Coal beds
Rajpur	Rajpur	Surguja	Lower Ganges	14.56	12.18	–	8	8.43	Basement Gneissic Complex
Bhadar	Rajpur	Surguja	Lower Ganges	6.75	6.1	–	4.27	4.27	Basement Gneissic Complex
Karji	Rajpur	Surguja	Lower Ganges	5.9	5	–	–	4.47	Sand Stone with Shale/Coal beds
Narsinghpur	Rajpur	Surguja	Lower Ganges	8.7	8.7	–	5.18	6.52	Sand Stone with Shale/Coal beds
Chilma Kala	Rajpur	Surguja	Lower Ganges	9	9	–	4.18	6.68	Sand Stone with Shale/Coal beds
Bario	Rajpur	Surguja	Lower Ganges	9.3	7	–	8.11	–	Sand Stone with Shale/Coal beds
Sargaon	Shankargarh	Surguja	Mahanadi	9.4	7	–	5.18	6.95	Basement Gneissic Complex
Bachwar	Shankargarh	Surguja	Lower Ganges	8	8	–	4.11	5.13	Basement Gneissic Complex
Surajpur	Surajpur	Surguja	Lower Ganges	10	9.05	2.3	3.6	5.4	Sand Stone with Shale
Kanakpur	Surajpur	Surguja	Mahanadi	9.7	9	2.58	4	5.29	Sand Stone with Shale/Coal beds
Pachira	Surajpur	Surguja	Mahanadi	7.4	6	2.5	3.6	4.37	Charnockite
Bishrampur	Surajpur	Surguja	Lower Ganges	9.6	7.06	–	4.055	4.935	Sand Stone with Shale/Coal beds
Jaynagar	Surajpur	Surguja	Lower Ganges	10.28	5	4.15	5	8.17	Sand Stone with Shale/Coal beds
Kalyanpur	Surajpur	Surguja	Lower Ganges	9.5	8.56	–	3.2	4.77	Sand Stone with Shale/Coal beds
Krishnapur Kalwa	Surajpur	Surguja	Lower Ganges	11	11	–	4.17	8	Sand Stone with Shale
Narayanpur	Surajpur	Surguja	Mahanadi	10	9	–	6	8	Sand Stone with Shale/Coal beds
Deonagar	Surajpur	Surguja	Lower Ganges	8.3	8.06	2.81	4	5.37	Sand Stone with Shale

Location	Block	District	Basin	Depth	DTW May 2019	DTW August 2019	DTW November 2019	DTW January 2020	Aquifer
Sirsi	Surajpur	Surguja	Lower Ganges	8.5	6	3.18	5.18	8.34	Basement Gneissic Complex
Badsara	Surajpur	Surguja	Lower Ganges	10.3	8.1	—	4.58	7.44	Sand Stone with Shale/Coal beds
Newara	Surajpur	Surguja	Lower Ganges	10	8	3.19	5	6.54	Sand Stone with Shale
Biharpur	Surajpur	Surguja	Mahanadi	12	7.4	—	5.54	8.19	Sand Stone with Shale
Madanpur	Surajpur	Surguja	Lower Ganges	14.77	6.43	2.17	5	5.56	Sand Stone with Shale/Coal beds
Majeera	Surajpur	Surguja	Mahanadi	9	7.56	—	3.67	4.54	Sand Stone with Shale
Nawapara	Ambikapur	Surguja	Lower Ganges	9.1	9.06	—	5	8.83	Basement Gneissic Complex
Gangapur	Ambikapur	Surguja	Mahanadi	15.1	9.76	—	6	5.51	Sand Stone with Shale/Coal beds
Baghima	Ambikapur	Surguja	Lower Ganges	6	4.62	—	2.41	1.52	Basement Gneissic Complex
Barion	Ambikapur	Surguja	Lower Ganges	8.42	—	—	—	8	Basement Gneissic Complex
Parsa	Ambikapur	Surguja	Lower Ganges	10	8.62	—	4	5.52	Basement Gneissic Complex
Sargawan	Ambikapur	Surguja	Lower Ganges	7.7	7	2.5	3.17	4	Sand Stone with Shale/Coal beds
Rajpurikhurd	Ambikapur	Surguja	Mahanadi	11	5.15	—	3	2.48	Basement Gneissic Complex
Ambikapur	Ambikapur	Surguja	Lower Ganges	11.14	9.9	—	5	4.83	Sand Stone with Shale
Kakalo	Ambikapur	Surguja	Mahanadi	9.55	—	—	—	6.07	Basement Gneissic Complex
Chatakpur	Ambikapur	Surguja	Mahanadi	5.7	5.7	—	3.68	5.5	Basement Gneissic Complex
Darima	Ambikapur	Surguja	Lower Ganges	8.35	8	—	5	5.8	Basement Gneissic Complex
Kunni	Lakhanpur	Surguja	Lower Ganges	9.7	—	3	5	7	Basement Gneissic Complex
Udaipur Dhah	Lakhanpur	Surguja	Lower Ganges	10.6	6.9	3	4	5.15	Sandstone, conglomerate
Singhitana	Lakhanpur	Surguja	Mahanadi	10.1	10	5.14	7	8.58	Basement Gneissic Complex
Lakhanpur	Lakhanpur	Surguja	Mahanadi	14.5	7	—	4.18	2.49	Basement Gneissic Complex
Amgachi	Lakhanpur	Surguja	Lower Ganges	15	5	0.63	1	2.18	Basement Gneissic Complex
Rajakatel	Lakhanpur	Surguja	Mahanadi	10	—	—	4.1	4.49	Basement Gneissic Complex
Tara	Premnagar	Surguja	Mahanadi	15.44	11	2.14	—	—	Sand Stone with Shale/Coal beds
Katarouli Harrapara	Premnagar	Surguja	Mahanadi	7	6.5	2.63	3.6	5.42	Charnockite
Premnagar D	Premnagar	Surguja	Mahanadi	50	—	—	—	16.39	Charnockite
Taraa	Premnagar	Surguja	Lower Ganges	11	8	—	—	—	Sand Stone with Shale/Coal beds
Fulkona	Premnagar	Surguja	Mahanadi	10	2.4	1.33	3.62	2.49	Sand Stone with Shale
Premnagar	Premnagar	Surguja	Mahanadi	13.65	10	6.13	8.13	10	Charnockite
Abhaypur	Premnagar	Surguja	Mahanadi	8.5	6.06	2.17	3	4.4	Sand Stone with Shale/Coal beds
Shivnagar	Premnagar	Surguja	Mahanadi	12.8	10.1	4.895	7	8.1	Sand Stone with Shale/Coal beds
Bandana	Batauli	Surguja	Mahanadi	9.43	7.36	—	4.67	7	Basement Gneissic Complex
Belkota	Batauli	Surguja	Lower Ganges	8.1	6	—	—	7.36	Basement Gneissic Complex
Batauli S	Batauli	Surguja	Mahanadi	50	—	—	—	7	Basement Gneissic Complex
Batauli	Batauli	Surguja	Mahanadi	10	9.06	—	—	—	Basement Gneissic Complex
Sedam	Batauli	Surguja	Mahanadi	11.1	8.36	—	7	7	Basement Gneissic Complex
Batauli Kunkurikala	Batauli	Surguja	Mahanadi	5.7	—	—	2	2.34	Basement Gneissic Complex
Dandgaon	Udeypur	Surguja	Mahanadi	7.71	7	2.2	3.47	4.48	Sand Stone with Shale
Jajga	Udeypur	Surguja	Mahanadi	9	7.22	4.17	6	4.34	Sand Stone with Shale
Udaipur	Udeypur	Surguja	Lower Ganges	14.58	13.9133	3.1	4.18	5.61	Sand Stone with Shale
Udaipur-d	Udeypur	Surguja	Lower Ganges	61.75	—	8.34	11.18	12.1	Sand Stone with Shale
Udaipur-s	Udeypur	Surguja	Lower Ganges	30.99	—	9.19	10	10.34	Sand Stone with Shale
Kamleswarpur	Mainpat	Surguja	Lower Ganges	21.27	15.32	—	10.4	7.42	Laterite/Ferruginous concretions
Nagadand	Mainpat	Surguja	Mahanadi	20	6	—	—	12	Laterite/Ferruginous concretions
Pratapgarh	Sitapur	Surguja	Mahanadi	11.3	9	—	5	6	Basement Gneissic Complex
Sitapur-d	Sitapur	Surguja	Mahanadi	52.46	—	—	5	6.6	Basement Gneissic Complex
Sontarai	Sitapur	Surguja	Mahanadi	6.9	6	—	3	3.58	Basement Gneissic Complex

Location	Block	District	Basin	Depth	DTW May 2019	DTW August 2019	DTW November 2019	DTW January 2020	Aquifer
Sitapur New	Sitapur	Surguja	Mahanadi	9.7	9.255	–	–	6.36	Basement Gneissic Complex
Sumerpur	Lundra	Surguja	Mahanadi	7.5	7	–	4	7	Basement Gneissic Complex
Dandgaon Koltapara	Lundra	Surguja	Mahanadi	12	10.1	–	5	7	Basement Gneissic Complex
Lundraa	Lundra	Surguja	Lower Ganges	10	9.36	–	6	–	Basement Gneissic Complex
Dhaurpur S	Lundra	Surguja	Lower Ganges	50	–	–	–	16.18	Basement Gneissic Complex
Amdih	Lundra	Surguja	Mahanadi	7.8	7.26	–	6.34	7.06	Basement Gneissic Complex
Dhaurpur	Lundra	Surguja	Lower Ganges	9	8.3	–	4	5.58	Basement Gneissic Complex
Lundra	Lundra	Surguja	Lower Ganges	10	–	–	–	7	Basement Gneissic Complex
Bulga	Lundra	Surguja	Lower Ganges	11	8.86	–	4	5.38	Sand Stone with Shale/Coal beds
Silsila	Lundra	Surguja	Lower Ganges	10	7	–	4	4.37	Basement Gneissic Complex

Annexure II Water Quality Data of National Hydrograph Monitoring Stations

Sl. No	District	Block	Village	PH	EC µS	CO3 mg/l	HCO3 mg/l	Cl mg/l	SO4 mg/l	F mg/l	TH mg/l	Ca mg/l	Mg mg/l	Na mg/l	K mg/l	Si mg/l	Po4 mg/l
1	Durg	Gurur	Gurur	6.9	567	ND	177.0	57.0	17.0	0.4	220	40	29.0	16.0	3.7	10.0	ND
2	Durg	Gurur	Balodgahan	6.8	539	ND	171.0	50.0	36.0	0.6	105	32	6.0	39.0	85.0	12.0	ND
3	Durg	Gurur	kuliya	6.8	535	ND	189.0	50.0	42.0	0.6	110	24	12.0	84.0	3.0	17.0	ND
4	Durg	Gurur	Jagtara	6.9	399	ND	195.0	21.0	11.0	0.5	155	32	18.0	30.0	3.4	14.0	ND
5	Durg	Gurur	Markatola	6.9	516	ND	244.0	35.0	17.0	0.7	175	28	25.0	49.0	1.3	10.0	ND
6	Kanker	Charama	Ratesara (Sadak Para)	6.9	360	ND	189.0	7.0	14.0	0.9	115	34	7.2	32.0	0.8	25.0	ND
7	Kanker	Kanker	Kanker	6.7	1040	ND	177.0	174.0	56.0	0.9	280	58	32.0	90.0	0.3	20.0	ND
8	Kanker	Kanker	Kulgaon	7.0	523	ND	268.0	21.0	12.0	0.8	215	46	24.0	29.0	0.4	23.0	ND
9	Bastar	Keshkal	Keskal	7.0	340	ND	122.0	39.0	ND	0.9	140	38	11.0	18.0	1.4	36.0	ND
10	Kondagaon	Kondagaon	Kondagaon	6.9	396	ND	104.0	57.0	ND	0.4	285	36	11.0	21.0	1.5	32.0	ND
11	Bastar	Kondagaon	Joba	6.9	1016	ND	226.0	142.0	42.0	0.5	345	58	48.0	57.0	1.8	23.0	ND
12	Bastar	Bastar	Bhanpuri	6.9	250	ND	98.0	14.0	10.0	0.6	90	30	3.6	13.0	0.8	24.0	ND
13	Bastar	Kondagaon	Borgaon	6.9	243	ND	122.0	14.0	ND	0.3	105	28	42.0	6.4	3.0	5.0	ND
14	Bastar	Jagdaldpur	Jagdaldpur	7.0	495	ND	195.0	28.0	ND	ND	210	48	22.0	10.0	0.6	10.0	ND
15	Bastar	Londigura	Chirakot	6.9	357	ND	171.0	11.0	7.0	0.3	150	26	20.0	19.0	3.6	10.0	ND
16	Bastar	Jagdaldpur	Kumharwand	7.0	265	ND	122.0	7.0	8.0	ND	100	32	4.8	10.0	0.4	6.0	ND
17	Bastar	Londigura	Usri bera	7.0	301	ND	134.0	21.0	5.0	0.2	135	40	8.4	5.4	1.0	9.0	ND
18	Bastar	Keshkal	Chapra Bhanpuri	7.0	326	ND	134.0	28.0	6.0	0.3	130	38	8.4	14.0	0.6	8.0	ND
19	Bastar	Jagdaldpur	Markel	6.9	497	ND	238.0	21.0	ND	0.2	230	60	19.0	11.0	0.6	5.0	ND
20	Bastar	Jagdaldpur	Bastar	6.9	300	ND	146.0	21.0	ND	0.2	140	44	7.2	7.2	0.6	4.0	ND
21	Bastar	Pharasaon	Jaitpuri	6.9	308	ND	159.0	14.0	ND	ND	110	32	7.2	7.3	0.5	5.0	ND
22	Bastar	Baster	Farsaguda	7.0	292	ND	110.0	28.0	ND	ND	115	36	6.0	13.0	0.4	9.0	ND
23	Kanker	Kondagaon	Surkupal	7.1	303	ND	134.0	28.0	ND	0.3	120	28	12.0	16.0	0.2	20.0	ND
24	Bastar	Pharasaon	Lanjora	7.1	1182	ND	183.0	213.0	31.0	0.3	480	96	58.0	28.0	1.3	30.0	ND
25	Bastar	Pharasaon	Pharasaon	6.8	442	ND	98.0	64.0	12.0	ND	180	40	19.0	28.4	3.4	32.0	ND
26	Kanker	Kanker	Govindpur	7.0	667	ND	256.0	43.0	14.0	0.6	170	52	9.6	66.0	3.4	30.0	ND
27	Kanker	Charama	Tegara	7.0	605	ND	244.0	50.0	20.0	1.0	140	32	14.0	88.0	1.2	34.0	ND
28	Kanker	Charama	Machandur	7.0	388	ND	195.0	21.0	8.0	1.0	140	40	9.6	31.0	2.7	24.0	ND
29	Bastar	Kondagaon	Chikalphuti	7.0	573	ND	171.0	71.0	16.0	0.2	240	56	24.0	33.0	2.3	36.0	ND
30	Bastar	Bastar	Sonarpal	6.8	335	ND	183.0	14.0	ND	0.2	165	52	8.4	3.7	1.2	16.0	ND
31	Mungeli	Patharya	Baitalpur	7.5	713	ND	329.0	21.0	55.0	0.2	330	72	36.0	23.0	1.4	8.0	0.5
32	Mungeli	Bilha	Amerikapa (Tala)	7.4	1681	ND	378.0	206.0	65.0	ND	600	124	70.0	113.0	3.0	7.0	0.2
33	Bilaspur	Bilha	Dagauri	7.3	1772	ND	586.0	78.0	252.0	0.2	560	192	19.0	153.0	12.0	7.0	ND
34	Bilaspur	Bilha	Bartoli	7.5	1229	ND	464.0	91.0	62.0	0.2	480	108	50.0	37.0	29.0	8.0	ND
35	Bilaspur	Bilha	Sawti	7.6	712	ND	329.0	21.0	44.0	ND	310	64	36.0	25.0	1.6	7.0	ND
36	Bilaspur	Bilha	Bohardi	7.6	668	ND	329.0	28.0	18.0	0.4	310	68	5.6	14.0	1.4	9.0	2.0
37	Bilaspur	Bilha	Bitkuli	7.3	1044	ND	342.0	57.0	85.0	0.2	490	116	48.0	21.0	1.1	8.0	ND
38	Bilaspur	Bilha	Bilha	7.3	758	ND	354.0	35.0	25.0	0.2	340	68	41.0	21.0	3.8	8.0	ND
39	Bilaspur	Bilha	Hirri	7.3	446	ND	317.0	35.0	48.0	0.3	330	64	41.0	20.0	2.9	7.0	2.2
40	Bilaspur	Bilha	Chakarbhata	7.4	639	ND	305.0	28.0	32.0	0.2	320	68	36.0	12.0	0.8	8.0	ND
41	Bilaspur	Takhatpur	Ganiyari	7.5	504	ND	268.0	14.0	13.0	0.3	240	44	31.0	14.0	1.1	9.0	ND
42	Bilaspur	Takhatpur	Neora	7.5	518	ND	256.0	7.0	20.0	ND	240	64	19.0	11.0	0.6	9.0	ND
43	Bilaspur	Kota	Kota(kargi)	7.2	1063	ND	329.0	106.0	44.0	0.2	360	96	29.0	67.0	2.4	10.0	ND
44	Bilaspur	Takhatpur	Pendari	7.4	2340	ND	732.0	35.0	176.0	0.5	1020	312	58.0	31.0	3.0	9.0	ND

Sl. No	District	Block	Village	PH	EC µS	CO3 mg/l	HCO3 mg/l	Cl mg/l	SO4 mg/l	F mg/l	TH mg/l	Ca mg/l	Mg mg/l	Na mg/l	K mg/l	Si mg/l	Po4 mg/l
45	Bilaspur	Takhatpur	Khamharia1	7.4	668	ND	232.0	28.0	80.0	0.3	310	84	24.0	26.0	1.1	12.0	ND
46	Bilaspur	Takhatpur	Jaroundha	7.3	1216	ND	451.0	21.0	140.0	0.4	520	140	41.0	55.0	1.4	10.0	ND
47	Bilaspur	Takhatpur	Khapri	7.3	1641	ND	415.0	35.0	216.0	0.3	650	208	31.0	61.0	1.9	8.0	ND
48	Bilaspur	Takhatpur	Takhatpur	7.1	2260	ND	769.0	64.0	144.0	0.5	770	176	79.0	135.0	2.7	10.0	ND
49	Mungeli	Mungeli	Daukapa	7.3	1080	ND	403.0	35.0	120.0	0.2	400	80	48.0	89.0	1.6	11.0	ND
50	Bilaspur	Mungeli	Khamaria	7.4	982	ND	366.0	21.0	110.0	0.2	300	76	26.0	92.0	1.2	12.0	ND
51	Mungeli	Patharia	Barcha	7.4	1826	ND	610.0	92.0	115.0	0.5	590	156	48.0	85.0	77.0	16.0	ND
52	Mungeli	Patharya	Patharia (chorbhatti)	7.2	2730	ND	549.0	390.0	220.0	0.6	900	184	106.0	210.0	4.6	10.0	ND
53	Mungeli	Patharia	Chandargarhi	7.4	1013	ND	342.0	35.0	113.0	0.5	420	96	43.0	56.0	1.7	8.0	ND
54	Mungeli	Patharya	Chirhula	7.2	1940	ND	647.0	220.0	112.0	1.0	780	192	72.0	69.0	96.0	10.0	ND
55	Mungeli	Mungeli	Chatarkhar	7.3	1040	ND	342.0	92.0	87.0	0.2	440	100	46.0	42.0	1.2	8.0	ND
56	Mungeli	Mungeli	Sitalkunda	7.5	698	ND	415.0	7.0	4.0	0.1	340	68	41.0	16.0	1.0	6.0	ND
57	Mungeli	Mungeli	Mungeli	7.5	1221	ND	549.0	21.0	80.0	0.4	330	40	55.0	146.0	1.2	12.0	ND
58	Bilaspur	Mungeli	Surada	7.4	791	ND	366.0	35.0	42.0	0.5	260	44	36.0	69.0	1.2	10.0	ND
59	Mungeli	Mungeli	Deori	7.2	1310	ND	464.0	50.0	150.0	0.2	540	100	70.0	71.0	2.0	14.0	ND
60	Bilaspur	Mungeli	Kanteli.1	7.3	844	ND	427.0	14.0	45.0	0.2	340	60	46.0	50.0	1.2	15.0	ND
61	Mungeli	Mungeli	Fulwari	7.3	2030	ND	683.0	20.0	85.0	0.2	700	68	127.0	145.0	0.5	18.0	ND
62	Mungeli	Mungeli	Chhatan	7.5	598	ND	293.0	28.0	15.0	0.3	240	52	26.0	32.0	2.0	12.0	ND
63	Mungeli	Lormi	Rajpur	7.3	688	ND	366.0	7.0	16.0	0.3	300	40	48.0	32.0	0.9	10.0	ND
64	Mungeli	Lormi	Chandli	7.4	685	ND	366.0	7.0	25.0	0.2	250	44	34.0	52.0	1.1	10.0	ND
65	Mungeli	Lormi	Lormi	7.4	730	ND	342.0	21.0	20.0	0.2	270	40	41.0	38.0	0.9	13.0	ND
66	Mungeli	Lormi	Lormi	7.3	599	ND	281.0	35.0	14.0	0.2	270	60	29.0	15.0	0.8	14.0	ND
67	Bilaspur	Takhatpur	Udaypur	7.3	762	ND	354.0	35.0	23.0	0.2	260	48	34.0	55.0	0.6	17.0	ND
68	Korba	Pali	Pali	7.1	790	ND	232.0	92.0	19.0	0.3	290	76	24.0	49.0	0.6	10.0	ND
69	Bilaspur	Kota	Tenduwa	7.1	751	ND	366.0	43.0	24.0	0.2	325	72	35.0	40.0	0.4	6.0	ND
70	Bilaspur	Bilaspur	Matiyari	7.3	647	ND	305.0	35.0	24.0	0.2	280	56	34.0	26.0	0.6	9.0	ND
71	Bilaspur	Bilaspur	Bhadrapara	7.1	595	ND	293.0	28.0	22.0	ND	280	60	31.0	17.0	7.0	7.0	0.7
72	Bilaspur	Takhatpur	Sipat	7.2	745	ND	305.0	35.0	50.0	0.2	190	44	19.0	77.0	3.4	10.0	0.5
73	Bilaspur	Takhatpur	Kuli	7.5	734	ND	293.0	35.0	56.0	0.4	200	36	26.0	74.0	3.4	11.0	0.5
74	Bilaspur	Takhatpur	Bamhani	7.3	752	ND	305.0	35.0	55.0	0.5	200	36	26.0	78.0	3.3	12.0	0.1
75	Bilaspur	Takhatpur	Baloouda	7.1	1011	ND	464.0	71.0	44.0	0.2	490	128	41.0	28.0	0.5	26.0	ND
76	Janjgir-Champa	Akaltara	Akaltara	7.1	808	ND	305.0	43.0	40.0	ND	330	72	36.0	26.0	1.2	27.0	ND
77	Janjgir-Champa	Pamgarh	Jhulanpakariya	7.1	800	ND	317.0	57.0	44.0	0.2	350	76	38.0	28.0	0.5	27.0	ND
78	Janjgir-Champa	Akaltara	Nariyara	7.2	1435	ND	342.0	206.0	65.0	0.2	530	84	77.0	85.0	1.4	14.0	ND
79	Janjgir-Champa	Pamgarh	Mulmula	7.2	1417	ND	329.0	206.0	100.0	0.2	500	100	60.0	87.0	1.4	13.0	ND
80	Janjgir-Champa	Akaltara	Konargarh	7.3	430	ND	305.0	206.0	65.0	0.3	520	96	67.0	89.0	1.4	14.0	ND
81	Janjgir-Champa	Akaltara	Amora	7.2	418	ND	238.0	14.0	5.0	0.5	200	52	17.0	12.0	0.5	5.0	ND
82	Janjgir-Champa	Pamgarh	Vayash nagar	7.1	408	ND	232.0	14.0	ND	0.4	190	56	12.0	12.0	0.5	6.0	ND
83	Janjgir-Champa	Pamgarh	Kosa	7.1	423	ND	244.0	7.0	ND	0.4	190	52	14.0	12.0	0.5	6.0	ND
84	Janjgir-Champa		Bhaiso	7.1	1952	ND	525.0	106.0	128.0	0.3	525	160	30.0	162.0	6.6	10.0	ND
85	Bilaspur	Masturi	Tikari (Sadak Para)	7.1	804	ND	354.0	43.0	45.0	0.4	350	68	43.0	26.0	1.4	9.0	ND
86	Bilaspur	Masturi	Malhar	7.2	802	ND	305.0	50.0	32.0	0.3	320	56	43.0	27.0	1.4	9.0	ND
87	Bilaspur	Masturi	Bakarkuda	7.3	1018	ND	281.0	92.0	68.0	0.4	350	76	38.0	55.0	5.9	10.0	ND
88	Bilaspur	Masturi	Binauri	7.1	1959	ND	366.0	106.0	264.0	0.3	550	160	36.0	162.0	6.5	11.0	ND
89	Bilaspur	Masturi	Chilhati	7.1	1964	ND	403.0	113.0	236.0	0.5	670	196	43.0	115.0	6.5	12.0	0.8
90	Bilaspur	Masturi	Masturi	7.4	997	ND	220.0	135.0	82.0	0.4	360	64	48.0	55.0	6.1	11.0	0.7
91	Bilaspur	Masturi	Koni	7.0	603	ND	268.0	43.0	14.0	ND	240	60	22.0	38.0	2.5	12.0	ND

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92	Bilaspur	Masturi	Panchpedi	6.9	599	ND	268.0	50.0	13.0	0.2	245	60	23.0	38.0	1.0	11.0	ND
93	Bilaspur	Bilha	Bilaspur (Hemunagar)	7.1	602	ND	281.0	43.0	13.0	0.2	250	48	31.0	37.0	2.5	10.0	ND
94	Bilaspur	Masturi	Kohronda	7.0	603	ND	281.0	35.0	14.0	0.2	230	68	14.0	37.0	2.6	11.0	ND
95	Bilaspur	Masturi	Bothidih	7.1	608	ND	244.0	43.0	12.0	0.2	260	64	24.0	36.0	2.5	10.0	ND
96	Bilaspur	Masturi	Shri para	7.2	561	ND	256.0	57.0	9.0	0.4	235	56	23.0	18.0	0.5	25.0	ND
97	Bilaspur	Kota	Saudhakhurd	7.2	591	ND	281.0	50.0	11.0	0.2	270	48	36.0	36.0	2.4	14.0	ND
98	Bilaspur	Kota	Jhingatpur	7.3	680	ND	293.0	35.0	32.0	0.2	300	80	24.0	22.0	1.7	13.0	ND
99	Janjgir-Champa	Akaltara	Jairamnagar	7.2	471	ND	244.0	14.0	12.0	0.2	230	44	29.0	17.0	1.3	12.0	ND
100	Bilaspur	Kota	Belgahana	7.3	231	ND	85.0	21.0	6.0	0.1	75	16	8.4	8.1	2.0	8.0	ND
101	Bilaspur	Belgahana	Konchua	7.3	681	ND	305.0	28.0	30.0	0.2	300	68	31.0	22.0	1.8	14.0	ND
102	Bilaspur	Kota	Kenda	7.2	470	ND	256.0	14.0	10.0	0.2	180	40	19.0	17.0	0.6	9.0	ND
103	Bilaspur	Kota	Banabel	7.1	620	ND	281.0	50.0	12.0	0.2	260	76	17.0	36.0	2.5	13.0	ND
104	Bilaspur	Kota	Nawapara	7.2	597	ND	244.0	50.0	11.0	0.2	230	44	29.0	36.0	2.5	13.0	ND
105	Bilaspur	Kota	Bansajhal	7.1	450	ND	232.0	14.0	10.0	0.5	180	44	17.0	31.0	0.6	11.0	ND
106	Bilaspur		Ghansipur (sainik camp)	6.9	754	ND	220.0	99.0	34.0	0.4	340	96	24.0	27.0	0.5	13.0	ND
107	Bilaspur	Kota	Ratanpur	7.0	760	ND	244.0	71.0	35.0	0.4	320	92	22.0	27.0	0.5	14.0	ND
108	Bilaspur	Kota	Beltara	7.2	591	ND	244.0	71.0	12.0	0.4	240	52	26.0	26.0	2.5	15.0	ND
109	Bilaspur	Takhatpur	Gatori	7.2	625	ND	268.0	43.0	11.0	0.2	240	48	29.0	26.0	2.4	14.0	ND
110	Bilaspur	Bilaspur	madhanpur	7.3	600	ND	244.0	50.0	10.0	0.7	270	64	26.0	18.0	0.5	25.0	ND
111	Bilaspur	Kota	Jogipur	7.0	609	ND	305.0	43.0	9.0	0.7	280	68	26.0	35.0	2.4	14.0	ND
112	Bilaspur	Kota	Khaira	7.0	467	ND	256.0	14.0	8.0	0.5	210	72	7.2	17.0	1.3	13.0	ND
113	Bilaspur	Kota	Pandra Patha	7.0	480	ND	256.0	14.0	12.0	0.4	225	52	23.0	17.0	1.3	14.0	ND
114	Bilaspur	Gaurela (pendrarod) - 2	Gaurela	7.2	559	ND	244.0	43.0	12.0	0.4	260	60	26.0	18.0	0.5	34.0	ND
115	Bilaspur	Gaurela (pendrarod) - 2	Gaurela pendra road	6.9	761	ND	244.0	92.0	23.0	0.4	360	96	29.0	28.0	0.6	24.0	ND
116	Bilaspur	Marwahi	Kudwahi	7.0	660	ND	305.0	50.0	18.0	0.2	310	78	34.0	22.0	1.1	26.0	ND
117	Bilaspur	Marwahi	Dhanpur	7.1	643	ND	293.0	28.0	44.0	ND	300	64	34.0	22.0	1.1	25.0	ND
118	Bilaspur	Marwahi	Lekhani	7.3	561	ND	250.0	43.0	13.0	0.3	270	52	34.0	17.0	0.5	34.0	ND
119	Bilaspur	Marwahi	Dharhar	7.2	452	ND	244.0	14.0	12.0	0.4	210	12	43.0	17.0	0.5	18.0	ND
120	Bilaspur	Marwahi	Seoni	7.1	230	ND	98.0	21.0	6.0	ND	105	24	11.0	8.4	2.0	12.0	ND
121	Bilaspur	Marwahi	Chchgohana	7.4	446	ND	183.0	28.0	32.0	1.5	170	48	12.0	38.0	1.0	23.0	ND
122	Bilaspur	Marwahi	Pandri (Dhanwari Posa)	7.6	455	ND	195.0	14.0	32.0	1.5	150	40	12.0	39.0	1.0	42.0	ND
123	Bilaspur	Marwahi	Tendumuda	7.2	916	ND	415.0	50.0	42.0	0.5	275	60	30.0	106.0	1.1	31.0	ND
124	Bilaspur	Marwahi	Tikthi	7.1	457	ND	232.0	21.0	5.0	0.2	200	48	19.0	18.0	3.7	15.0	ND
125	Bilaspur	Marwahi	Danikundi	7.0	425	ND	122.0	64.0	2.0	ND	130	28	14.0	24.0	24.0	24.0	ND
126	Bilaspur	Marwahi	Sekhawa	7.0	868	ND	342.0	50.0	24.0	ND	220	40	29.0	89.0	10.0	20.0	ND
127	Bilaspur	Marwahi	Kotmi.1	7.1	874	ND	256.0	85.0	ND	ND	280	24	53.0	37.0	7.2	21.0	ND
128	Bilaspur	Pendra Road	DamDam	7.0	139	ND	37.0	28.0	ND	ND	70	20	4.8	4.3	0.7	23.0	ND
129	Korba	Pondi	Pasan	7.0	526	ND	232.0	57.0	5.7	0.7	190	56	12.0	45.0	1.1	26.0	ND
130	Korba	Pondi	Lenga	7.1	907	ND	427.0	64.0	47.0	ND	250	20	48.0	102.0	13.0	26.0	ND
131	Korba	Pondi	Jatga	7.2	419	ND	183.0	14.0	3.0	0.7	160	32	19.0	12.0	6.3	17.0	ND
132	Korba	Pondi	Nagai	7.1	317	ND	256.0	28.0	6.0	0.2	160	56	4.8	17.0	3.5	13.0	ND
133	Korba	Pondi	Rawa	7.0	466	ND	73.0	106.0	24.0	ND	90	24	7.2	69.0	11.2	20.0	ND
134	Korba	Pondi	Khodri	7.0	875	ND	256.0	64.0	74.0	0.2	350	76	38.0	44.0	0.7	25.0	ND
135	Korba	Pondi	Tuman	7.0	683	ND	73.0	28.0	ND	0.2	75	16	8.4	11.0	6.5	12.0	ND
136	Korba	Katghora	Katghora	7.0	200	ND	61.0	28.0	6.7	0.2	80	20	7.2	11.0	0.6	22.0	ND
137	Korba	Korba	Salora	6.9	678	ND	268.0	28.0	27.0	ND	310	68	34.0	21.0	6.4	10.0	ND
138	Korba	Korba	Chhuri	7.0	193	ND	85.0	14.0	ND	0.3	80	20	7.2	37.0	3.5	11.0	ND

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139	Korba	Katghora	Gopalpur	7.0	730	ND	268.0	35.0	46.0	0.2	250	60	24.0	50.0	0.6	16.0	ND
140	Korba	Korba	Korba	7.1	528	ND	220.0	14.0	46.0	ND	200	36	26.0	25.0	7.2	13.0	ND
141	Korba	Katghora	Suttara	7.3	131	ND	67.0	7.0	4.8	0.2	60	16	4.8	4.6	0.5	19.0	ND
142	Korba	Korba	Dhegurdi manzipara	7.3	352	ND	195.0	14.0	5.0	0.2	160	32	19.0	14.0	1.5	23.0	ND
143	Korba	Katghora	Jamchuwa	7.3	336	ND	171.0	7.0	14.0	0.2	120	20	17.0	25.0	2.2	2.0	ND
144	KORBA	Katghora	Kasania	7.3	448	ND	195.0	21.0	42.0	ND	180	56	9.6	31.0	2.4	24.0	ND
145	Korba	Katghora	Rajkamma	7.3	597	ND	256.0	21.0	18.0	0.2	210	36	29.0	32.0	0.2	20.0	ND
146	Korba	Katghora	Chaitama	7.1	556	ND	244.0	14.0	65.0	0.5	255	80	13.0	25.0	4.2	19.0	ND
147	Korba	Korba	Shuklakhar	7.2	86	ND	37.0	7.0	ND	ND	35	8	3.6	2.3	0.9	8.0	ND
148	Korba	Korba	Jagara	7.0	68	ND	37.0	35.0	ND	ND	30	8	2.4	2.0	2.6	4.0	ND
149	Korba	Pali	Banbandha	7.1	609	ND	232.0	50.0	47.0	0.3	260	72	19.0	31.0	2.4	22.0	ND
150	Bilaspur	Lormi	Pali(Lormi)	7.3	340	ND	183.0	7.0	7.0	0.3	150	40	12.0	14.0	1.6	18.0	ND
151	Korba	Pali	Ponri	7.4	638	ND	281.0	14.0	80.0	0.2	280	92	12.0	25.0	6.9	25.0	ND
152	Korba	Pali	Rahadih	7.7	592	ND	244.0	35.0	32.0	0.4	210	52	19.0	36.0	4.6	27.0	ND
153	Korba	Pali	Mungadih	7.5	71	ND	37.0	3.5	ND	0.5	30	8	2.4	2.2	13.0	20.0	ND
154	Korba	Pali	Bakasahi	7.5	591	ND	195.0	50.0	30.0	0.3	210	44	24.0	36.0	4.3	25.0	ND
155	Korba	Pali	Ghogharbhata	7.5	637	ND	317.0	35.0	ND	0.2	230	52	24.0	33.0	27.0	11.0	ND
156	Korba	Pali	Bandhakhar	7.5	228	ND	73.0	35.0	ND	0.8	70	12	9.6	21.0	7.2	12.0	ND
157	Korba	Pali	Nunera	7.4	637	ND	305.0	43.0	ND	0.8	250	52	29.0	30.0	17.0	14.0	ND
158	Korba	Pali	Chadda	7.4	157	ND	73.0	14.0	ND	0.1	90	16	12.0	5.4	2.0	18.0	ND
159	KORBA	Pali	Hardibazar	7.3	63	ND	30.0	3.5	ND	ND	25	4	3.6	2.0	11.8	20.0	ND
160	Korba	Katghora	Jhabar	7.1	73	ND	37.0	3.5	ND	0.1	30	8	2.4	2.2	9.4	18.0	ND
161	Korba	Katghora	Rainpur	7.1	150	ND	61.0	7.0	23.0	ND	60	12	7.2	11.0	0.8	22.0	ND
162	Korba	Pali	Nonbirra	7.0	146	ND	49.0	7.0	13.0	ND	50	12	4.8	11.0	0.9	20.0	ND
163	Korba	Korba	Ralia-I	6.9	705	ND	244.0	43.0	46.0	ND	270	76	19.0	27.0	2.3	36.0	0.1
164	Korba	Katghora	Mongara(Pz)	7.2	423	ND	207.0	14.0	4.0	0.4	130	32	12.0	32.0	1.1	38.0	ND
165	Korba	Katghora	Mudiyandar	7.3	316	ND	159.0	14.0	3.8	ND	100	28	7.2	12.0	28.0	14.0	ND
166	Korba	Korba	Naktikhar	7.2	67	ND	24.0	7.0	11.0	0.8	40	8	4.8	2.3	0.9	21.0	ND
167	Korba	Katghora	Tiwarta I	7.0	147	ND	49.0	7.0	25.0	0.9	55	16	3.6	11.0	0.8	17.0	ND
168	Korba	Pali	Ramtarai-I	7.1	783	ND	317.0	92.0	ND	0.1	340	80	34.0	31.0	2.2	23.0	ND
169	Korba	Korba	Pandripani-D	7.1	730	ND	256.0	71.0	26.0	0.9	300	72	29.0	31.0	2.2	26.0	ND
170	Korba	Korba	Urga.1	7.1	168	ND	61.0	14.0	10.0	0.7	80	20	7.2	5.4	0.4	21.0	ND
171	Korba	Kartala	Purena	7.0	417	ND	195.0	14.0	32.0	0.5	90	24	7.2	32.0	0.9	28.0	ND
172	Korba	korba	kothari naka	7.0	699	ND	207.0	64.0	46.0	0.4	200	60	12.0	64.0	3.2	12.0	ND
173	Korba	Korba	Rishdi	7.3	885	ND	232.0	99.0	49.0	0.2	250	68	19.0	64.0	49.0	10.0	ND
174	Korba	Korba	Dumardihi	7.3	887	ND	244.0	99.0	14.0	0.2	270	64	26.0	63.0	45.0	13.0	ND
175	Korba	Korba	Dhungurdihi	7.3	239	ND	122.0	21.0	ND	ND	110	24	12.0	9.7	5.5	12.0	ND
176	Korba	Korba	Korkoma	7.2	185	ND	37.0	39.0	11.0	ND	70	20	4.8	9.7	7.7	11.0	ND
177	Korba	Kartala	Batati Junction	7.1	147	ND	73.0	14.0	ND	ND	65	12	8.4	2.3	7.6	14.0	ND
178	Korba	Korba	Pasarkhet	7.0	128	ND	61.0	14.0	ND	ND	55	12	6.0	3.6	6.6	15.0	ND
179	Korba	Korba	Polge	6.8	196	ND	73.0	28.0	ND	ND	90	16	12.0	4.1	6.2	14.0	ND
180	Korba	Korba	Basin	7.0	100	ND	37.0	7.0	9.6	ND	50	16	2.4	2.7	0.4	15.0	ND
181	Korba	Kartala	Barpali	7.0	310	ND	122.0	28.0	19.0	0.2	150	20	24.0	6.2	6.2	10.0	ND
182	Korba	Korba	Jilga(OW)	7.1	153	ND	85.0	7.0	ND	0.2	75	16	8.4	1.5	2.7	12.0	ND
183	Korba	Kartala	Kudmura	7.0	98	ND	49.0	7.0	ND	0.7	100	12	17.0	1.3	0.8	15.0	ND
184	Korba	Kartala	Jogipali	7.3	375	ND	207.0	7.0	15.0	0.1	150	20	24.0	11.0	26.0	4.0	ND
185	Korba	Korba	chachiya	7.2	513	ND	183.0	64.0	ND	0.2	165	28	23.0	25.0	49.0	14.0	ND

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186	Korba	Kartala	Champa mode	7.3	300	ND	171.0	14.0	ND	0.2	110	28	9.6	7.7	26.0	10.0	ND
187	Korba	Kartala	Kartala	7.3	114	ND	61.0	7.0	22.0	0.4	55	16	3.6	1.8	1.6	13.0	ND
188	Korba	Kartala	Kotmer	7.2	550	ND	220.0	43.0	12.0	0.1	240	32	38.0	18.0	37.0	4.0	ND
189	Korba	Kartala	Sakdukala	7.1	450	ND	183.0	35.0	14.0	0.1	210	44	24.0	11.0	9.7	12.0	ND
190	Korba	Kartala	Nonbirra-4	7.2	323	ND	159.0	21.0	ND	ND	120	28	12.0	12.0	25.0	6.0	ND
191	Korba	Kartala	Salihabhata	7.0	120	ND	67.0	7.0	ND	ND	60	16	4.8	2.1	2.1	14.0	ND
192	Korba	Korba	Bhaisma(Anjoripali)	6.9	188	ND	61.0	28.0	ND	ND	70	12	9.6	8.8	9.5	13.0	ND
193	Korba	Kartala	Tilkeja	6.8	295	ND	49.0	35.0	28.0	0.2	100	24	9.6	12.0	9.3	12.0	ND
194	Janjgir-Champa	Shakti	Saliabhata	7.2	406	ND	183.0	28.0	9.6	0.4	160	36	17.0	28.0	3.4	34.0	ND
195	Korba	Kartala	Tuman	7.4	2470	ND	488.0	425.0	60.0	0.2	1040	56	216.0	102.0	8.5	32.0	ND
196	Janjgir-Champa	Shakti	Damau	7.6	249	ND	110.0	28.0	ND	0.2	95	20	11.0	19.0	1.1	13.0	ND
197	Janjgir-Champa	Shakti	Asunda	7.4	243	ND	146.0	7.0	ND	0.2	110	24	12.0	7.7	0.4	14.0	ND
198	Janjgir-Champa	Shakti	Sakti	7.3	290	ND	122.0	14.0	27.0	0.2	140	40	9.6	7.1	2.1	5.0	ND
199	Janjgir-Champa	Malkharoda	Adbhar	7.1	1356	ND	244.0	227.0	75.0	0.2	380	100	31.0	133.0	8.6	14.0	ND
200	Janjgir-Champa	Malkharoda	Sukda	7.1	1294	ND	244.0	220.0	60.0	0.4	380	84	41.0	142.0	3.1	12.0	ND
201	Janjgir-Champa	Malkharoda	Lachhmanbhata	7.1	1397	ND	268.0	121.0	246.0	0.2	425	120	30.0	153.0	3.1	12.0	ND
202	Janjgir-Champa	Dabhra	Dabra	7.2	402	ND	207.0	21.0	5.0	0.2	180	56	9.6	15.0	4.3	18.0	ND
203	Janjgir-Champa	Malkharoda	Ghoghari	7.3	394	ND	220.0	14.0	10.0	0.3	165	16	30.0	15.0	13.0	9.0	ND
204	Janjgir-Champa	Malkhroda	Malkhroda	7.2	866	ND	244.0	113.0	27.0	0.5	410	76	53.0	28.0	4.2	9.0	ND
205	Janjgir-Champa	Jaijaipur	Hasoud	7.2	880	ND	293.0	113.0	40.0	0.2	385	72	49.0	43.0	1.0	8.0	ND
206	Janjgir-Champa	Jaijaipur	Odekara	7.3	552	ND	207.0	50.0	20.0	0.4	250	56	26.0	14.0	5.0	10.0	ND
207	Janjgir-Champa	Jaijaipur	Jaijaipur	7.3	766	ND	317.0	71.0	45.0	0.4	300	68	31.0	56.0	1.6	12.0	ND
208	Janjgir-Champa	Jaijaipur	Jaijaipur Pz	7.1	1384	ND	415.0	177.0	89.0	0.5	680	24	149.0	7.6	2.0	13.0	ND
209	Janjgir-Champa	Shakti	Thathari	7.3	624	ND	305.0	35.0	18.0	0.2	275	72	23.0	32.0	1.0	16.0	ND
210	Korba	Pali	Dhaurabhata	7.1	1006	ND	317.0	121.0	76.0	0.2	455	92	54.0	44.0	0.9	16.0	ND
211	Janjgir-Champa	Bamhndih	Baradwar-d	7.2	585	ND	220.0	57.0	9.6	0.1	260	80	14.0	7.0	0.6	13.0	ND
212	Janjgir-Champa	Bamhndih	Saragaon	7.4	412	ND	195.0	28.0	7.6	0.3	200	40	24.0	10.0	2.0	14.0	ND
213	Janjgir-Champa	Bamhndih	Bamhndihi	7.0	1378	ND	244.0	248.0	100.0	0.3	610	128	70.0	70.0	4.1	15.0	ND
214	Janjgir-Champa	Bamhndih	Sonthi	7.3	228	ND	128.0	14.0	ND	0.3	110	24	12.0	8.5	1.1	18.0	ND
215	Janjgir-Champa	Bamhndih	Champa	7.2	484	ND	244.0	21.0	15.0	0.2	190	40	22.0	30.0	0.9	17.0	ND
216	Janjgir-Champa	Nawagarh	Janjgir	7.2	233	ND	49.0	50.0	ND	0.1	80	16	9.6	19.0	7.0	16.0	ND
217	Janjgir-Champa	Nawagarh	Janjgir PZ	7.0	1201	ND	207.0	213.0	79.0	0.4	410	16	29.0	89.0	4.7	14.0	ND
218	Janjgir-Champa	Janjgir	shukli	7.5	646	ND	305.0	43.0	24.0	0.5	250	64	22.0	47.0	1.1	18.0	ND
219	Janjgir-Champa	Nawagarh	Dhurkot	7.4	449	ND	220.0	28.0	20.0	0.4	185	44	18.0	26.0	1.3	18.0	ND
220	Janjgir-Champa	Nawagarh	Budena	7.3	660	ND	317.0	35.0	25.0	0.2	210	56	17.0	69.0	4.0	16.0	ND
221	Janjgir-Champa	Nawagarh	Semra	7.1	730	ND	183.0	78.0	74.0	0.2	270	88	12.0	44.0	0.4	10.0	ND
222	Janjgir-Champa	Nawagarh	Khartal	7.2	748	ND	268.0	85.0	25.0	ND	315	80	28.0	40.0	3.0	12.0	ND
223	Janjgir-Champa	Nawagarh	Kera	7.0	1025	ND	281.0	99.0	90.0	0.2	450	116	30.0	25.0	8.7	16.0	ND
224	Janjgir-Champa	Janjgir- champa	Mudpar	7.2	434	ND	220.0	21.0	9.6	ND	195	44	20.0	20.0	1.0	14.0	ND
225	Janjgir-Champa	Nawagarh	Seorinarayan	7.2	949	ND	354.0	71.0	52.0	0.4	340	80	34.0	54.0	8.6	10.0	ND
226	Janjgir-Champa	Nawagarh	Loharsi	7.2	749	ND	232.0	85.0	45.0	0.4	340	76	36.0	32.0	1.5	11.0	ND
227	Janjgir-Champa		Dhardei	7.2	723	ND	244.0	71.0	42.0	0.5	280	80	19.0	40.0	1.2	13.0	ND
228	Janjgir-Champa	Janjgir- champa	Mehandi	7.0	1384	ND	171.0	248.0	59.0	0.3	530	152	36.0	50.0	1.5	13.0	ND
229	Janjgir-Champa	Pamgarh	Meubhata	7.2	415	ND	183.0	35.0	12.0	0.3	190	52	14.0	12.0	0.6	4.0	ND
230	Janjgir-Champa	Pamgarh	Pamgarh	7.3	758	ND	220.0	106.0	27.0	0.3	330	80	31.0	29.0	1.2	10.0	ND
231	Janjgir-Champa	Pamgarh	Dongakahrod	7.1	1898	ND	329.0	298.0	128.0	0.3	610	136	65.0	135.0	8.7	13.0	ND
232	Janjgir-Champa	Pamgarh	Sasaha	7.4	592	ND	293.0	35.0	11.0	0.3	250	60	24.0	34.0	1.1	11.0	ND

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233	Janjgir-Champa	Pamgarh	Jewara	7.2	1348	ND	268.0	163.0	92.0	0.3	430	100	43.0	53.0	65.0	14.0	ND
234	Janjgir-Champa	Pamgarh	Bhaiso	7.5	900	ND	354.0	85.0	42.0	0.3	320	84	26.0	28.0	89.0	12.0	ND
235	Mahasamund	Saraipali	Patsendri	7.0	721	ND	110.0	160.0	18.5	0.2	190	42	20.4	56.8	6.0	6.8	0.1
236	Mahasamund	Saraipali	Bodesara	6.9	1327	ND	73.0	316.0	51.3	0.2	460	114	42.0	76.1	2.8	8.3	0.1
237	Raigarh	Sarangarh	Kargidipa	7.1	543	ND	238.0	39.0	8.1	0.7	130	28	14.4	48.9	2.1	6.4	0.1
238	Raigarh	Sarangarh	Damdarha	7.2	427	ND	146.0	21.0	52.0	1.7	125	32	10.8	29.7	3.2	10.7	0.1
239	Raigarh	Sarangarh	Kanakbirra	7.1	499	ND	140.0	32.0	15.6	2.0	130	28	14.4	24.3	1.2	24.6	0.1
240	Raigarh	Sarangarh	Bataupali	7.4	928	ND	378.0	75.0	27.9	1.3	270	42	39.6	65.8	0.9	9.8	0.1
241	Raigarh	Sarangarh	Malda-B	7.3	483	ND	122.0	64.0	21.6	0.2	195	44	20.4	17.0	0.8	11.0	0.1
242	Raigarh	Baramkela	Baramkela	7.5	503	ND	226.0	21.0	9.3	0.6	215	40	27.6	3.9	1.9	10.4	0.1
243	Raigarh	Baramkela	Bade Nawapara	7.2	540	ND	98.0	85.0	29.2	0.2	170	42	15.6	26.9	1.4	8.3	0.1
244	Raigarh	Baramkela	Lendra	7.0	621	ND	104.0	99.0	27.8	0.2	245	52	27.6	15.5	0.6	7.0	0.1
245	Raigarh	Baramkela	Jhikipali	7.2	737	ND	128.0	135.0	43.9	0.2	225	56	20.4	53.5	1.1	22.4	0.1
246	Raigarh	Baramkela	Mahuapali	7.0	416	ND	171.0	21.0	43.0	0.3	180	30	25.2	10.9	2.1	6.3	0.1
247	Raigarh	Pussaur	Bonda	7.1	520	ND	177.0	53.0	30.3	0.3	215	24	37.2	10.8	1.5	6.9	0.1
248	Raigarh	Baramkela	Kandola	7.3	661	ND	238.0	18.0	76.0	0.3	305	22	60.0	8.3	2.8	6.1	0.1
249	Raigarh	Raigarh	Sariya	7.0	445	ND	85.0	60.0	39.4	ND	145	36	13.2	31.0	9.5	6.1	0.1
250	Raigarh	Baramkela	Barpali	7.2	467	ND	201.0	11.0	16.6	0.2	200	20	36.0	2.7	2.5	6.1	0.1
251	Raigarh	Pussaur	Surajgarh	7.3	427	ND	153.0	50.0	11.3	0.1	130	30	13.2	31.7	0.6	6.1	0.1
252	Raigarh	Pussaur	Kondatarai	7.0	856	ND	128.0	46.0	194.0	0.2	265	58	28.8	65.9	1.6	12.1	0.1
253	Raigarh	Raigarh	Kotra	7.1	982	ND	116.0	43.0	305.0	0.1	325	66	38.4	64.3	1.6	10.3	0.2
254	Raigarh	Pussaur	Nawrangpur	7.2	1147	ND	85.0	14.0	442.6	0.2	425	118	31.2	57.8	1.9	8.7	0.2
255	Raigarh	Pussaur	Tadola	7.4	512	ND	256.0	18.0	27.0	0.1	200	46	20.4	30.2	1.4	14.0	0.1
256	Raigarh	Pussaur	Tetla	7.3	1047	ND	165.0	21.0	318.0	ND	360	102	25.2	81.5	2.0	11.4	0.2
257	Raigarh	Pussaur	Kathali	7.2	1048	ND	55.0	50.0	394.2	ND	420	104	38.4	59.2	2.5	8.0	0.1
258	Janjgir Champa	Dabhra	Chandrapur	7.5	1110	ND	281.0	128.0	104.0	0.2	360	66	46.8	69.3	20.0	12.7	0.2
259	Raigarh	Pussaur	Aurda	7.3	640	ND	232.0	75.0	28.5	0.1	225	50	24.0	44.8	1.1	4.0	0.1
260	Raigarh	Pussaur	Koshmunda	7.4	682	ND	262.0	21.0	109.8	0.2	260	42	37.2	42.9	1.5	13.8	0.2
261	Raigarh	Pussaur	Rengalpali	7.3	1095	ND	171.0	46.0	341.0	ND	465	144	25.2	37.7	7.7	12.4	0.1
262	Raigarh	Kharsia	Chaple	7.5	823	ND	268.0	124.0	15.7	0.2	205	46	21.6	87.4	1.0	12.0	0.1
263	Raigarh	Raigarh	Bhupdevpur	7.2	491	ND	244.0	25.0	14.7	0.4	200	44	21.6	26.0	0.9	10.1	0.1
264	Raigarh	Raigarh	Kerajhar	7.4	426	ND	226.0	21.0	7.4	0.2	195	46	19.2	11.9	2.1	4.2	0.1
265	Raigarh	Raigarh	Chiraipani1	7.2	79.4	ND	31.0	7.0	3.4	0.1	35	10	2.4	1.2	0.7	3.4	0.1
266	Raigarh	Raigarh	Sambalpuri	7.1	153	ND	73.0	14.0	6.4	0.1	75	22	4.8	2.2	6.4	5.7	0.1
267	Raigarh	Raigarh	Bangrushian	6.8	102	ND	31.0	18.0	2.5	ND	40	6	6.0	5.9	2.4	3.6	0.1
268	Raigarh	Raigarh	Raigarh	7.1	942	ND	214.0	96.0	148.0	0.1	340	92	26.4	53.9	1.4	8.4	0.1
269	Raigarh	Raigarh	Mahapali	7.2	989	ND	116.0	202.0	37.9	0.1	320	62	39.6	62.3	2.9	26.0	0.1
270	Raigarh	Raigarh	Jamgaon Basti	7.3	608	ND	153.0	107.0	24.4	0.2	235	48	27.6	21.7	5.1	12.0	0.1
271	Raigarh	Raigarh	Jamga Railway station	6.9	111	ND	31.0	18.0	3.7	ND	40	6	6.0	7.3	2.1	3.2	0.1
272	Raigarh	Raigarh	Kotarlia	7.4	384	ND	165.0	36.0	17.4	0.4	110	26	10.8	43.6	0.7	18.4	0.1
273	Raigarh	Raigarh	Chiraipani	7.5	546	ND	220.0	43.0	40.4	0.4	190	34	25.2	32.2	6.7	7.2	0.1
274	Raigarh	Raigarh	Lakha	6.8	76	ND	31.0	11.0	1.5	ND	30	4	4.8	5.3	0.2	4.2	0.1
275	Raigarh	Raigarh	Gerwani	6.5	146	ND	37.0	18.0	1.7	ND	45	10	4.8	10.2	0.7	4.5	0.1
276	Raigarh	Tamnar	Taraimal	6.6	195	ND	43.0	28.0	10.6	0.1	65	12	8.4	13.4	2.8	3.2	0.1
277	Raigarh	Tamnar	Amaghat	6.9	196	ND	43.0	25.0	7.7	0.1	70	12	9.6	4.9	10.0	7.8	0.1
278	Raigarh	Tamnar	Godhi	7.3	870	ND	244.0	163.0	8.9	0.1	280	56	33.6	37.0	55.1	3.1	0.1
279	Raigarh	Tamnar	Tamnar	7.1	315	ND	122.0	39.0	7.2	0.1	115	30	9.6	14.9	3.8	12.5	0.1

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280	Raigarh	Raigarh	Padigaon	7.3	400	ND	207.0	28.0	1.7	0.3	140	26	18.0	7.7	30.5	5.2	0.2
281	Raigarh	Tamnar	Daurabhata	7.2	335	ND	134.0	32.0	10.0	0.2	105	24	10.8	15.2	8.7	7.5	0.1
282	Raigarh	Tamnar	Gare	7.3	294	ND	146.0	21.0	2.9	0.9	105	22	12.0	12.2	9.3	6.9	0.1
283	Raigarh	Tamnar	Milupara	7.1	320	ND	159.0	28.0	8.9	0.2	100	16	14.4	15.4	24.0	6.4	0.2
284	Raigarh	Tamnar	Barkaspali	7.2	520	ND	281.0	28.0	2.0	0.4	180	32	24.0	21.4	22.0	4.4	0.2
285	Raigarh	Tamnar	Devgarh	6.9	443	ND	85.0	85.0	9.8	0.1	130	26	15.6	29.4	4.0	10.7	0.1
286	Raigarh	Gharghoda	Gharghoda	7.1	1294	ND	238.0	156.0	76.0	0.2	380	98	32.4	79.0	33.5	5.5	0.1
287	Raigarh	Gharghoda	Bhengari	7.0	187	ND	49.0	21.0	3.4	ND	60	14	6.0	9.6	7.4	4.1	0.1
288	Raigarh	Dharamjaigarh	Katangdih	6.8	126	ND	43.0	21.0	3.1	ND	45	8	6.0	2.7	8.2	5.1	0.2
289	Raigarh	Gharghoda	Bhalumar	7.1	199	ND	73.0	21.0	7.8	0.1	65	14	7.2	8.1	10.9	10.5	0.1
290	Raigarh	Gharghoda	Amlidih	7.0	394	ND	98.0	50.0	18.1	0.1	120	28	12.0	22.8	10.7	4.2	0.1
291	Raigarh	Gharghoda	Samarumi	7.0	52	ND	24.0	11.0	1.6	ND	30	6	3.6	1.1	0.7	2.4	0.1
292	Raigarh	Gharghoda	Teram	6.9	381	ND	201.0	14.0	8.3	0.3	145	38	12.0	11.5	5.7	6.6	0.1
293	Raigarh	Gharghoda	Porda	7.2	360	ND	207.0	18.0	9.7	0.8	135	26	16.8	19.4	10.3	4.8	0.1
294	Raigarh	Gharghoda	Kurmibhuna	7.1	145	ND	67.0	11.0	2.0	0.3	60	12	7.2	2.2	2.2	5.3	0.1
295	Raigarh	Gharghoda	Dumarpali	6.7	74	ND	37.0	7.0	2.4	0.1	35	10	2.4	2.0	1.9	12.5	0.2
296	Raigarh	Dharamjaigarh	Barpali	6.5	149	ND	55.0	14.0	4.2	0.1	65	14	7.2	3.4	4.0	9.6	0.1
297	Raigarh	Dharamjaigarh	Gersa	6.9	421	ND	128.0	36.0	14.4	0.1	125	50	ND	11.1	34.5	7.4	0.1
298	Raigarh	Dharamjaigarh	Amapali	6.8	100	ND	49.0	11.0	1.6	0.1	45	12	3.6	3.4	0.5	10.8	0.3
299	Raigarh	Dharamjaigarh	Bartapali	6.7	131	ND	55.0	14.0	1.6	ND	55	10	7.2	2.4	5.5	9.6	0.1
300	Raigarh	Dharamjaigarh	Amagaon	6.9	215	ND	43.0	25.0	5.3	ND	70	14	8.4	5.5	0.2	4.0	0.1
301	Raigarh	Gharghoda	Baroud	7.3	438	ND	207.0	25.0	11.8	0.4	160	38	15.6	19.9	7.8	6.6	0.1
302	Raigarh	Dharamjaigarh	Bojia	6.8	364	ND	73.0	67.0	2.0	0.1	130	30	13.2	14.1	1.5	17.3	0.1
303	Raigarh	Dharamjaigarh	Auranar	6.9	40	ND	18.0	7.0	1.4	ND	25	6	2.4	0.8	0.2	5.5	0.2
304	Raigarh	Dharamjaigarh	Khedapali	6.8	110	ND	31.0	18.0	1.3	ND	35	10	2.4	4.7	6.4	11.0	0.1
305	Raigarh	Dharamjaigarh	Edu	7.1	268	ND	159.0	14.0	1.4	0.3	125	26	14.4	3.7	8.7	4.9	0.2
306	Raigarh	Kharsia	Domnara	7.2	365	ND	207.0	21.0	8.6	0.2	150	38	13.2	19.5	0.6	19.1	0.1
307	Raigarh	Kharsia	Farkanara	7.3	581	ND	201.0	53.0	24.6	0.1	160	46	10.8	24.5	30.0	5.2	0.1
308	Raigarh	Dharamjaigarh	Nawapara	7.5	424	ND	256.0	14.0	10.8	0.4	185	36	22.8	14.6	4.5	5.9	0.1
309	Raigarh	Dharamjaigarh	Chhal	7.5	511	ND	281.0	25.0	5.7	0.3	205	40	25.2	14.1	9.6	5.2	0.1
310	Raigarh	Tamnar	Koknara	7.5	473	ND	287.0	14.0	13.8	0.5	195	36	25.2	19.3	3.4	4.7	0.1
311	Raigarh	Tamnar	Arimura	6.9	140	ND	49.0	18.0	3.4	0.1	50	12	4.8	4.1	4.7	11.2	0.1
312	Raigarh	Gharghoda	Kotrimal	7.4	372	ND	183.0	21.0	11.1	0.6	150	30	18.0	9.4	9.3	6.0	0.1
313	Raigarh	Gharghoda	Chimtapani	7.2	218	ND	110.0	14.0	3.3	0.2	95	6	19.2	5.6	2.3	6.8	0.2
314	Raigarh	Lailunga	Futhahmuda	7.0	91	ND	31.0	14.0	1.9	0.1	35	10	2.4	2.9	5.2	9.2	0.1
315	Raigarh	Lailunga	Laripani	7.1	927	ND	171.0	192.0	14.2	0.3	375	84	39.6	14.6	6.8	22.4	0.1
316	Raigarh	Lailunga	Gosaidih	7.3	370	ND	207.0	11.0	3.2	0.4	145	22	21.6	19.2	1.5	16.5	0.1
317	Raigarh	Lailunga	Jegarpur	7.3	687	ND	195.0	96.0	34.7	0.3	260	78	15.6	27.5	1.7	28.8	0.1
318	Raigarh	Lailunga	Kunjara Basti	7.4	393	ND	128.0	36.0	22.8	0.2	160	42	13.2	16.7	2.2	14.8	0.1
319	Raigarh	Lailunga	Lailunga	7.3	835	ND	140.0	146.0	63.8	0.1	250	88	7.2	76.7	2.5	20.2	0.1
320	Raigarh	Lailunga	Salkhiya	7.4	198	ND	128.0	11.0	1.6	0.2	105	24	10.8	5.3	0.4	18.8	0.1
321	Raigarh	Lailunga	Rajpur	7.3	594	ND	104.0	128.0	8.1	0.1	205	66	9.6	34.4	1.8	29.5	0.1
322	Raigarh	Lailunga	Choranga	7.5	577	ND	268.0	39.0	12.5	0.2	250	48	31.2	14.7	1.8	25.7	0.1
323	Raigarh	Lailunga	Pakargaon	7.2	417	ND	220.0	18.0	7.6	0.2	175	36	20.4	16.4	1.6	24.0	0.1
324	Jashpur	Pathalgaon	Surangpani	7.4	389	ND	183.0	25.0	12.5	0.2	155	38	14.4	16.3	0.8	28.3	0.1
325	Jashpur	Pathalgaon	Amatoli	7.5	367	ND	195.0	18.0	6.4	0.4	135	40	8.4	20.4	1.0	20.6	0.1
326	Jashpur	Pathalgaon	Kotba	7.4	350	ND	153.0	32.0	7.6	0.2	120	34	8.4	24.7	2.4	27.1	0.2

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327	Jashpur	Farsabaha	Ganjhaidih	7.2	347	ND	134.0	43.0	10.3	0.3	115	32	8.4	25.8	1.0	25.4	0.1
328	Jashpur	Farsabaha	Khutsera	7.5	472	ND	250.0	21.0	21.3	0.3	215	38	28.8	14.5	1.0	19.7	0.2
329	Jashpur	Farsabaha	Jharmunda	7.5	705	ND	311.0	50.0	28.9	1.6	165	34	19.2	85.0	0.7	19.4	0.1
330	Jashpur	Farsabaha	Lavakera	7.2	602	ND	134.0	89.0	27.6	0.4	140	48	4.8	58.2	1.3	30.8	0.1
331	Jashpur	Farsabaha	Amdiha	7.3	431	ND	165.0	57.0	13.2	0.2	170	50	10.8	23.9	0.3	20.9	0.2
332	Jashpur	Farsabaha	Kandaibaha	7.5	300	ND	159.0	14.0	9.4	0.2	130	26	15.6	13.4	0.6	17.6	0.1
333	Jashpur	Farsabaha	Farsabaha	7.3	313	ND	122.0	25.0	8.8	0.2	115	40	3.6	13.4	0.7	17.4	0.2
334	Jashpur	Farsabaha	Bangaon1	7.4	393	ND	220.0	18.0	4.8	0.1	150	34	15.6	19.4	0.9	16.1	0.2
335	Jashpur	Farsabaha	Sirshringa	7.4	354	ND	226.0	11.0	3.6	0.2	135	36	10.8	23.2	1.5	17.1	0.2
336	Jashpur	Pathalgaon	Bagh Bahar	7.3	915	ND	238.0	131.0	28.9	0.2	375	110	24.0	25.8	1.3	20.4	0.2
337	Jashpur	Farsabaha	Tapkara	7.5	430	ND	177.0	50.0	5.7	0.2	160	48	9.6	23.8	0.9	21.0	0.2
338	Jashpur	Duldula	Kersai	7.6	356	ND	165.0	25.0	7.9	0.2	140	40	9.6	15.0	0.8	20.7	0.1
339	Jashpur	Duldula	Kunjara	7.5	842	ND	287.0	103.0	29.0	0.2	305	98	14.4	42.9	1.2	16.4	0.1
340	Jashpur	kunkuri	Kunkuri	7.5	627	ND	159.0	89.0	21.0	0.5	205	64	10.8	35.6	1.9	27.5	0.1
341	Jashpur	kunkuri	Dhodidand	7.3	159	ND	79.0	14.0	1.9	0.1	55	14	4.8	11.7	1.7	23.9	0.1
342	Jashpur	kunkuri	Ghatmunda	7.4	381	ND	116.0	46.0	11.9	0.3	150	34	15.6	17.5	2.8	19.9	0.1
343	Jashpur	Bagicha	Kandora	7.4	208	ND	122.0	7.0	1.5	1.8	65	20	3.6	19.9	0.4	15.9	0.1
344	Jashpur	kunkuri	Raikera(Kunkuri)	7.2	206	ND	67.0	28.0	1.8	0.2	65	18	4.8	16.1	0.9	24.5	0.1
345	Jashpur	Jashpur	Chiraidand	6.9	109	ND	37.0	14.0	1.9	ND	20	8	ND	9.2	2.4	13.6	0.1
346	Jashpur	Jashpur	Patratoli	6.8	98	ND	43.0	11.0	1.0	0.5	25	6	2.4	10.2	0.5	31.2	1.0
347	Jashpur	Duldula	Binjpur	6.9	284	ND	98.0	36.0	10.8	0.2	90	20	9.6	16.9	8.6	11.9	0.1
348	Jashpur	Jashpur	Loro(Bagicha)	6.9	138	ND	43.0	21.0	3.1	0.1	50	10	6.0	8.1	0.5	11.8	0.1
349	Jashpur	Jashpur	Balachhappar	6.8	59	ND	24.0	7.0	1.4	0.1	30	8	2.4	0.8	0.7	6.2	0.1
350	Jashpur	Jashpur	Jakba	7.1	90	ND	43.0	11.0	1.4	ND	45	12	3.6	3.7	1.1	11.0	0.1
351	Jashpur	Jashpur	Rupsera	7.2	340	ND	134.0	39.0	5.5	0.1	120	34	8.4	19.1	2.8	23.9	0.1
352	Jashpur	Jashpur	Jashpur Nagar	7.0	226	ND	67.0	36.0	1.3	0.1	65	14	7.2	18.0	1.1	12.4	0.1
353	Jashpur	Manora	Fathepur	7.2	125	ND	73.0	14.0	1.5	0.2	45	12	3.6	13.8	0.6	19.0	0.2
354	Jashpur	Manora	Sarkardih	7.1	98	ND	37.0	11.0	1.6	0.1	35	10	2.4	4.1	0.6	12.8	0.2
355	Jashpur	Bagicha	Sonquari	6.9	95.7	ND	55.0	11.0	1.4	0.2	45	12	3.6	4.4	2.8	9.9	0.1
356	Jashpur	Bagicha	Sanna	6.9	217	ND	79.0	21.0	1.4	0.4	80	18	8.4	12.9	4.5	24.2	0.1
357	Jashpur	Bagicha	Bahora	6.8	312	ND	195.0	7.0	3.1	0.3	175	48	13.2	5.9	1.4	25.3	0.1
358	Jashpur	Bagicha	Pandhrapatath	7.0	69	ND	104.0	11.0	1.4	0.2	90	10	15.6	1.3	0.3	8.7	0.1
359	Jashpur	Bagicha	Raoni	6.9	108	ND	49.0	14.0	1.4	0.1	55	10	7.2	5.0	0.8	2.9	0.1
360	Jashpur	Bagicha	Bagicha	6.8	262	ND	134.0	21.0	11.4	0.2	120	26	13.2	13.8	1.0	13.1	0.1
361	Jashpur	Bagicha	Peta	6.9	279	ND	128.0	25.0	8.6	0.2	115	28	10.8	13.3	2.0	8.0	0.1
362	Jashpur	Bagicha	Durgapara	7.1	405	ND	159.0	32.0	11.4	0.2	180	44	16.8	11.2	1.0	29.7	0.1
363	Jashpur	Bagicha	Maini	7.0	202	ND	110.0	18.0	1.4	1.9	85	20	8.4	16.6	0.4	35.5	0.1
364	Jashpur	Kansabel	Phooldih	7.1	198	ND	98.0	14.0	10.2	1.0	90	20	9.6	9.3	1.8	27.1	0.2
365	Jashpur	Kansabel	Muskutri	6.7	131	ND	49.0	18.0	1.4	0.2	55	14	4.8	7.2	0.4	24.8	0.1
366	Jashpur	Kansabel	Mahuadih	6.9	143	ND	55.0	14.0	2.2	0.1	45	10	4.8	11.3	0.6	20.5	0.1
367	Jashpur	Kansabel	Saraipani	6.9	272	ND	134.0	21.0	3.7	0.6	125	36	8.4	12.8	1.2	15.1	0.1
368	Jashpur	Bagicha	Raikera	6.9	253	ND	73.0	28.0	1.4	0.7	95	14	14.4	7.7	0.5	25.0	0.1
369	Jashpur	Bagicha	Pandripani	7.1	555	ND	183.0	64.0	19.2	0.3	240	62	20.4	17.3	1.8	24.1	0.1
370	Jashpur	Kansabel	Bewartoli	7.1	185	ND	85.0	18.0	3.1	0.3	95	20	10.8	6.3	1.1	18.3	0.1
371	Jashpur	Kansabel	Sahidand(Jamdhora)	7.2	280	ND	159.0	11.0	1.4	1.7	105	28	8.4	16.4	0.7	17.7	0.1
372	Jashpur	Bagicha	Kanpoda	7.1	245	ND	73.0	32.0	4.5	0.2	90	20	9.6	13.0	1.7	15.5	0.1
373	Jashpur	kunkuri	Matasi	6.7	162	ND	85.0	18.0	1.4	0.2	70	20	4.8	10.5	0.8	18.9	0.1

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374	Jashpur	kunkuri	Narayanpur	7.1	265	ND	92.0	28.0	5.4	0.1	100	32	4.8	13.1	1.8	21.2	0.1
375	Jashpur	kunkuri	Chhpartoli	6.9	190	ND	79.0	18.0	2.7	0.2	80	18	8.4	9.2	1.4	21.3	0.1
376	Jashpur	kunkuri	Farsakanhi	7.0	286	ND	177.0	18.0	2.3	0.5	140	32	14.4	18.4	0.9	22.3	0.1
377	Jashpur	kunkuri	Bandarchuwa	7.1	398	ND	183.0	32.0	10.2	0.3	170	46	13.2	18.6	1.7	23.7	0.1
378	Jashpur	Kansabel	Gariabandh	7.2	235	ND	128.0	14.0	2.5	0.2	100	30	6.0	12.7	1.2	18.9	0.1
379	Jashpur	Kansabel	Dokra	7.0	276	ND	128.0	18.0	3.8	0.2	115	28	10.8	14.5	1.6	20.0	0.1
380	Jashpur	Kansabel	Shabdmunda	7.0	575	ND	256.0	39.0	10.4	0.6	215	60	15.6	28.4	1.4	23.1	0.1
381	Jashpur	Kansabel	Tangargaon	7.1	579	ND	140.0	78.0	20.5	0.1	185	54	12.0	37.1	1.7	28.8	0.1
382	Jashpur	Kansabel	Kansabel	7.2	591	ND	171.0	67.0	18.3	0.1	235	76	10.8	23.1	2.4	24.5	0.1
383	Jashpur	Kansabel	Narayanbahali	6.9	318	ND	189.0	14.0	1.7	0.2	115	32	8.4	25.2	1.7	22.9	0.1
384	Jashpur	Kansabel	Dandajor	7.1	382	ND	195.0	25.0	6.5	0.2	165	52	8.4	17.7	3.1	25.5	0.1
385	Jashpur	Kansabel	Bataikela	7.2	225	ND	122.0	18.0	2.4	0.3	90	26	6.0	14.1	2.2	18.0	0.1
386	Jashpur	Kansabel	Khutera	7.3	355	ND	153.0	25.0	11.9	0.3	130	38	8.4	26.3	0.5	26.4	0.1
387	Jashpur	Pathalgaon	Lamdand	7.0	213	ND	98.0	21.0	2.1	0.2	70	20	4.8	17.3	0.6	32.4	0.1
388	Jashpur	Pathalgaon	Bangaon-B	7.1	467	ND	177.0	50.0	18.2	0.2	175	50	12.0	27.1	0.8	30.4	0.1
389	Jashpur	Pathalgaon	Saraitola	7.3	361	ND	214.0	14.0	4.6	0.5	130	34	10.8	28.7	1.3	25.0	0.3
390	Jashpur	Pathalgaon	Ludeg	7.1	1260	ND	293.0	174.0	61.4	0.2	455	90	55.2	75.1	2.8	18.2	0.2
391	Jashpur	Pathalgaon	Kachhar	7.5	701	ND	195.0	92.0	24.5	0.3	260	78	15.6	24.8	4.4	27.1	0.1
392	Jashpur	Pathalgaon	Paldih	7.2	600	ND	250.0	43.0	47.3	1.6	120	24	14.4	87.6	1.5	17.9	0.2
393	Jashpur	Pathalgaon	Pathalgaon	7.0	1232	ND	232.0	224.0	11.5	0.2	450	120	36.0	36.9	3.8	21.4	0.2
394	Jashpur	Pathalgaon	Nawaguda(Eela)	7.2	403	ND	165.0	39.0	10.2	0.1	135	42	7.2	28.8	2.2	10.8	0.2
395	Raigarh	Dharamjaigarh	Golabuda	6.7	157	ND	79.0	11.0	0.9	0.8	70	12	9.6	10.5	2.2	22.4	0.1
396	Raigarh	Dharamjaigarh	Lipti	6.8	163	ND	85.0	11.0	4.3	1.9	50	14	3.6	17.5	0.5	24.1	0.1
397	Raigarh	Dharamjaigarh	Kapu	7.1	326	ND	128.0	32.0	0.9	0.2	125	32	10.8	14.5	1.9	20.7	0.2
398	Raigarh	Dharamjaigarh	Derpani	7.3	482	ND	189.0	46.0	24.0	0.6	190	50	15.6	23.0	1.7	16.7	0.2
399	Raigarh	Dharamjaigarh	Khamhar	7.2	394	ND	177.0	32.0	4.4	0.6	125	42	4.8	30.7	0.4	14.1	0.1
400	Raigarh	Dharamjaigarh	Kandadand	7.2	277	ND	165.0	11.0	4.3	0.6	95	20	10.8	22.6	5.0	4.2	0.1
401	Raigarh	Dharamjaigarh	Lakshmipur	7.2	597	ND	287.0	32.0	20.2	0.5	185	36	22.8	55.5	2.0	19.4	0.1
402	Raigarh	Dharamjaigarh	Bansjour	7.1	417	ND	207.0	25.0	9.5	0.4	125	34	9.6	35.4	1.5	21.5	0.2
403	Raigarh	Dharamjaigarh	Dharamjaigarh	7.2	496	ND	122.0	71.0	19.2	0.1	155	34	16.8	36.7	8.0	9.8	0.2
404	Raigarh	Dharamjaigarh	Bakaruma	7.3	871	ND	177.0	124.0	50.7	0.1	355	106	21.6	25.6	1.6	18.8	0.4
405	Raigarh	Dharamjaigarh	Charkhapara	7.3	475	ND	165.0	57.0	20.6	0.3	175	48	13.2	24.8	0.9	28.8	0.1
406	Raigarh	Dharamjaigarh	Karramara	7.4	345	ND	226.0	11.0	1.1	0.3	165	52	8.4	14.6	0.8	17.3	0.1
407	Raigarh	Dharamjaigarh	Sirsinga	7.2	1016	ND	165.0	188.0	27.1	0.2	390	92	38.4	33.3	11.5	5.9	0.1
408	Raigarh	Dharamjaigarh	Ongana	7.1	358	ND	116.0	36.0	9.1	0.1	115	26	12.0	9.0	27.0	9.3	0.1
409	Raigarh	Dharamjaigarh	Tendumar	7.2	138	ND	37.0	18.0	0.9	ND	45	8	6.0	4.6	6.8	11.4	0.2
410	Raigarh	Dharamjaigarh	Shahpur	6.9	198	ND	61.0	18.0	0.9	ND	65	12	8.4	5.0	9.4	8.8	0.2
411	Raigarh	Dharamjaigarh	Durgapur	7.2	94	ND	31.0	14.0	0.9	ND	35	8	3.6	3.0	5.6	9.8	0.2
412	Raigarh	Dharamjaigarh	Karigashi	7.3	908	ND	92.0	138.0	145.0	1.0	175	46	14.4	107.5	1.6	6.0	0.1
413	Raigarh	Dharamjaigarh	Jabga	7.2	186	ND	79.0	18.0	2.3	0.1	80	18	8.4	3.3	8.5	9.4	0.2
414	Raigarh	Dharamjaigarh	Boro	7.2	453	ND	128.0	57.0	13.5	ND	135	28	15.6	16.3	34.5	6.0	0.1
415	Raigarh	Dharamjaigarh	Pordahi	7.4	422	ND	220.0	25.0	8.6	0.3	165	48	10.8	20.9	3.3	7.3	0.1
416	Raigarh	Dharamjaigarh	Taraimar	7.2	172	ND	110.0	7.0	0.9	0.3	85	22	7.2	1.4	4.5	10.7	0.2
417	Raigarh	Dharamjaigarh	Bayasi	7.0	219	ND	73.0	28.0	4.6	0.1	85	16	10.8	8.7	5.4	8.9	0.2
418	Raigarh	Dharamjaigarh	Duliamuda	7.4	85	ND	31.0	11.0	0.9	ND	30	6	3.6	1.0	6.3	11.7	0.1
419	Raigarh	Dharamjaigarh	Khadgaon	7.5	418	ND	214.0	21.0	6.5	0.4	140	34	13.2	13.1	30.0	6.0	0.1
420	Raigarh	Dharamjaigarh	Hati	6.8	85	ND	31.0	14.0	0.9	0.1	35	6	4.8	2.2	6.8	13.1	0.2

Sl. No	District	Block	Village	PH	EC µS	CO3 mg/l	HCO3 mg/l	Cl mg/l	SO4 mg/l	F mg/l	TH mg/l	Ca mg/l	Mg mg/l	Na mg/l	K mg/l	Si mg/l	Po4 mg/l
421	Raigarh	Dharamjaigarh	Munund	6.9	112	ND	43.0	18.0	1.5	0.1	50	10	6.0	6.5	3.1	6.1	0.1
422	Raigarh	Dharamjaigarh	Kurekela	7.2	274	ND	153.0	14.0	6.3	0.2	110	24	12.0	11.7	6.4	9.7	0.1
423	Raigarh	Kharsia	Kharsia	7.0	892	ND	201.0	163.0	36.4	0.2	185	52	13.2	107.0	0.7	5.5	0.1
424	Raigarh	Sarangarh	Kushalnagar(Sarangarh)	7.1	1513	ND	293.0	316.0	30.1	0.2	520	136	43.2	94.1	1.1	8.6	0.2
425	Raigarh	Sarangarh	Godam	7.3	1223	ND	360.0	199.0	36.2	0.2	165	42	14.4	181.5	2.4	5.9	0.2
426	Raigarh	Sarangarh	Pindri	7.3	1011	ND	342.0	131.0	39.2	0.3	140	38	10.8	144.5	4.9	8.3	0.1
427	Raigarh	Sarangarh	Hirri	7.1	482	ND	207.0	39.0	15.4	0.1	210	54	18.0	17.1	0.6	8.4	0.2
428	Raigarh	Sarangarh	Reda	7.2	679	ND	244.0	75.0	29.5	0.5	295	100	10.8	16.0	4.0	8.8	0.2
429	Raigarh	Sarangarh	Chhind	7.2	1295	ND	317.0	209.0	70.8	0.1	485	162	19.2	63.1	10.5	14.2	0.1
430	Raigarh	Sarangarh	Kedar	7.2	610	ND	250.0	53.0	28.6	0.4	235	48	27.6	33.6	6.0	8.1	0.2
431	Korba	Pondi	Gurasia	7.4	463	ND	158.6	24.9	33.9	ND	155	48	8.4	34.1	1.1	19.5	0.1
432	Korba	Pondi	Korbi	7.4	445	ND	231.8	14.2	18.3	0.3	60	18	3.6	78.2	0.3	10.5	ND
433	Korba	Pondi	Kurtha	7.4	570	ND	134.2	60.4	38.5	0.1	195	60	10.8	22.2	35.3	11.0	0.1
434	Korba	kurtha (new)	Pondi-Uproda	7.5	892	ND	262.3	81.7	70.6	ND	300	76	26.4	41.0	48.0	18.5	14.3
435	Korba	Pondi	Madai	7.4	401	ND	183.0	24.9	20.2	0.7	140	40	9.6	29.6	0.9	23.0	ND
436	Korba	Pondi	Morga	6.9	154	ND	24.4	17.8	0.6	0.2	45	10	4.8	2.8	8.3	9.5	ND
437	Korba	Pondi	Nawapara(Chotia)	7.6	294	ND	128.1	28.4	11.7	0.2	115	26	12.0	12.5	4.5	9.8	ND
438	Balrampur	Rajpur	Alkadiah	7.5	260	ND	109.8	24.9	5.5	ND	115	32	8.4	3.2	3.1	5.5	ND
439	Balrampur	Shankargarh	Bachwar	7.4	718	ND	323.3	24.9	19.1	0.1	335	80	32.4	6.5	4.6	8.0	0.1
440	Balrampur	Rajpur	Bhadar	7.4	706	ND	378.2	24.9	18.3	ND	335	78	33.6	6.3	4.5	7.8	ND
441	Balrampur	Rajpur	Ghorghadi	7.5	248	ND	112.3	21.3	5.7	0.3	105	32	6.0	5.9	4.3	11.7	ND
442	Balrampur	Rajpur	Karji	7.4	259	ND	115.9	17.8	3.6	ND	115	34	7.2	3.2	3.0	5.0	0.1
443	Balrampur	Wadrafnagar	Maheva	7.6	359	ND	195.2	21.3	10.3	0.2	155	34	16.8	13.2	12.3	10.5	ND
444	Balrampur	Rajpur	Rajpur	7.4	176	ND	91.5	7.1	2.8	0.1	60	18	3.6	10.9	1.6	26.4	ND
445	Balrampur	Balrampur	Pasta	7.5	257	ND	115.9	21.3	3.5	0.1	115	30	9.6	3.1	3.0	6.3	ND
446	Balrampur	Rajpur	Rajpur	7.3	318	ND	115.9	28.4	14.7	ND	130	30	10.8	9.8	1.7	28.2	ND
447	Balrampur	Shankargarh	Sargaoa	7.2	180	ND	61.5	14.2	13.0	0.2	55	18	2.4	10.9	1.7	26.0	ND
448	Balrampur	Wadrafnagar	Wadrafnagar	7.0	370	ND	85.4	42.6	3.4	0.1	100	8	19.2	42.9	2.8	8.6	ND
449	Koriya	Khadgaowan	Akhradand	7.3	605	ND	256.2	46.2	41.3	0.5	105	36	3.6	89.6	1.2	7.9	ND
450	Koriya	Bharatpur (Janakpur)	Ara	7.2	121	ND	73.2	10.7	ND	0.1	55	10	7.2	4.7	3.6	11.8	ND
451	Koriya	Bharatpur (Janakpur)	Baharsi.1	6.9	124	ND	73.2	7.1	0.2	0.1	55	12	6.0	4.7	4.0	11.3	ND
452	Koriya	Baikunthpur	Baikunthpur	7.2	1998	ND	152.5	49.7	584.6	0.1	1035	348	39.6	31.3	2.2	11.9	ND
453	Koriya	Baikunthpur	Baikunthpur	7.4	362	ND	197.5	10.7	21.4	0.2	140	40	9.6	19.3	1.8	16.0	ND
454	Koriya	Sonhat	Bhainswar	7.4	304	ND	207.4	10.7	3.0	0.1	160	34	18.0	3.1	4.4	9.2	ND
455	Koriya	Manendragarh	Biharpur	7.3	263	ND	176.9	14.2	0.3	0.2	150	30	18.0	5.2	1.1	7.4	ND
456	Koriya	Sonhat	Bikrampur	7.3	184	ND	97.6	10.7	0.5	0.1	90	18	12.0	2.2	4.6	9.1	ND
457	Koriya	Manendragarh	Chainpur	7.3	708	ND	256.2	81.7	25.7	1.6	190	42	20.4	87.9	0.2	10.0	ND
458	Koriya	Baikunthpur	Chharcha Basti	7.3	277	ND	134.2	21.3	4.5	ND	100	36	2.4	15.7	1.8	11.6	0.2
459	Koriya	Bharatpur (Janakpur)	Chutki	7.1	175	ND	115.9	7.1	ND	0.1	100	16	14.4	3.4	1.9	11.5	ND
460	Koriya	Manendragarh	Dodki	7.4	177	ND	101.9	7.1	ND	0.1	75	16	8.4	3.9	1.3	11.5	ND
461	Koriya	Manendragarh	Garundol	7.2	280	ND	103.7	24.9	1.6	ND	115	34	7.2	5.3	4.5	11.6	ND
462	Koriya	Baikunthpur	Ghugra	7.1	84	ND	24.4	14.2	0.1	0.2	25	6	2.4	3.1	9.6	12.0	ND
463	Koriya	Baikunthpur	Girjapur	7.4	1051	ND	134.2	192.2	78.2	0.2	205	52	18.0	115.4	2.9	10.4	ND
464	Koriya	Baikunthpur	Jamgahana	7.3	316	ND	175.2	14.2	3.6	0.5	135	36	10.8	13.2	0.5	22.0	ND
465	Koriya	Bharatpur (Janakpur)	Janakpur	7.2	126	ND	79.3	14.2	0.4	0.1	70	12	9.6	4.3	3.9	12.3	ND
466	Koriya	Sonhat	kailashpur	7.3	310	ND	148.6	17.8	9.9	0.1	130	40	7.2	5.2	4.6	7.3	ND
467	Koriya	Manendragarh	Kelhari	7.3	180	ND	112.2	7.1	0.3	ND	90	16	12.0	3.4	1.1	11.4	ND

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468	Koriya	Khadgawan	Khadgawan	7.2	747	ND	274.5	85.2	43.0	0.2	285	66	28.8	40.0	0.5	23.9	ND
469	Koriya	Baikunthpur	Khatgori	7.0	160	ND	54.9	24.9	0.1	0.2	60	6	10.0	9.7	3.4	4.3	ND
470	Koriya	Baikunthpur	Khodri	7.4	307	ND	183.0	11.2	0.5	0.2	145	32	15.6	3.0	4.4	9.6	ND
471	Koriya	Bharatpur (Janakpur)	Kuwarpur	7.6	280	ND	128.1	24.9	0.6	ND	125	36	8.4	5.4	2.8	12.0	ND
472	Koriya	Manendragarh	Manendragarh	7.1	800	ND	292.8	85.2	48.3	0.3	180	44	16.8	105.1	0.8	12.0	ND
473	Koriya	Baikunthpur	Mansukha	7.4	639	ND	195.2	49.7	54.5	ND	260	72	19.2	17.9	4.0	14.3	ND
474	Koriya	Baikunthpur	Mohra	7.3	783	ND	298.9	74.6	43.4	0.4	305	76	27.6	31.0	1.8	23.1	ND
475	Koriya	Baikunthpur	Nagar (Station)	7.5	552	ND	221.5	46.2	18.6	0.5	225	62	16.8	20.6	0.5	12.8	ND
476	Koriya	Baikunthpur	Nagar(Tilwandar	7.5	452	ND	268.5	21.3	2.6	0.2	175	46	14.4	32.6	0.7	15.0	ND
477	Koriya	Manendragarh	Nagpur	7.1	527	ND	289.4	14.2	15.1	0.3	185	44	18.0	33.1	0.9	18.0	ND
478	Koriya	Baikunthpur	Patan	7.4	406	ND	207.4	21.3	6.0	0.3	155	44	10.8	25.1	1.1	16.0	ND
479	Koriya	Manendragarh	Pendri	7.3	334	ND	190.0	17.8	0.2	0.2	115	30	9.6	23.0	3.0	8.0	ND
480	Koriya	Manendragarh	Piparia	7.3	847	ND	384.3	71.0	0.7	0.1	125	26	14.4	150.9	0.8	10.3	ND
481	Koriya	Khadgaowan	podidih	7.8	452	ND	158.6	42.6	27.6	0.6	130	34	10.8	33.9	2.3	6.8	ND
482	Koriya	Khadgawan	Pouri	7.2	429	ND	250.1	14.2	1.2	0.4	100	30	6.0	51.6	0.5	16.0	ND
483	Koriya	Baikunthpur	Ranai	7.2	1121	ND	347.7	166.9	20.4	0.3	355	88	32.4	66.7	1.4	11.0	ND
484	Koriya	Manendragarh	Rojhi	7.6	260	ND	151.7	10.7	0.6	0.2	120	28	12.0	5.1	3.2	7.5	ND
485	Koriya	Manendragarh	Sarbhoka	7.1	1326	ND	225.7	188.2	9.1	0.1	430	90	49.2	76.8	0.8	43.5	ND
486	Koriya	Bharatpur	Seri	7.4	288	ND	109.8	21.3	2.5	ND	110	36	4.8	5.2	2.5	11.5	ND
487	Koriya	Sonhat	Sonhat	7.2	429	ND	115.9	60.4	26.3	ND	125	28	13.2	35.0	2.8	4.7	ND
488	Koriya	Manendragarh	Tarabahara	7.4	260	ND	170.8	14.2	ND	0.1	135	28	15.6	4.9	3.3	7.6	ND
489	Koriya	Baikunthpur	Tengni	7.4	1433	ND	170.8	237.9	115.6	0.6	330	90	25.2	178.4	4.6	7.7	ND
490	Koriya	Manendragarh	Tilokhan	7.4	260	ND	48.8	58.2	4.3	0.1	75	8	20.0	6.0	4.4	9.3	ND
491	Koriya	Manendragarh	Ujiyarpur	7.3	371	ND	225.7	7.1	9.2	0.2	165	36	18.0	20.5	1.1	24.4	ND
492	Surajpur	Prem nagar	Katarouli (Harrapara)	6.8	95	ND	28.3	7.1	ND	ND	30	6	3.6	9.4	1.6	9.3	0.1
493	Surajpur	Premnagar	Abhaypur	6.8	96.7	ND	30.5	18.1	ND	ND	30	8	2.4	3.9	5.9	9.8	0.1
494	Surajpur	Pratappur	Banshipur	7.2	127.9	ND	42.7	14.2	3.1	ND	60	8	4.8	6.1	3.3	8.5	ND
495	Surajpur	Pratappur	Bhediya	7.0	249	ND	91.5	14.2	9.2	0.8	70	20	4.8	26.3	1.4	25.4	ND
496	Surajpur	Bhaiyathan	Chainpur	6.8	77	ND	24.4	14.2	0.1	0.1	30	8	2.4	3.0	1.4	12.1	0.1
497	Surajpur	Bhaiyathan	Dalabahara(Bhaskar)	6.9	84	ND	31.6	7.1	7.0	0.1	30	8	2.4	3.7	1.5	12.3	0.1
498	Surajpur	Pratappur	Dawankera	7.2	254	ND	85.4	21.3	0.8	0.4	95	22	9.6	10.8	1.9	20.9	0.1
499	Surajpur	Pratappur	Karajwar	6.9	237	ND	67.1	35.5	1.0	0.5	75	18	7.2	16.7	2.6	22.9	0.1
500	Surajpur	Bhaiyathan	Khandapara	7.3	484	ND	128.1	63.9	24.3	0.3	165	54	7.2	19.2	1.6	18.6	0.1
501	Surajpur	Surajpur	Narayanpur	7.0	188.3	ND	85.4	14.8	4.6	ND	65	14	7.2	9.6	2.9	8.0	ND
502	Surajpur	Pratappur	Podi	7.1	319	ND	97.6	32.0	9.1	0.3	95	24	8.4	25.5	1.6	21.9	0.1
503	Surajpur	Surajpur	Surajpur	7.6	646	ND	207.4	56.8	70.0	0.1	135	42	7.2	83.4	1.5	12.0	0.1
504	Surajpur	Pratappur	Dwarikanagar	7.1	123.6	ND	61.0	7.1	5.3	0.1	50	14	3.6	2.0	4.3	12.1	0.1
505	Surajpur	Ramanujnagar	Jagatpur Podipara	7.1	307	ND	128.1	24.9	14.0	0.6	95	28	6.0	23.0	2.1	19.8	0.2
506	Surajpur	Surajpur	Krishnapur(kalwa)	7.6	646	ND	207.4	63.9	64.2	0.1	125	42	4.8	80.6	1.5	12.1	0.1
507	Surajpur	Bhaiyathan	Samouli(Bhayathan)	6.9	476	ND	134.2	60.4	28.4	ND	180	54	10.8	9.3	5.9	17.8	0.1
508	Surajpur	Premnagar	Shivnagar	7.2	84.5	ND	30.5	7.1	ND	0.1	25	10	ND	2.4	6.4	12.7	ND
509	Surajpur	Surajpur	Badsara	7.5	371	ND	158.6	39.1	6.8	0.2	155	42	12.0	12.0	1.5	11.9	ND
510	Surajpur	Surajpur	Biharpur	7.2	155	ND	54.9	17.8	3.7	ND	55	12	6.0	4.0	4.3	12.0	ND
511	Surajpur	Pratappur	Chandora	7.4	398	ND	183.0	24.9	15.0	0.4	195	42	21.6	14.3	1.9	16.1	0.1
512	Surajpur	Pratappur	Darhora	7.3	273	ND	109.8	28.4	7.7	0.3	100	28	7.2	14.1	0.8	17.8	ND
513	Surajpur	Surajpur	Deonagar	7.4	358	ND	213.5	10.7	0.4	0.2	180	52	12.0	5.3	2.2	9.3	ND
514	Surajpur	Premnagar	Fulkona	7.4	504	ND	213.5	24.9	36.1	0.3	235	50	26.4	22.2	1.4	19.8	ND

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515	Surajpur	Ramanujnagar	Ganeshpur	7.4	461	ND	256.2	24.9	5.8	1.5	120	24	14.4	57.7	1.5	14.8	ND
516	Surajpur	Pratappur	Gonda	7.5	260	ND	152.5	7.1	ND	2.7	125	26	14.4	4.6	5.7	8.7	0.1
517	Surajpur	Premnagar	Hanumangarh	7.8	579	ND	335.5	24.9	12.1	3.2	15	4	1.2	137.0	0.5	9.8	ND
518	Surajpur	Pratappur	Jagannathpur	7.2	712	ND	378.2	35.5	39.0	0.2	90	30	3.6	58.2	7.8	3.7	ND
519	Surajpur	Surajpur	Jaynagar	7.5	385	ND	256.2	3.6	3.6	0.5	105	10	19.2	49.3	2.2	11.6	ND
520	Surajpur	Surajpur	Kaliyanpur	7.2	160	ND	30.5	24.9	ND	0.2	75	14	9.6	3.8	5.7	12.0	ND
521	Surajpur	Surajpur	Kanakpur	7.1	118.6	ND	54.9	14.2	2.8	0.1	55	10	7.2	2.7	4.8	9.5	ND
522	Surajpur	Surajpur	Majeera	7.6	186.6	ND	73.2	17.8	4.3	0.2	80	16	9.6	7.1	2.4	6.4	0.1
523	Surajpur	Bhaiyathan	Odigi	7.4	471	ND	128.1	63.9	26.6	0.1	160	50	8.4	19.7	1.5	7.4	0.1
524	Surajpur	Surajpur	Pachira	7.5	402	ND	228.4	10.7	6.5	0.4	115	30	9.6	39.0	2.1	17.3	0.1
525	Surajpur	Ramanujnagar	Parasrampur	7.3	590	ND	195.2	60.4	22.5	0.3	230	78	8.4	24.5	0.7	12.4	0.1
526	Surajpur	Pratappur	Pratappur	7.4	229	ND	146.4	10.7	2.8	0.3	110	28	9.6	6.1	1.6	24.5	0.1
527	Surajpur	Premnagar	Premnagar	7.4	713	ND	213.5	81.7	21.7	0.4	285	72	25.2	26.2	1.0	25.9	0.1
528	Surajpur	Ramanujnagar	Ramanuj nagar	7.4	591	ND	195.2	81.7	23.0	0.2	225	58	19.2	24.5	0.7	25.2	ND
529	Surajpur	Pratappur	Reonti	7.8	396	ND	195.2	21.3	18.3	0.4	200	30	30.0	11.6	1.6	11.5	ND
530	Surajpur	Surajpur	Sirsi	7.4	217	ND	96.4	17.8	4.8	0.2	90	24	8.4	7.1	0.6	17.6	ND
531	Surajpur	Pratappur	Songara	7.8	123	ND	31.0	7.1	1.4	0.5	35	10	2.4	2.7	9.8	1.0	1.0
532	Surajpur	Premnagar	Tara	8.2	100	ND	47.0	7.1	3.5	0.6	40	8	3.6	3.9	3.6	21.0	0.1
533	Surguja	Ambikapur	Ambikapur	8.1	474	ND	214.0	14.2	15.8	0.5	145	40	10.8	30.6	4.9	42.6	0.1
534	Surguja	Lundra	Amdih	8.0	625	ND	165.0	81.7	25.0	0.5	170	40	16.8	43.0	8.8	21.6	0.5
535	Surguja	Lakhanpur	Amgachi	7.9	515	ND	177.0	60.8	6.7	1.9	185	52	13.2	32.9	10.9	15.5	0.1
536	Surguja	Mainpat	Amgaon	8.2	215	ND	79.0	24.9	5.2	0.5	75	20	6.0	19.8	1.4	21.6	0.2
537	Surguja	Ambikapur	Baghima	8.1	365	ND	100.0	39.9	19.4	0.5	130	44	4.8	13.0	2.6	18.3	21.0
538	Surguja	Batauli	Bandana	8.2	104	ND	61.0	14.8	3.2	0.5	60	14	6.0	6.5	1.9	21.1	0.2
539	Surguja	Batauli	Belkota	8.1	140	ND	79.0	14.1	2.9	0.5	50	4	9.6	14.0	1.6	47.3	0.1
540	Surguja	Lundra	Bulga	7.9	403	ND	128.0	58.6	14.9	0.5	125	38	7.2	29.1	1.4	29.5	0.3
541	Surguja	Ambikapur	Chatakpur	8.1	151	ND	92.0	10.7	4.1	0.5	70	16	7.2	8.9	1.2	24.9	0.1
542	Surguja	Udeypur	Dandgaon	7.9	123	ND	50.0	14.0	3.2	0.6	50	14	3.2	6.1	2.1	2.7	ND
543	Surguja	Lundra	Dandgaon(koltapara)	7.7	110	ND	43.0	14.2	1.0	0.6	40	10	3.6	4.0	5.7	10.2	ND
544	Surguja	Ambikapur	Darima	8.0	137	ND	60.0	14.1	1.4	0.5	45	16	1.2	5.9	1.9	13.1	ND
545	Surguja	Lundra	Dhaurpur	8.0	190	ND	18.0	32.0	6.0	0.6	50	14	3.6	11.3	10.3	11.2	ND
546	Surguja	Udaypur	Jajga	8.0	426	ND	110.0	67.5	7.0	1.9	435	56	10.8	12.9	0.4	5.6	0.1
547	Surguja	Mainpat	Kamleswarpur	8.2	104	ND	55.0	11.2	1.0	0.5	34	12	1.2	12.3	0.8	23.5	0.1
548	Surguja	Ambikapur	Katkalo	8.1	286	ND	128.0	7.1	4.8	0.5	110	28	9.6	1.9	2.9	12.5	ND
549	Surguja	Lakhanpur	Kunni	8.1	176	ND	31.0	32.0	2.1	0.5	55	12	6.0	7.2	17.5	11.8	ND
550	Surguja	Lakhanpur	Lakhanpur	8.1	175	ND	34.0	25.1	1.8	0.5	55	12	0.6	6.9	17.2	12.1	ND
551	Surguja	Lundra	Lundra	8.2	529	ND	195.0	63.9	6.9	0.5	70	18	6.0	89.7	1.4	12.8	1.4
552	Surguja	Batauli	Mangari	7.7	162	ND	31.0	17.8	1.2	0.5	65	16	6.0	4.0	8.6	8.7	0.1
553	Surguja	Mainpat	Nagdand	7.3	102	ND	37.0	7.1	0.7	0.5	30	10	1.2	13.0	0.2	14.2	ND
554	Surguja	Ambikapur	Nawapara	7.8	297	ND	141.0	14.9	3.1	0.5	125	30	7.2	14.1	0.4	10.2	ND
555	Surguja	Ambikapur	Parsa	7.7	256	ND	128.0	7.1	2.1	0.5	110	28	9.6	1.9	2.9	9.5	0.1
556	Surguja	Sitapur	Pratapgarh	7.2	161	ND	67.0	11.0	3.0	0.4	60	20	2.0	5.0	1.0	8.3	ND
557	Surguja	Ambikapur	Rajpurikhurd	8.1	399	ND	207.0	1.0	0.3	0.4	80	14	10.0	57.7	2.0	11.1	ND
558	Surguja	Batauli	Sedam	8.2	742	ND	261.0	61.0	18.0	0.4	300	78	26.0	33.7	9.3	14.0	ND
559	Surguja	Lakhanpur	singhitana	7.8	298	ND	171.0	14.0	5.0	0.4	150	40	12.0	12.0	0.4	19.0	ND
560	Surguja	Lundra	Sisila	7.5	210	ND	90.0	14.0	3.0	0.5	110	30	4.8	6.0	0.7	14.0	ND
561	Surguja	Sitapur	Sitapur	7.9	160	ND	67.0	11.0	2.5	0.4	65	20	2.0	5.0	13.0	11.6	ND

Sl. No	District	Block	Village	PH	EC µS	CO3 mg/l	HCO3 mg/l	Cl mg/l	SO4 mg/l	F mg/l	TH mg/l	Ca mg/l	Mg mg/l	Na mg/l	K mg/l	Si mg/l	Po4 mg/l
562	Surguja	Sitapur	Sontarai (Sitapur)	8.1	156	ND	61.0	7.1	2.1	0.4	60	18	5.0	1.0	22.0	8.2	ND
563	Surguja	Lundra	Sumerpur	7.7	432	ND	214.0	14.0	18.5	0.6	145	40	10.8	30.1	4.7	25.9	0.1
564	Surguja	Ambikapur	Gangapur	8.1	105	ND	36.0	7.1	0.7	0.6	30	10	1.2	3.0	0.2	14.8	0.1
565	Surguja	Udeypur	Udaipur	8.1	114	ND	48.0	14.0	1.6	0.6	45	16	1.2	5.9	1.9	13.1	0.1
566	Surguja	Lakhanpur	Udaipur Dhah	8.1	106	ND	56.0	7.1	14.1	0.5	60	14	6.0	6.5	1.9	21.1	0.2
567	Balodabazar	Balodabazar	Bhangaon	7.1	377	ND	183.0	25.0	13.2	0.4	155	46	9.6	17.8	1.2	9.4	0.1
568	Balodabazar	Simgha	Hadabandh	7.2	388	ND	183.0	28.0	15.1	0.3	175	48	13.2	17.3	1.2	9.1	0.1
569	Balodabazar	Kasdol	Charched	7.2	387	ND	183.0	28.0	13.2	0.3	185	44	18.0	17.8	1.2	9.2	0.1
570	Balodabazar	Balodabazar	Rawan	7.2	397	ND	177.0	25.0	12.7	0.3	170	36	19.2	17.5	1.2	9.4	0.1
571	Balodabazar	Simga	Udela	7.0	981	ND	226.0	124.0	80.9	0.2	380	116	21.6	52.5	1.9	7.4	0.1
572	Balodabazar	Simga	Hathband	7.2	390	ND	183.0	28.0	12.4	0.3	175	42	16.8	17.5	1.2	8.8	0.1
573	Balodabazar	Kasdol	Temri	7.1	464	ND	195.0	25.0	12.9	0.3	190	38	22.8	17.6	1.2	9.3	0.1
574	Balodabazar	Balodabazar	Amera	7.3	471	ND	183.0	28.0	13.3	0.3	195	36	25.2	17.5	1.2	8.9	ND
575	Balodabazar	Kasdol	Aouri	7.2	473	ND	189.0	28.0	12.1	0.3	195	40	22.8	17.3	1.2	9.2	0.1
576	Balodabazar	Balodabazar	Arjuni	7.1	898	ND	329.0	103.0	34.5	0.4	330	84	28.8	52.2	21.0	11.7	0.1
577	Balodabazar	Balodabazar	Baloda bazar	7.2	894	ND	317.0	103.0	35.0	0.4	325	74	33.6	51.5	25.5	12.1	0.1
578	Balodabazar	Bilaigarh	Tundri	7.1	514	ND	195.0	28.0	12.3	0.3	205	38	26.4	17.1	1.2	9.2	0.1
579	Balodabazar	Bilaigarh	Bhatgaon	7.1	925	ND	342.0	107.0	34.6	0.4	335	82	31.2	51.4	22.5	12.2	0.1
580	Balodabazar	Pallari	Bhatia	7.1	810	ND	220.0	124.0	37.6	0.4	355	82	36.0	29.0	1.1	10.8	0.1
581	Balodabazar	Balodabazar	Bitkuli	7.2	470	ND	183.0	28.0	12.4	0.3	195	40	22.8	17.0	1.2	9.0	0.1
582	Balodabazar	Bilaigarh	Bilaigarh	7.1	892	ND	317.0	103.0	35.4	0.4	315	66	36.0	52.2	24.5	11.6	0.1
583	Balodabazar	Balodabazar	Chandi	7.1	924	ND	226.0	117.0	80.5	0.2	345	122	9.6	51.7	1.9	7.2	0.1
584	Balodabazar	Simga	Damakheda	7.5	718	ND	226.0	57.0	88.6	0.2	330	76	33.6	16.8	2.5	6.6	0.1
585	Balodabazar	Simga	Darchura	7.3	670	ND	262.0	25.0	88.2	0.2	285	66	28.8	18.4	1.7	6.1	0.2
586	Balodabazar	Kasdol	Haswa	7.0	914	ND	207.0	121.0	87.7	0.2	335	114	12.0	51.5	1.9	7.2	0.2
587	Balodabazar	Palari	Devsundri	7.1	764	ND	189.0	121.0	36.5	0.3	310	82	25.2	29.3	1.1	10.3	0.1
588	Balodabazar	Balodabazar	Dhabadih	7.2	845	ND	287.0	103.0	33.7	0.3	265	74	19.2	51.4	22.5	11.6	0.1
589	Balodabazar	Kasdol	Kasdol	7.0	804	ND	207.0	124.0	36.5	0.3	355	80	37.2	29.0	1.1	10.6	0.1
590	Balodabazar	Simga	Khapri	7.1	856	ND	293.0	99.0	34.8	0.4	275	74	21.6	50.0	23.5	12.1	0.1
591	Balodabazar	Palari	Kodwa	7.2	849	ND	287.0	103.0	33.6	0.3	305	70	31.2	50.7	22.0	11.6	0.1
592	Balodabazar	Balodabazar	Lahoud	7.1	884	ND	317.0	103.0	33.9	0.4	295	80	22.8	49.8	23.5	11.7	0.1
593	Balodabazar	Balodabazar	Lawan	7.2	869	ND	299.0	99.0	33.6	0.4	305	76	27.6	49.9	24.0	11.6	0.1
594	Balodabazar	Bilaigarh	Marban Gatadih	7.0	845	ND	281.0	103.0	33.0	0.3	280	76	21.6	50.0	24.0	11.8	0.1
595	Balodabazar	Kasdol	Mudhipar	7.1	868	ND	299.0	107.0	33.2	0.4	295	72	27.6	50.5	24.0	11.5	0.1
596	Balodabazar	Balodabazar	Risda	7.1	873	ND	305.0	99.0	32.6	0.4	300	74	27.6	49.5	24.0	11.8	0.2
597	Balodabazar	Bilaigarh	Sarsiwa	7.2	847	ND	293.0	99.0	32.0	0.4	270	68	24.0	50.0	22.5	11.4	0.1
598	Balodabazar	Kasdol	Sel	7.0	966	ND	238.0	121.0	84.1	0.1	360	122	13.2	50.1	1.9	6.2	0.1
599	Balodabazar	Simga	Simga	7.3	690	ND	250.0	21.0	118.6	0.4	310	60	38.4	17.9	1.7	5.8	0.1
600	Balodabazar	Simga	suhela	7.1	864	ND	165.0	121.0	90.0	0.1	310	102	13.2	49.6	1.9	7.0	0.1
601	Balodabazar	Bhatapara	Tarenga	7.0	308	ND	85.0	46.0	6.0	0.2	75	16	8.4	25.0	5.8	5.3	0.1
602	Balodabazar	Simga	Tatibandh MVM	6.9	299	ND	79.0	46.0	5.0	0.1	80	14	10.8	24.9	6.3	5.3	0.2
603	Balodabazar	Palari	Sandi	7.1	580	ND	220.0	64.0	16.9	0.4	220	52	21.6	33.1	1.0	9.8	0.1
604	Dhamtari	Kurud	Aouri	7.1	621	ND	159.0	89.0	44.4	0.2	250	64	20.4	33.1	0.6	7.2	0.1
605	Dhamtari	Nagri	Arjuni	7.3	616	ND	140.0	89.0	48.2	0.1	215	66	12.0	33.8	0.7	7.3	0.1
606	Dhamtari	Sihawa (Nagri)	Arsi-kanhar	7.2	754	ND	232.0	114.0	8.3	1.0	285	80	20.4	36.5	1.6	29.2	0.1
607	Dhamtari	Nagri	Amali	7.1	647	ND	165.0	89.0	47.5	0.2	235	72	13.2	33.6	0.7	7.2	0.1
608	Dhamtari	Magarload	Banraud	7.0	925	ND	183.0	178.0	32.9	0.3	295	84	20.4	54.1	9.1	21.9	0.1

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609	Dhamtari	Sihawa (Nagri)	Banspani	7.3	595	ND	256.0	57.0	13.5	1.1	195	44	20.4	53.0	1.0	7.2	0.1
610	Dhamtari	Magarload	Baspara(Kukrel)	7.3	666	ND	293.0	57.0	12.4	1.1	220	52	21.6	52.9	1.3	6.8	0.1
611	Dhamtari	Kurud	Bhatagaon	7.5	588	ND	122.0	124.0	32.4	0.1	165	46	12.0	62.6	1.1	7.9	0.1
612	Dhamtari	Sihawa (Nagri)	Birgudi	7.1	732	ND	98.0	163.0	38.3	0.1	255	76	15.6	45.8	1.6	24.1	0.1
613	Dhamtari	Magarload	Budaraon	7.2	562	ND	183.0	60.0	18.1	0.9	155	34	16.8	45.2	1.7	8.1	0.1
614	Dhamtari	Dhamtari	Marradev	7.2	521	ND	281.0	18.0	4.5	0.4	100	10	18.0	61.2	9.0	9.0	0.1
615	Dhamtari	Dhamtari	Chhati	7.1	934	ND	171.0	57.0	16.5	0.9	110	22	13.2	60.4	9.0	8.1	0.1
616	Dhamtari	Kurud	Dandesara	7.1	569	ND	183.0	60.0	18.5	0.8	140	26	18.0	61.4	1.7	8.1	0.1
617	Dhamtari	Kurud	Darba	7.3	565	ND	177.0	60.0	17.8	0.8	135	24	18.0	59.3	1.5	8.2	0.1
618	Dhamtari	Sihawa (Nagri)	Dorgardula	7.3	755	ND	98.0	181.0	38.3	0.1	225	74	9.6	60.3	8.9	23.3	0.1
619	Dhamtari	Sihawa (Nagri)	Dugli	7.1	828	ND	110.0	195.0	38.6	0.1	245	70	16.8	58.6	8.9	23.1	0.1
620	Dhamtari	Nagri	Farsiya	7.4	714	ND	122.0	124.0	13.3	0.7	195	54	14.4	45.0	1.6	32.4	0.1
621	Dhamtari	Kurud	Gadadih	7.2	577	ND	287.0	21.0	4.7	0.4	135	28	15.6	47.2	15.7	9.6	0.1
622	Dhamtari	Dhamtari	Gangrel	7.1	625	ND	122.0	124.0	13.2	0.6	175	54	9.6	59.0	8.8	30.4	0.1
623	Dhamtari	Abhanpur	Ghatapara	7.4	666	ND	128.0	121.0	13.7	0.7	195	54	14.4	58.3	1.4	31.8	0.1
624	Dhamtari	Sihawa (Nagri)	Gattasilli	7.4	777	ND	98.0	185.0	37.5	0.2	235	68	15.6	62.0	1.1	23.3	0.2
625	Dhamtari	Sihawa (Nagri)	Keregaon	7.3	605	ND	104.0	181.0	38.0	0.2	250	72	16.8	58.9	1.2	24.1	0.1
626	Dhamtari	Dhamtari	Khadadaha	7.3	758	ND	104.0	178.0	38.0	0.1	230	62	18.0	58.9	8.7	23.1	0.1
627	Dhamtari	Nagri	Kouhabahara	7.1	807	ND	92.0	181.0	38.8	0.2	245	74	14.4	58.6	8.8	23.2	0.1
628	Dhamtari	Kurud	Kondapar	7.3	535	ND	177.0	57.0	17.5	0.8	120	26	13.2	57.8	1.3	8.4	0.1
629	Dhamtari	Kurud	Kosmarra	7.2	728	ND	92.0	170.0	38.0	0.1	215	64	13.2	58.9	8.8	23.1	0.1
630	Dhamtari	Kurud	Kurud	6.7	562	ND	177.0	60.0	18.4	0.7	135	24	18.0	58.8	1.6	8.2	0.1
631	Dhamtari	Nagri	Kumhada	6.9	608	ND	177.0	99.0	35.0	0.3	240	72	10.8	39.3	1.0	18.5	0.1
632	Dhamtari	Nagri	Lilanj	7.0	316	ND	79.0	46.0	10.1	ND	65	14	7.2	26.8	16.5	6.1	0.1
633	Dhamtari	Magarload	Magarload	7.1	553	ND	183.0	60.0	18.8	1.1	130	28	14.4	58.3	1.5	7.9	0.1
634	Dhamtari	Kurud	Marod	7.3	574	ND	183.0	60.0	17.8	0.9	140	30	15.6	58.0	1.6	8.2	0.1
635	Dhamtari	Sihawa (Nagri)	Mechka (sondur)	7.0	597	ND	128.0	121.0	13.5	0.7	195	54	14.4	44.9	1.7	30.2	0.1
636	Dhamtari	Kurud	Mega	7.1	530	ND	177.0	57.0	18.0	0.8	140	28	16.8	58.6	1.5	8.1	0.1
637	Dhamtari	Magarload	Mulgaon	7.2	547	ND	177.0	60.0	17.8	0.8	140	24	19.2	57.4	1.3	7.9	0.1
638	Dhamtari	Sihawa (Nagri)	Nagri	7.0	757	ND	104.0	178.0	37.8	0.1	215	70	9.6	58.1	8.8	22.6	0.1
639	Dhamtari	Dhamtari	Rudri chowk	6.9	652	ND	140.0	121.0	13.8	1.1	215	58	16.8	44.5	1.7	32.4	0.1
640	Dhamtari	Sihawanagri	Sankra	7.1	686	ND	134.0	121.0	13.3	1.0	235	54	24.0	44.4	1.7	30.3	0.1
641	Dhamtari	Dhamtari	Shankarda	6.9	586	ND	122.0	117.0	13.1	0.7	180	50	13.2	44.4	1.7	30.9	0.1
642	Dhamtari	Dhamtari	Seadei	7.2	590	ND	116.0	121.0	14.5	0.7	175	54	9.6	44.4	1.6	30.4	0.1
643	Dhamtari	Sihawa (Nagri)	Sihawa	7.1	609	ND	122.0	124.0	13.0	0.7	185	52	13.2	44.1	1.6	29.9	0.1
644	Dhamtari	Magarload	Singhpur	7.3	745	ND	159.0	131.0	46.8	0.1	175	48	13.2	67.4	26.5	13.1	0.1
645	Dhamtari	Nagri	Tumribahar	6.9	327	ND	92.0	50.0	10.3	ND	65	16	6.0	26.8	16.5	5.8	0.1
646	Gariyabandh	Chhura	Amethi	7.2	292	ND	134.0	18.0	2.6	0.9	110	30	8.4	9.1	1.4	23.0	0.1
647	Gariyabandh	Fingeswar	Baronda	7.3	626	ND	183.0	60.0	15.4	0.3	90	18	10.8	74.2	0.9	11.0	0.1
648	Gariyabandh	Chhura	Sorid	7.2	616	ND	122.0	71.0	64.5	0.2	175	46	14.4	40.8	35.2	10.7	0.1
649	Gariyabandh	Rajim	Kaskera	7.3	231	ND	122.0	14.0	2.4	0.8	95	20	10.8	9.1	1.4	23.3	0.2
650	Gariyabandh	Rajim	Mudagaon	7.0	279	ND	67.0	50.0	12.5	ND	85	26	4.8	19.5	1.0	17.7	0.1
651	Gariyabandh	Chhura	Pond	7.2	541	ND	140.0	92.0	30.4	1.2	170	44	14.4	41.3	1.4	27.9	0.1
652	Gariyabandh	Gariyabandh	Malgaon	7.2	562	ND	159.0	92.0	30.4	1.2	180	54	10.8	40.2	1.4	25.3	0.1
653	Gariyabandh	Fingeswar	Sarkada	7.2	430	ND	104.0	64.0	61.8	0.3	175	46	15.6	9.0	7.9	11.5	0.1
654	Gariyabandh	Chhura	Baruka	7.3	545	ND	153.0	96.0	31.0	1.2	170	50	10.8	40.6	1.3	26.2	0.1
655	Gariyabandh	Rajim	Chhura	7.0	280	ND	61.0	46.0	12.6	ND	85	26	4.8	19.5	1.0	17.4	0.1

Sl. No	District	Block	Village	PH	EC µS	CO3 mg/l	HCO3 mg/l	Cl mg/l	SO4 mg/l	F mg/l	TH mg/l	Ca mg/l	Mg mg/l	Na mg/l	K mg/l	Si mg/l	Po4 mg/l
656	Gariyabandh	Rajim	Devri	6.8	824	ND	183.0	121.0	40.0	0.3	300	80	24.0	51.0	2.5	8.0	ND
657	Gariyabandh	Rajim	Fingeshwar	6.9	274	ND	134.0	14.0	ND	ND	120	36	7.2	6.8	0.9	5.0	ND
658	Gariyabandh	Chhura	Gariaband	6.8	469	ND	146.0	46.0	25.0	0.9	365	28	26.0	42.0	1.4	25.0	ND
659	Gariyabandh	Deobhog	Jhariabara	6.8	572	ND	226.0	50.0	42.0	0.1	250	60	24.0	37.0	0.6	10.0	ND
660	Gariyabandh	Rajim	Kanekera	6.9	262	ND	134.0	7.0	ND	ND	100	32	4.8	9.2	0.9	11.0	ND
661	Gariyabandh	Chhura	Kaseru	6.9	670	ND	293.0	35.0	24.0	1.1	290	24	55.0	41.0	1.4	25.0	ND
662	Gariyabandh	Rajim	Kashi Bahara	7.0	282	ND	128.0	21.0	13.0	0.3	245	28	12.0	20.0	1.0	14.0	ND
663	Gariyabandh	Chhura	Kharkhara	6.9	272	ND	73.0	43.0	8.0	0.2	90	24	7.2	20.0	0.9	21.0	ND
664	Gariyabandh	Rajim	Kopra	6.9	698	ND	110.0	99.0	40.0	0.2	210	44	24.0	54.0	2.6	18.0	ND
665	Gariyabandh	Rajim	Koma	6.9	929	ND	146.0	71.0	45.0	ND	200	60	12.0	38.0	0.6	11.0	ND
666	Gariyabandh	Chhura	Kurud	7.0	522	ND	73.0	99.0	50.0	0.8	180	12	36.0	37.0	0.6	12.0	ND
667	Gariyabandh	Rajim	Panduka	6.8	637	ND	73.0	85.0	35.0	1.2	465	72	12.0	44.0	1.2	27.0	ND
668	Gariyabandh	Rajim	Parsada Khurd	6.8	270	ND	140.0	14.0	nd	1.2	120	36	7.2	8.7	1.2	25.0	ND
669	Gariyabandh	Rajim	Rajim	6.9	893	ND	159.0	106.0	88.0	1.5	270	80	17.0	77.0	25.0	17.0	ND
670	Gariyabandh	Rajim	Sursabandha	7.0	501	ND	207.0	50.0	20.0	1.5	160	28	22.0	54.0	1.0	12.0	ND
671	Mahasamund	Mahasamund	Amlor	6.9	313	ND	98.0	39.0	10.0	0.9	80	16	9.6	26.0	17.0	5.0	ND
672	Mahasamund	Bagbahara	Bagbahara	6.8	311	ND	85.0	43.0	10.0	0.8	110	20	14.0	18.0	0.9	5.0	ND
673	Mahasamund	Mahasamund	Baldidih	6.9	387	ND	183.0	21.0	nd	1.1	180	52	12.0	4.5	2.8	30.0	ND
674	Mahasamund	Basna	Barbaspun	7.1	388	ND	220.0	14.0	nd	1.1	170	48	12.0	18.0	0.7	31.0	ND
675	Mahasamund	Basna	Basna	7.1	391	ND	195.0	21.0	nd	1.2	170	56	7.2	18.0	0.7	37.0	ND
676	Mahasamund	Mahasamund	Belsunda	6.8	313	ND	146.0	43.0	10.0	0.9	120	16	19.0	27.0	18.0	10.0	ND
677	Mahasamund	Bagbahara	Bhimkhoj	6.9	305	ND	146.0	35.0	10.0	0.8	70	20	4.8	24.0	16.0	35.0	ND
678	Mahasamund	Mahasamund	Borajhar	7.3	655	ND	366.0	21.0	nd	1.1	250	64	22.0	40.0	1.8	5.0	ND
679	Mahasamund	Pithora	Deori	7.2	243	ND	110.0	21.0	6.0	0.8	95	16	13.0	17.0	1.0	10.0	ND
680	Mahasamund	Bagbahara	Hadabundh	7.0	736	ND	134.0	121.0	40.0	1.0	300	76	26.0	18.0	0.7	10.0	ND
681	Mahasamund	Pithora	Jagdishpur	7.0	393	ND	213.0	21.0	9.0	1.1	170	48	12.0	19.0	4.1	32.0	ND
682	Mahasamund	Mahasamund	Jalki	6.9	586	ND	461.0	57.0	32.0	1.1	160	40	14.0	72.0	4.2	12.0	ND
683	Mahasamund	Mahasamund	Jhalap	6.9	466	ND	134.0	35.0	21.0	1.0	180	44	17.0	21.0	2.5	24.0	ND
684	Mahasamund	Mahasamund	Jhalkhamhariya	7.1	661	ND	305.0	43.0	25.0	1.1	250	68	19.0	42.0	1.3	26.0	ND
685	Mahasamund	Mahasamund	Jogidipa	7.2	394	ND	183.0	21.0	nd	1.1	300	48	7.2	18.0	0.6	34.0	ND
686	Mahasamund	Bagbahara	Khallari	6.9	299	ND	92.0	35.0	12.0	0.5	70	20	4.8	24.0	16.0	8.0	ND
687	Mahasamund	Mahasamund	Kowajhar	6.9	245	ND	85.0	28.0	9.0	0.5	90	24	7.2	14.0	2.0	10.0	ND
688	Mahasamund	Mahasamund	Lakhanpur(Bhatripura)	6.8	312	ND	85.0	57.0	14.0	0.5	90	16	12.0	25.0	20.0	5.0	ND
689	Mahasamund	Mahasamund	Lavra Khurud	7.0	317	ND	98.0	43.0	11.0	0.5	85	8	16.0	23.0	15.0	5.0	ND
690	Mahasamund	Mahasamund	Mahasamund.1	6.9	313	ND	98.0	43.0	10.0	0.6	80	20	7.2	26.0	17.0	6.0	ND
691	Mahasamund	Saraipalli	Marban	6.9	300	ND	85.0	43.0	10.0	0.5	50	8	7.2	32.0	21.0	7.0	ND
692	Mahasamund	Bagbahara	Maulimuda	6.8	752	ND	207.0	121.0	15.0	0.4	250	80	12.0	50.0	1.7	30.0	ND
693	Mahasamund	Mahasamund	Marod	7.0	339	ND	110.0	50.0	11.0	0.5	100	24	9.6	26.0	16.0	10.0	ND
694	Mahasamund	Bagbahara	Palsipani	7.0	305	ND	98.0	35.0	12.0	0.6	90	16	12.0	21.0	14.0	9.0	ND
695	Mahasamund	Mahasamund	Pasid	7.0	515	ND	195.0	57.0	27.0	0.3	100	20	12.0	71.0	21.0	12.0	ND
696	Mahasamund	Basna	Saraipali	7.0	299	ND	92.0	35.0	13.0	0.6	70	16	7.2	28.0	11.0	9.0	ND
697	Mahasamund	Bagbahara	Samahar	7.0	301	ND	98.0	43.0	12.0	0.5	80	20	7.2	28.0	18.0	8.0	ND
698	Mahasamund	Bagbahara	Suarmar	7.1	304	ND	85.0	35.0	7.2	0.4	80	12	12.0	20.0	13.0	8.0	ND
699	Mahasamund	Bagbahara	Tendukonda	7.0	308	ND	98.0	35.0	10.0	0.5	60	12	7.2	27.0	18.0	7.0	ND
700	Mahasamund	Mahasamund	Tumgaon	7.0	302	ND	98.0	35.0	11.0	0.5	85	20	8.4	23.0	15.0	9.0	ND
701	Mahasamund	Basna	Mandalpur	7.0	723	ND	250.0	71.0	46.0	0.4	290	56	36.0	56.0	2.4	11.0	ND
702	Mahasamund	Saraipalli	Deori	7.8	383	ND	134.0	35.0	30.0	0.5	130	40	7.2	29.0	2.0	10.0	ND

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703	Raipur	Arang	Umaria station	7.0	321	ND	110.0	35.0	12.0	0.5	120	20	17.0	17.0	3.5	10.0	ND
704	Raipur	Aurang	Godhi	7.0	607	ND	146.0	92.0	42.0	0.5	240	56	24.0	38.0	0.6	10.0	ND
705	Raipur	Arang	Nawagaon	7.0	772	ND	183.0	121.0	38.0	0.5	320	76	31.0	33.0	0.9	11.0	ND
706	Mahasamund	Mahasamund	Nawagaon	7.0	474	ND	281.0	14.0	5.0	0.4	130	20	19.0	61.0	0.8	12.0	ND
707	Raipur	Abhanpur	Abhanpur	7.2	652	ND	317.0	28.0	8.0	0.3	70	8	12.0	118.0	2.0	8.0	ND
708	Raipur	Abhanpur	Bajrangpur	7.2	555	ND	207.0	50.0	27.0	0.4	190	52	14.0	37.0	0.6	10.0	ND
709	Raipur	Arang	Bhatia	7.0	306	ND	73.0	50.0	10.0	0.6	90	16	12.0	28.0	0.7	8.0	ND
710	Raipur	Tilda	Biladi	7.0	669	ND	207.0	71.0	36.0	0.5	260	72	19.0	43.0	1.5	10.0	ND
711	Raipur	Tilda	Chicholi	7.0	431	ND	134.0	57.0	32.0	0.5	180	52	12.0	26.0	0.7	10.0	ND
712	Raipur	Dharsinwa	Chrauda	7.0	684	ND	268.0	57.0	43.0	0.5	250	84	9.6	55.0	3.1	8.0	ND
713	Raipur	Dharsinwa	Devpuri	7.0	563	ND	207.0	50.0	50.0	0.5	200	52	17.0	48.0	2.7	9.0	ND
714	Raipur	Darsinwa	Devri	7.0	780	ND	256.0	71.0	55.0	0.5	220	76	7.2	66.0	46.0	13.0	ND
715	Raipur	Dharsinwa	Dharsinwa	7.0	629	ND	207.0	50.0	54.0	0.5	260	68	22.0	29.0	3.1	10.0	ND
716	Raipur	Dharsinwa	Dumartarai	6.8	621	ND	146.0	92.0	55.0	0.2	210	68	9.6	61.0	0.8	7.0	ND
717	Raipur	Arang	Ghivera	7.0	492	ND	268.0	7.0	10.0	0.6	200	28	31.0	24.0	2.0	8.0	ND
718	Raipur	Abhanpur	Gotiadih	7.0	505	ND	171.0	64.0	26.0	0.5	200	52	17.0	37.0	0.7	13.0	ND
719	Raipur	Kharora	Kanki	6.8	626	ND	159.0	64.0	57.0	0.3	220	64	14.0	37.0	0.5	6.0	ND
720	Raipur	Arang	Kasrangi	6.9	625	ND	159.0	85.0	54.0	0.3	220	68	12.0	18.0	11.0	7.0	ND
721	Raipur	Abhanpur	Kendri	6.9	570	ND	207.0	46.0	24.0	0.7	250	56	26.0	17.0	0.5	14.0	ND
722	Raipur	Tilda	Kharora	6.8	383	ND	110.0	50.0	15.0	0.6	125	36	8.4	36.0	0.4	8.0	ND
723	Raipur	Abhanpur	Kurra	6.8	517	ND	183.0	64.0	22.0	0.7	200	56	14.0	36.0	0.4	8.0	ND
724	Raipur	Dharsinwa	manabasti	6.8	559	ND	195.0	50.0	25.0	0.8	210	64	12.0	31.0	2.4	15.0	ND
725	Raipur	Dharsinwa	Mandhar	6.8	610	ND	146.0	85.0	54.0	0.3	210	64	12.0	46.0	0.5	8.0	ND
726	Raipur	Dharsinwa	Mandirhasud	6.2	576	ND	220.0	43.0	23.0	0.7	200	64	9.6	35.0	0.7	14.0	ND
727	Raipur	Tilda	Math	7.0	1263	ND	171.0	248.0	52.0	0.7	380	64	53.0	98.0	2.1	14.0	ND
728	Raipur	Palari	Palari	7.0	329	ND	183.0	14.0	5.0	0.3	140	36	12.0	19.0	0.7	5.0	ND
729	Raipur	Tilda	Pandan Bhata	6.8	547	ND	146.0	71.0	30.0	0.2	190	52	14.0	38.0	0.4	8.0	ND
730	Raipur	Arang	Piparhatta	6.9	623	ND	183.0	64.0	44.0	0.3	240	64	19.0	36.0	0.4	8.0	ND
731	Raipur	Dharsinwa	Raipur	7.0	636	ND	159.0	92.0	50.0	0.3	270	64	26.0	36.0	0.4	6.0	ND
732	Raipur	Tilda	Raita (Satna ni para)	7.0	624	ND	159.0	71.0	46.0	0.2	220	64	14.0	33.0	0.4	7.0	ND
733	Raipur	Arang	Ranisagar	7.0	576	ND	159.0	71.0	46.0	0.2	200	64	9.6	45.0	0.4	8.0	ND
734	Raipur	Dharsinwa	Ravishankar University	6.8	350	ND	110.0	14.0	70.0	0.6	170	48	12.0	9.0	0.6	6.0	ND
735	Raipur	Dharsiwa	Sakara	7.0	371	ND	195.0	14.0	11.0	0.3	130	40	7.2	28.0	1.6	7.0	ND
736	Raipur	Tilda	Saragaon	7.0	515	ND	244.0	21.0	10.0	0.2	190	64	19.0	29.0	1.8	7.0	ND
737	Raipur	Dharsinwa	Semoriya	7.0	667	ND	232.0	64.0	17.0	0.5	250	56	26.0	33.0	1.5	8.0	ND
738	Raipur	Tilda	Tarpongi	7.0	395	ND	171.0	14.0	19.0	0.6	160	48	9.6	12.0	1.1	16.0	ND
739	Balodabazar	Balodabazar	Arjuni-s	7.0	618	ND	195.0	71.0	34.0	0.2	240	68	17.0	34.0	1.5	15.0	ND
740	Dhamtari	Kurud	Chataud	7.0	511	ND	146.0	50.0	42.0	0.8	190	28	29.0	38.0	1.5	18.0	ND
741	Dhamtari	Sihawa	Murrumsilli	7.0	622	ND	183.0	50.0	52.0	ND	230	64	17.0	31.0	1.9	16.0	ND
742	Mahasamund	Bagbahara	Awardabari	7.0	605	ND	146.0	85.0	47.0	0.2	230	56	22.0	32.0	1.7	15.0	ND
743	Mahasamund	Bagbahara	Keshwa (Chinronda)	7.0	396	ND	159.0	14.0	10.0	1.1	150	40	12.0	18.0	1.1	32.0	ND
744	Mahasamund	Mahasamund	Pithora	7.0	568	ND	195.0	50.0	24.0	1.2	190	36	24.0	37.0	0.5	17.0	ND
745	Mahasamund	Mahasamund	Sirpur	7.0	572	ND	110.0	85.0	50.0	0.2	190	56	12.0	53.0	2.7	14.0	ND
746	Durg	Dhamdha	Ahiwara	7.2	512	ND	138.0	60.4	31.0	0.1	200	66	8.4	18.7	4.1	9.0	ND
747	Durg	Bemetara	Andhiyarkhor	7.3	762	ND	240.0	39.1	125.0	0.2	240	44	31.2	56.5	0.6	15.0	ND
748	Durg	Gunderdehi	Arjunda	7.5	468	ND	150.0	42.6	31.0	0.1	115	36	6.0	35.0	21.7	5.0	ND
749	Durg	Gurur	Armari kalan	7.3	766	ND	150.0	127.8	15.0	0.2	315	90	21.6	18.7	0.2	10.0	ND

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750	Durg	Ahrwar	Arasnara	7.4	375	ND	174.0	14.2	21.0	0.1	165	42	14.4	12.1	21.7	8.0	ND
751	Durg	Bemetara	Ashoga	7.4	377	ND	168.0	24.9	3.0	0.5	155	40	13.2	10.7	0.2	9.0	ND
752	Durg	Sanjari Balod	Bakitola	7.3	804	ND	150.0	113.6	49.0	0.6	245	52	27.6	56.5	0.2	33.0	ND
753	Durg	Dondi Lohara	Batera	7.7	356	ND	60.0	53.3	14.0	0.1	125	30	12.0	19.5	8.7	8.0	ND
754	Durg	Dondi Lohara	Bhalukonha	7.6	369	ND	204.0	10.7	12.0	0.7	135	22	19.2	19.5	1.7	17.0	ND
755	Durg	Dondi Lohara	Bharnabhat	7.3	262	ND	108.0	21.3	4.0	0.5	110	34	6.0	5.9	0.9	12.0	ND
756	Durg	Durg	Bhilai	7.5	605	ND	150.0	60.4	45.0	0.1	190	66	6.0	43.0	1.8	5.0	ND
757	Durg	Durg	Binayakpur	7.6	508	ND	240.0	28.4	18.0	1.8	105	22	12.0	62.6	0.8	15.0	ND
758	Durg	Bemetara	Bitkuli	7.6	395	ND	132.0	32.0	43.0	0.4	130	24	16.8	28.0	3.6	11.0	0.1
759	Durg	Saja	Bortara	7.4	1250	ND	186.0	142.0	202.0	0.4	445	76	61.2	84.8	1.8	9.0	0.2
760	Durg	Bemetara	Dadhi	7.4	687	ND	192.0	39.1	103.0	0.3	195	56	13.2	49.7	2.0	9.0	ND
761	Durg	Patan	Darbarmukhli	7.3	589	ND	168.0	71.0	24.0	0.3	225	44	30.0	31.4	3.9	25.0	ND
762	Durg	Dhamdha	Dargaon	7.3	856	ND	228.0	35.5	156.0	0.7	315	60	39.6	45.0	2.0	8.0	ND
763	Durg	Sanjari Balod	Delli Rajhara	7.4	434	ND	240.0	17.8	5.0	0.3	200	34	27.6	11.3	0.1	8.0	ND
764	Durg	Patan	Dewada	7.5	355	ND	150.0	28.4	8.0	0.4	150	46	8.4	5.0	0.9	18.0	ND
765	Durg	dhamda	Dhaba	7.4	553	ND	198.0	60.4	22.0	0.4	205	48	20.4	27.4	1.2	0.6	ND
766	Durg	Durg	Durg	7.4	543	ND	150.0	60.4	53.0	0.3	155	42	12.0	39.5	3.8	6.0	ND
767	Durg	Patan	Funda	7.4	506	ND	96.0	67.5	34.0	0.2	185	54	12.0	20.0	0.2	6.0	ND
768	Durg	Durg	Ganiyari	7.5	664	ND	108.0	113.6	46.0	0.1	210	52	19.2	29.8	6.4	9.0	ND
769	Durg	Saja	Gatapar	7.9	307	ND	108.0	21.3	16.0	0.5	130	34	10.8	5.1	1.0	8.0	ND
770	Durg	Dhamdha	Girola	7.4	1063	ND	48.0	191.7	15.0	0.4	405	146	9.6	8.3	0.2	10.0	ND
771	Durg	Durg	Janjgiri	7.3	1345	ND	102.0	252.1	100.0	0.5	375	102	28.8	51.8	132.4	18.0	ND
772	Durg	Berla	Jeora	7.3	824	ND	78.0	142.0	44.0	0.1	205	68	8.4	82.7	15.9	10.0	ND
773	Durg	Patan	Kashi	7.3	664	ND	132.0	92.3	34.0	0.5	245	74	14.4	28.0	0.1	14.0	ND
774	Durg	Bemetara	Khati	7.3	1892	ND	120.0	35.5	749.0	0.4	820	304	14.4	68.8	0.1	15.0	ND
775	Durg	Patan	kharra	7.3	1726	ND	114.0	17.8	598.0	0.2	625	152	58.8	103.0	3.7	11.0	0.1
776	Durg	Patan	Khurdmudi	7.5	441	ND	210.0	21.3	15.0	0.6	125	20	18.0	35.7	0.2	8.0	0.2
777	Durg	Dhamdha	Kodiya	7.4	649	ND	84.0	134.9	0.2	0.1	225	60	18.0	27.3	3.3	6.0	ND
778	Durg	Sanjari Balod	Kusumkasa	7.5	425	ND	216.0	17.8	6.0	0.6	140	40	9.6	30.0	0.5	16.0	ND
779	Durg	Dhamdha	Litia	7.4	622	ND	90.0	113.6	22.0	0.5	260	58	15.6	28.5	ND	10.0	ND
780	Durg	Patan	Marra	7.4	787	ND	132.0	159.8	19.0	0.5	195	40	22.8	65.3	0.3	12.0	ND
781	Durg	Patan	Motipur	7.3	657	ND	90.0	95.9	48.0	0.2	250	70	18.0	17.8	0.7	9.0	ND
782	Durg	Dhamda	Murmunda	7.7	893	ND	210.0	124.3	26.0	0.2	210	58	15.6	76.3	55.2	11.0	ND
783	Durg	Dondi Lohara	Nahalda	7.5	540	ND	162.0	74.6	14.0	0.2	150	40	12.0	39.1	9.7	10.0	ND
784	Durg	Bemetara	Nawagarh.1	7.5	1681	ND	114.0	67.5	532.0	0.2	660	176	40.8	91.5	1.7	14.0	ND
785	Durg	Durg	Nagpura	7.4	1610	ND	114.0	358.6	106.0	1.0	600	140	60.0	48.0	32.0	10.7	ND
786	Durg	Saja	Parpoda	7.9	539	ND	240.0	56.8	10.0	0.7	130	16	21.6	68.0	1.2	8.7	ND
787	Durg	Patan	Patan	7.9	575	ND	228.0	32.0	31.2	0.5	150	24	21.6	68.4	1.2	9.6	ND
788	Durg	Dhamdha	Pathariya	7.6	623	ND	132.0	106.5	23.1	0.3	160	34	18.0	55.4	1.5	7.9	ND
789	Durg	Durg	Powara	7.6	756	ND	120.0	142.0	75.2	0.1	170	60	4.8	80.0	35.0	8.4	ND
790	Durg	Dhamdha	Ravelidih	7.5	576	ND	78.0	85.2	9.5	0.2	215	70	9.6	17.0	1.0	7.4	ND
791	Durg	Bemetara	Sagona	7.4	2020	ND	96.0	71.0	795.0	0.4	1025	342	16.8	55.0	1.0	12.4	ND
792	Durg	Dondi Lohara	Sambalpur	8.0	334	ND	180.0	14.2	5.2	0.6	165	54	7.2	3.0	0.3	8.2	ND
793	Durg	Gunderdehi	Sankri	7.6	678	ND	162.0	95.9	22.7	0.7	220	48	24.0	38.0	4.1	9.9	ND
794	Durg	Durg	Selud	7.5	567	ND	102.0	88.8	32.5	0.5	180	56	9.6	30.0	4.0	10.0	ND
795	Durg	Gunderdehi	Sikosa	7.5	853	ND	120.0	131.4	48.0	0.2	250	68	19.2	64.0	1.8	9.3	ND
796	Durg	Patan	Sikola	7.7	600	ND	144.0	81.7	16.0	0.3	240	68	16.8	32.0	1.5	9.4	ND

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797	Durg	Dhamdha	Tarkori	7.3	2440	ND	96.0	504.1	192.0	ND	850	252	48.0	80.0	4.0	11.0	ND
798	Durg	Sanjari Balod	Umaradah	7.6	570	ND	156.0	74.6	49.1	0.9	190	40	21.6	33.0	3.0	12.5	ND
799	Durg	Durg	Utai(Adarshnagar)	7.6	426	ND	84.0	63.9	25.1	0.4	170	48	12.0	20.0	1.0	10.0	ND
800	Durg	Patan	Zhit	7.6	427	ND	150.0	46.2	11.4	0.4	110	36	4.8	45.0	3.1	11.4	ND
801	Balod	Gunderdehi	chichalgondi	7.9	453	ND	198.0	46.2	8.9	0.4	135	34	12.0	13.1	1.8	6.1	ND
802	Balod	Gurur	Chirchari	7.8	312	ND	138.0	28.4	8.6	0.8	135	28	15.6	11.0	10.0	7.3	ND
803	Balod	Durg	Danganiya	7.5	1304	ND	108.0	259.2	101.9	0.1	520	112	57.6	54.0	2.0	11.9	ND
804	Balod	Sanjari Balod	Gujara	7.7	675	ND	198.0	85.2	43.1	0.6	225	44	27.6	70.2	1.5	15.4	ND
805	Balod	Balod	Jatadah	7.8	502	ND	246.0	28.4	14.9	1.0	115	28	10.8	80.4	1.0	23.1	ND
806	Balod	Balod	Jagtara	7.9	412	ND	216.0	10.7	31.5	0.5	105	22	12.0	59.9	2.9	12.4	ND
807	Balod	Gunderdehi	Kalangpur	7.5	720	ND	138.0	113.6	17.8	0.5	190	44	19.2	81.0	5.9	8.4	ND
808	Balod	Doundi- lohara	Mudkhusara	7.4	500	ND	132.0	71.0	20.0	0.5	180	54	10.8	35.8	7.1	10.2	ND
809	Balod	Gurur	Tarri	7.6	1101	ND	156.0	163.3	86.0	0.2	300	64	33.6	91.0	48.0	18.6	ND
810	Bemetara	Bemetara	Baba Mohtara	7.7	696	ND	156.0	35.5	149.0	0.3	260	88	9.6	42.0	5.1	9.9	ND
811	Bemetara	Bemetara	Bahera	7.5	872	ND	162.0	39.1	122.0	0.5	340	74	37.2	42.0	12.0	11.5	ND
812	Bemetara	Bemetara	Baiji	7.7	346	ND	144.0	24.9	16.0	0.5	130	30	13.2	18.0	1.8	5.3	ND
813	Bemetara	Dhamdha	Barhapur	7.7	284	ND	90.0	42.6	10.0	ND	115	34	7.2	11.0	1.5	4.1	ND
814	Bemetara	Bemetara	Bhurki	7.5	1919	ND	156.0	159.8	548.0	0.6	710	140	86.4	140.0	1.5	9.1	ND
815	Bemetara	Bela	Bijabhat	7.5	1038	ND	180.0	124.3	144.0	0.1	260	70	20.4	90.0	110.0	7.8	ND
816	Bemetara	Bemetara	Chilphi	7.5	2160	ND	156.0	188.2	602.0	0.3	850	206	80.4	148.0	18.3	12.6	ND
817	Bemetara	Bemetara	Dunra	7.6	970	ND	180.0	24.9	268.0	0.4	325	62	40.8	78.1	3.1	8.7	ND
818	Bemetara	Bemetara	Jhalam	7.4	2130	ND	120.0	71.0	831.0	0.4	1100	350	54.0	9.5	5.8	11.3	ND
819	Bemetara	Saja	Jata	7.8	473	ND	186.0	14.2	32.0	0.9	215	44	25.2	9.3	11.8	8.2	ND
820	Bemetara	Bemetara	Khilora	7.5	1401	ND	90.0	32.0	518.0	0.8	550	146	32.4	91.7	6.9	8.9	ND
821	Bemetara	Bemetara	Kusmi	7.9	348	ND	150.0	24.9	25.0	0.5	160	34	18.0	20.1	4.1	8.1	ND
822	Bemetara	saja	Mouha bhata	7.8	437	ND	216.0	21.3	24.0	0.3	180	32	24.0	28.3	4.5	9.5	ND
823	Bemetara	Saja	Ninwa	7.7	515	ND	162.0	17.8	95.0	0.5	150	48	7.2	46.0	2.2	7.5	ND
824	Bemetara	Berla	Parpoda	7.6	560	ND	216.0	32.0	21.0	0.5	245	50	28.8	20.4	4.3	8.7	ND
825	Bemetara	Bemetara	Pendri	7.4	342	ND	144.0	32.0	13.0	0.5	95	24	8.4	32.1	5.1	6.7	ND
826	Bemetara	Bemetara	Fari	7.8	400	ND	156.0	32.0	13.0	0.2	200	44	21.6	8.9	1.1	10.5	ND
827	Bemetara	Saja	Rakhi (loba)	7.6	464	ND	162.0	39.1	11.0	0.3	225	50	24.0	8.5	0.9	10.6	ND
828	Bemetara	Berla	Sondh	7.8	551	ND	180.0	46.2	30.0	1.9	215	50	21.6	19.4	0.2	8.7	ND
829	Bemetara	Saja	Suwartala	7.5	740	ND	114.0	60.4	117.0	0.2	305	72	30.0	28.5	0.9	18.4	ND
830	Bemetara	Berla	Rampur (Bhand)	7.6	1220	ND	222.0	103.0	214.0	0.6	370	72	45.6	116.1	2.4	9.9	ND
831	Kawardha	Bodla	Banjari	7.8	851	ND	432.0	39.1	21.0	0.6	360	30	68.4	30.7	1.9	15.1	ND
832	Kawardha	Sahaspur lohara	BijaBairangi	7.7	565	ND	228.0	49.7	15.0	0.1	180	32	24.0	53.0	0.9	13.8	ND
833	Kawardha	Sahaspur lohara	Biroda	7.8	276	ND	144.0	17.8	6.0	0.7	90	22	8.4	25.1	1.2	12.6	ND
834	Kawardha	Kawardha	Bodla	7.6	393	ND	156.0	28.4	16.0	0.3	160	36	16.8	17.5	0.9	12.9	ND
835	Kawardha	Bolda	Chilpi	7.8	323	ND	210.0	7.1	12.0	0.1	145	20	22.8	21.0	1.1	30.1	ND
836	Kawardha	Kawardha	Danganiya	7.7	694	ND	234.0	60.4	19.0	0.4	240	34	37.2	56.6	0.9	11.0	ND
837	Kawardha	Pandariya	Kapada	8.0	475	ND	216.0	24.9	13.0	0.4	145	20	22.8	45.7	0.9	11.2	ND
838	Kawardha	Kawardha	Kawardha	7.8	778	ND	234.0	103.0	29.0	0.4	145	20	22.8	94.1	12.5	15.3	ND
839	Kawardha	Kawardha	Kharoda Kalan	7.7	460	ND	216.0	14.2	34.0	0.6	160	34	18.0	39.1	1.1	14.1	ND
840	Kawardha	Pandariya	Kishungarh	7.7	766	ND	222.0	99.4	32.0	0.9	285	32	49.2	41.2	1.6	14.8	ND
841	Kawardha	Pandariya	Kui	7.7	399	ND	180.0	28.4	12.0	0.4	130	28	14.4	40.0	1.5	13.9	ND
842	Kawardha	Kawardha	Mudiyapara	7.6	600	ND	90.0	78.1	43.6	ND	245	60	22.8	18.5	1.7	21.1	ND
843	Kawardha	Pandariya	Munmuna	8.0	873	ND	240.0	88.8	62.0	0.7	135	20	20.4	116.5	11.5	11.4	ND

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844	Kawardha	Kawardha	Rajnanwagaon	7.7	400	ND	168.0	32.0	15.0	0.2	130	26	15.6	30.1	0.3	13.5	ND
845	Kawardha	Kawardha	Rengakharkhurd	7.7	1240	ND	216.0	216.6	95.0	0.5	320	40	52.8	123.0	16.5	12.8	ND
846	Kawardha	Sahaspur lohara	Sahaspur lohara.1	7.8	365	ND	180.0	32.0	15.0	ND	115	22	14.4	41.1	0.4	12.1	ND
847	Kawardha	Sahaspur lohara	Uriakhurd	7.6	738	ND	168.0	88.8	46.0	0.1	260	48	33.6	45.1	1.6	13.4	ND
848	Kabirdham	Bodla	Mahrajpur	7.6	495	ND	156.0	60.4	23.0	0.6	175	44	15.6	35.0	0.1	11.0	ND
849	Rajnandgaon	Rajnandgaon	Anjora	7.5	824	ND	114.0	131.4	42.0	ND	275	78	19.2	43.4	7.0	9.7	ND
850	Rajnandgaon	Khairagarh	Badaitola	7.9	450	ND	132.0	56.8	17.4	0.5	100	34	3.6	58.5	1.1	10.5	ND
851	Rajnandgaon	Rajnandgaon	Baghera	7.7	877	ND	72.0	195.3	53.0	0.1	275	92	10.8	56.4	2.8	13.7	ND
852	Rajnandgaon	Khairagarh	Baigatola	7.7	679	ND	204.0	88.8	24.0	0.1	190	60	9.6	50.0	40.1	14.2	ND
853	Rajnandgaon	Ambagarh Chowki	Bandhabazar	7.6	492	ND	114.0	74.6	33.0	0.2	180	46	15.6	24.9	1.5	9.8	ND
854	Rajnandgaon	Rajnandgaon	Bhaistara (Bhatapara)	7.6	390	ND	138.0	46.2	16.0	1.0	160	46	10.8	11.9	4.8	40.3	ND
855	Rajnandgaon	Dongargarh	Bharritola	7.7	335	ND	168.0	17.8	8.4	0.2	100	24	9.6	40.0	0.1	13.8	ND
856	Rajnandgaon	Chhuikadhan	Bhorampur	7.5	1241	ND	156.0	205.9	68.0	ND	175	34	21.6	129.0	40.0	11.6	ND
857	Rajnandgaon	Rajnandgaon	Bori	7.6	901	ND	168.0	145.6	39.0	0.2	335	78	33.6	40.5	12.0	27.6	ND
858	Rajnandgaon	Chhuriya	Chirchari	7.6	548	ND	138.0	81.7	34.0	0.3	210	48	21.6	35.0	16.0	14.2	ND
859	Rajnandgaon	Chuihadan	Chuihadan	7.6	647	ND	162.0	67.5	62.0	0.7	220	48	24.0	46.5	0.4	11.6	ND
860	Rajnandgaon	Rajnandgaon	Dewada	7.6	621	ND	246.0	53.3	43.0	0.6	160	44	12.0	48.5	36.3	12.3	ND
861	Rajnandgaon	Khairagarh	Dhaneli	7.8	1101	ND	336.0	142.0	46.0	0.7	350	86	32.4	58.0	42.0	23.1	ND
862	Rajnandgaon	Dongargarh	Dhara	7.4	590	ND	60.0	78.1	20.0	0.7	170	56	7.2	23.0	39.0	35.6	ND
863	Rajnandgaon	Dongargaon	Dongargaon.1	7.6	734	ND	126.0	99.4	62.0	0.4	215	54	19.2	54.6	10.0	22.5	ND
864	Rajnandgaon	Dongargarh	Dongargarh	7.5	541	ND	192.0	53.3	17.0	0.4	195	44	20.4	37.0	0.8	2.6	ND
865	Rajnandgaon	Chhuikadhan	Gandaipandaria	7.5	490	ND	126.0	46.2	25.8	ND	180	44	16.8	26.0	0.6	20.1	ND
866	Rajnandgaon	Dongargarh	Ghortalab	7.5	425	ND	126.0	39.1	15.1	ND	180	58	8.4	7.6	0.6	8.9	ND
867	Rajnandgaon	Rajnandgaon	Gidhwah	7.7	1152	ND	132.0	202.4	59.0	0.7	350	78	37.2	87.1	0.5	20.5	ND
868	Rajnandgaon	Dongargarh	Govindpur	7.7	320	ND	108.0	28.4	11.0	ND	120	40	4.8	17.4	0.3	6.5	ND
869	Rajnandgaon	Khairagarh	Jalbanda	7.6	1252	ND	120.0	234.3	59.0	0.2	370	86	37.2	97.9	1.9	9.7	ND
870	Rajnandgaon	Rajnandgaon	Joratarai	7.7	355	ND	96.0	35.5	17.4	0.2	110	44	ND	17.1	0.4	22.8	ND
871	Rajnandgaon	Dongargarh	kalkosa	7.8	403	ND	180.0	32.0	8.3	0.5	150	34	15.6	23.1	1.4	13.8	ND
872	Rajnandgaon	Dongargarh	Kalyanpur	7.8	345	ND	192.0	10.7	9.0	0.1	125	22	16.8	25.1	0.9	11.5	ND
873	Rajnandgaon	Khairagarh	Khairagarh	7.7	1203	ND	102.0	174.0	77.3	0.1	410	94	42.0	57.3	2.7	19.2	ND
874	Rajnandgaon	Dongargaon	Kokpur I	7.7	831	ND	186.0	88.8	46.9	0.5	260	62	25.2	55.9	1.1	22.0	ND
875	Rajnandgaon	Dongargaon	Kumarda.1	7.7	190	ND	66.0	14.2	10.3	0.1	65	18	4.8	11.8	0.3	20.3	ND
876	Rajnandgaon	Dongargarh	Lal bhadurnagar	7.7	807	ND	120.0	81.7	18.7	ND	265	70	21.6	25.8	25.9	7.1	ND
877	Rajnandgaon	Khairagarh	Madrakuhi	8.0	535	ND	312.0	7.1	6.9	0.4	90	12	14.4	91.0	2.2	8.4	ND
878	Rajnandgaon	Rajnandgaon	Maladabri	8.0	300	ND	132.0	14.2	1.9	0.3	105	26	9.6	19.0	0.4	23.5	ND
879	Rajnandgaon	Dongargaon	Mohar/Mohad	7.7	608	ND	150.0	88.8	9.6	0.3	265	46	36.0	8.8	1.1	3.7	ND
880	Rajnandgaon	Chhuikadhan	Mohgaon	7.9	844	ND	282.0	67.5	45.1	0.7	95	28	6.0	99.2	2.9	10.1	ND
881	Rajnandgaon	Rajnandgaon	Murhipar	7.9	324	ND	126.0	32.0	3.7	0.2	120	24	14.4	18.1	0.7	9.8	ND
882	Rajnandgaon	Chhuikadhan	Narmada	7.7	1126	ND	90.0	191.7	47.1	0.4	305	48	44.4	82.0	2.4	10.1	ND
883	Rajnandgaon	Rajnandgaon	Nawagaon	7.9	488	ND	222.0	21.3	16.4	0.1	160	34	18.0	30.0	2.0	9.7	ND
884	Rajnandgaon	Rajnandgaon	Patewa	8.1	604	ND	384.0	14.2	10.5	0.6	155	32	18.0	81.2	0.6	18.4	ND
885	Rajnandgaon	Dongargarh	Ramatola	7.9	842	ND	300.0	85.2	18.6	1.1	45	10	4.8	165.0	2.0	6.4	ND
886	Rajnandgaon	Khairagarh	Rangkathera	7.6	805	ND	180.0	92.3	56.6	0.9	130	28	14.4	101.0	0.6	14.5	ND
887	Rajnandgaon	Dongargarh	Ranitalab	7.7	1020	ND	90.0	159.8	34.6	0.4	300	88	19.2	58.0	3.1	9.7	ND
888	Rajnandgaon	Rajnandgaon	Ranitarai	8.0	1610	ND	288.0	230.8	89.0	0.5	265	28	46.8	200.0	4.5	10.5	ND
889	Rajnandgaon	Rajnandgaon	Reevadih	7.9	1366	ND	168.0	195.3	76.4	0.5	305	48	44.4	120.0	0.7	18.5	ND
890	Rajnandgaon	Dongargarh	Reevagaon	7.7	1300	ND	84.0	177.5	69.9	1.5	450	114	39.6	43.0	0.9	9.6	ND

Sl. No	District	Block	Village	PH	EC µS	CO3 mg/l	HCO3 mg/l	Cl mg/l	SO4 mg/l	F mg/l	TH mg/l	Ca mg/l	Mg mg/l	Na mg/l	K mg/l	Si mg/l	Po4 mg/l
891	Rajnandgaon	Rajnandgaon	Revagahan	7.9	240	ND	114.0	14.2	8.1	0.9	65	20	3.6	23.0	0.3	26.6	ND
892	Rajnandgaon	Chhuriya	SadakBanjari	8.1	930	ND	486.0	32.0	34.6	0.7	165	42	14.4	115.0	35.2	10.7	ND
893	Rajnandgaon	Khairagarh	Salgapat	8.1	1201	ND	672.0	10.7	12.5	0.8	125	12	22.8	198.0	1.0	19.4	ND
894	Rajnandgaon	Khairagarh	Salhebara	7.8	419	ND	120.0	42.6	3.4	0.1	155	48	8.4	8.9	0.8	8.5	ND
895	Rajnandgaon	Rajnandgaon	Saloni	7.6	1270	ND	156.0	205.9	75.3	0.4	400	102	34.8	78.0	2.8	10.4	ND
896	Rajnandgaon	Rajnandgaon	Sundara	7.7	980	ND	144.0	216.6	6.3	0.4	255	58	26.4	74.8	1.1	8.8	ND
897	Rajnandgaon	Rajnandgaon	Talai	8.2	456	ND	186.0	39.1	8.8	0.6	205	34	28.8	6.5	0.5	10.2	ND
898	Rajnandgaon	Dongargarh	Tappa	7.9	1157	ND	210.0	142.0	51.0	0.4	215	36	30.0	125.0	1.7	9.8	ND
899	Rajnandgaon	Khairagarh	Talagaon	7.8	633	ND	186.0	60.4	33.0	0.2	210	34	30.0	35.0	2.3	8.7	ND
900	Rajnandgaon	Rajnandgaon	Uperwah	7.9	432	ND	210.0	17.8	18.5	1.3	110	28	9.6	47.0	0.3	15.7	ND
901	Rajnandgaon	Dongargarh	Uraidabritola	7.7	1087	ND	138.0	60.4	270.0	0.1	375	72	46.8	68.9	2.5	9.9	ND
902	Bemetara	Saja	Barga	7.7	1038	ND	180.0	21.3	280.0	0.1	410	82	49.2	47.5	1.7	14.3	ND
903	Bemetara	Bemetara	Birsinghi	7.7	900	ND	72.0	131.4	68.2	0.1	280	72	24.0	47.1	3.9	10.8	ND
904	Bemetara	Bemetara	Dadhi	7.7	1049	ND	246.0	60.4	180.0	0.4	425	96	44.4	44.5	3.3	12.1	ND
905	Bemetara	Saja	Khurusbod	7.5	432	ND	240.0	14.2	9.1	0.1	175	50	12.0	24.9	0.1	22.9	ND
906	Bemetara	Saja	Muswadih	7.6	313	ND	192.0	10.7	4.0	ND	135	40	8.4	13.0	0.5	10.2	ND
907	Bemetara	Saja	Nawagaon	7.4	449	ND	180.0	53.3	5.4	0.1	105	26	9.6	49.8	2.5	24.1	ND
908	Bemetara	Bemetara	Ninawa	7.6	594	ND	196.7	24.8	29.2	0.4	145	32	15.6	34.2	6.0	6.4	ND
909	Bemetara	Saja	Piparia	7.4	264	ND	149.7	10.6	4.2	0.1	115	24	13.2	5.5	1.0	6.6	ND
910	Bemetara	Saja	Rano	7.4	692	ND	150.0	32.0	82.1	0.2	240	62	20.4	30.4	5.0	8.3	ND
911	Bemetara	Bemetara	Sahaspur	7.3	2040	ND	120.0	18.0	879.0	1.1	990	292	62.4	41.5	2.2	8.1	ND
912	Bemetara	Saja	Tipni	7.3	2040	ND	114.0	17.8	824.0	0.1	960	304	48.0	43.6	2.3	8.0	ND
913	Durg	Bemetara	Bemetara-d	7.5	607	ND	300.0	17.5	695.0	ND	945	298	48.0	41.3	1.4	5.6	ND
914	Durg	Dhamda	Biroda	7.4	482	ND	180.0	42.6	21.4	0.2	145	32	15.6	46.3	0.9	10.7	ND
915	Durg	Patan	Charoda	7.4	598	ND	192.0	53.3	44.2	ND	180	44	16.8	42.4	4.6	6.7	ND
916	Durg	Dhamdha	Dhamda-D	7.6	409	ND	210.0	24.7	1.0	0.3	175	48	13.2	25.3	6.8	18.8	ND
917	Durg	Doundi	Dondi	7.7	269	ND	156.0	10.7	1.1	ND	140	26	18.0	4.4	0.3	4.9	ND
918	Durg	Dhamda	Ghota	7.5	374	ND	156.0	35.5	7.8	ND	125	34	9.6	26.5	0.8	7.8	ND
919	Durg	Sanjari Balod	Khairwahi D	7.6	307	ND	186.1	17.7	10.6	ND	125	38	7.2	27.7	0.5	8.8	ND
920	Durg	Dondi Lohara	Koba(Pz-I)	8.0	1085	ND	110.0	163.0	79.2	0.1	290	100	9.6	107.0	0.9	9.2	ND
921	Durg	Patan	Kumhari	8.0	1541	ND	128.0	32.0	429.0	0.3	535	165	34.8	125.0	3.2	7.2	ND
922	Durg	Dhamda	Mohrenga	8.2	343	ND	134.0	32.0	27.0	0.3	95	36	1.2	29.5	0.9	6.3	ND
923	Durg	Sanjari Balod	Padkibhat	8.2	471	ND	110.0	46.0	39.9	0.3	165	44	13.2	31.8	1.4	5.5	ND
924	Durg	Patan	Pachpedi	8.0	420	ND	160.0	39.0	17.4	0.2	110	38	3.6	26.4	4.4	7.1	ND
925	Durg	Gurur	Perpar	8.3	904	0.3	268.0	11.0	29.9	0.5	180	38	20.4	12.3	1.9	5.0	ND
926	Durg	Berla	Ranka	8.3	374	0.3	140.0	31.9	2.5	0.2	145	40	10.8	11.1	1.0	6.0	ND
927	Durg	Patan	Tarra	8.4	217	ND	85.2	11.0	15.6	0.3	90	24	7.2	12.1	3.2	8.1	ND
928	Rajnandgaon	Chhuriya	Ambagarh chowki	8.3	273	0.3	201.0	11.0	3.5	0.5	120	42	3.6	5.5	0.6	9.5	ND
929	Rajnandgaon	Rajnandgaon	Bhatgaon	8.1	1345	ND	176.9	220.0	84.3	0.7	415	112	30.0	72.0	17.5	12.0	ND
930	Rajnandgaon	Rajnandgaon	Padumtara	8.4	1292	ND	152.5	106.5	37.1	0.3	110	60	12.0	195.0	25.5	7.4	ND
931	Rajnandgaon	Rajnandgaon	Singhola	8.2	552	ND	268.0	11.0	6.3	0.3	115	50	14.0	25.6	0.8	8.4	ND
932	Kawardha	Kawardha	Bharamdeo-d	8.3	512	ND	140.0	56.8	44.0	0.2	175	110	14.0	42.8	0.8	11.1	ND
933	Kawardha	Kawardha	Kawardha	8.3	263	ND	85.4	42.6	17.5	0.3	190	95	23.0	35.5	0.8	9.2	ND
934	Kawardha	Pandaria	Pandaria	8.4	285	ND	210.3	27.1	2.9	ND	120	55	16.0	14.5	1.8	7.9	ND
935	Kawardha	Bodla	Saroda dadar	8.2	335	ND	176.9	7.1	4.9	0.2	130	40	21.6	27.1	0.8	7.7	ND

ND= Not Detectable