



केन्द्रीय भूमिजल बोर्ड

जल शक्ति मंत्रालय, जल संसाधन, नदी विकास और गंगा संरक्षण विभाग
भारत सरकार

Central Ground Water Board

Ministry of Jal Shakti,
Department of Water Resources, River Development
and Ganga Rejuvenation
Government of India

Report on

AQUIFER MAPPING AND MANAGEMENT PLAN

Kundgol Taluk, Dharwad District, Karnataka

दक्षिण पश्चिमी क्षेत्र, बेंगलुरु
South Western Region, Bengaluru

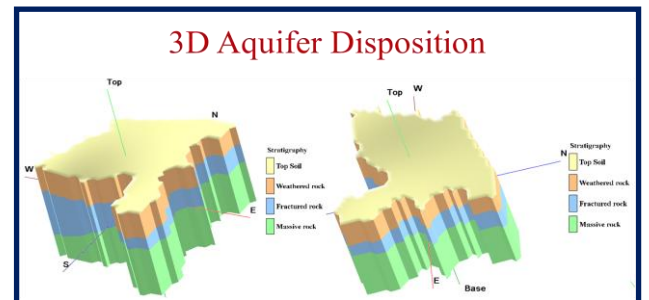
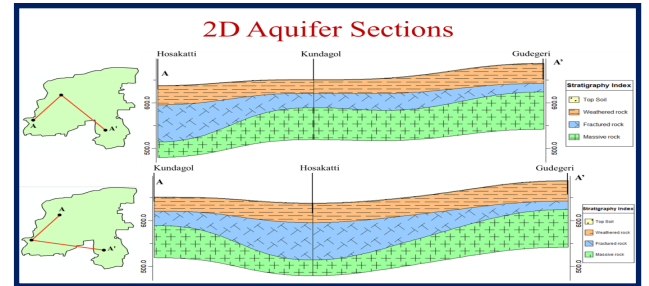
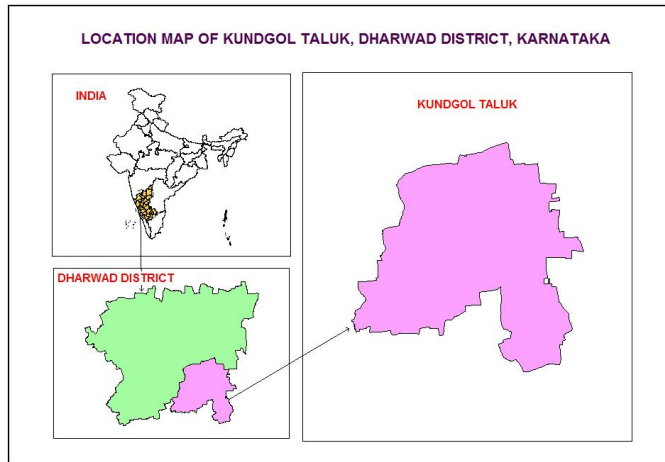
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AQUIFER MAPS AND MANAGEMENT PLAN, KUNDGOL TALUK, DHARWAD DISTRICT, KARNATAKA STATE

(AAP: – 2020-2021)



By

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Contents

1 SALIENT INFORMATION	1
1.1 Aquifer Mapping Study area.....	1
1.2 Population	2
1.3 Rainfall.....	2
1.4 Agriculture & Irrigation.....	2
1.5 Geomorphology, Physiography & Drainage.....	3
1.6 Soil	4
1.7 Ground water resource availability and extraction	5
1.8 Existing and future water demands (as per GEC-2017)	5
1.9 Water level behavior	6
2 AQUIFER DISPOSITION.....	7
2.1 Aquifer types.....	7
3 Ground water resource, extraction, contamination and other issues	11
3.1 Aquifer wise resource availability and extraction	11
3.2 Chemical quality of ground water and contamination	12
4 GROUND WATER RESOURCE ENHANCEMENT.....	14
4.1 Resource Enhancement by Supply Side Interventions	14
4.1.1 Regulation and Control.....	16
4.1.2 Ground water quality problem	16
4.1.3 Management/interventions on water quality front.....	17
4.2 Demand Side Interventions.....	18
4.2.1 Management/interventions on water quantity front.....	18
4.2.2 Other interventions proposed.....	19
4.3 Ground Water Development Plan.....	20
5 SUMMARY	20

AQUIFER MAPS AND MANAGEMENT PLAN, KUNDGOL TALUK, DHARWAD DISTRICT, KARNATAKA STATE

1 SALIENT INFORMATION

Name of the Taluk: **Kundgol**

District: Dharwad

State: Karnataka

Area:716 sq.km.

Population: 165568

Annual Normal Rainfall: 698 mm

1.1 Aquifer Mapping Study area

Aquifer mapping studies have been carried out in Kundgol Taluk, Dharwad district of Karnataka, covering an area of 716 sq. kms under National Aquifer Mapping Project (NAQUIM). Kundgol Taluk of Dharwad district is located between North Latitudes $15^{\circ} 02' 58.9''$ and $15^{\circ} 21' .1.8''$ and East Longitudes between $75^{\circ} 08' 2.49''$ to $75^{\circ} 26' 56.4''$ and is falling in Survey of India Toposheets Nos 48 M/3, 48 M/4, 48 M/7 and 48 M/8. The study area is bounded on the North and west by Hubballi Taluk of Dharwad district, east by Shirhatti Taluk of Haveri district and South by Shiggaon and Savanur Taluks of Haveri district. Location map of Kundgol Taluk of Dharwad district is presented in **Figure 1**. Kundgol is Taluk head quarter and there are 2 hoblies and 26 Gram panchayats. There are total 58 villages in this Taluk of which 57 are habited villages and 1 village is uninhabited.

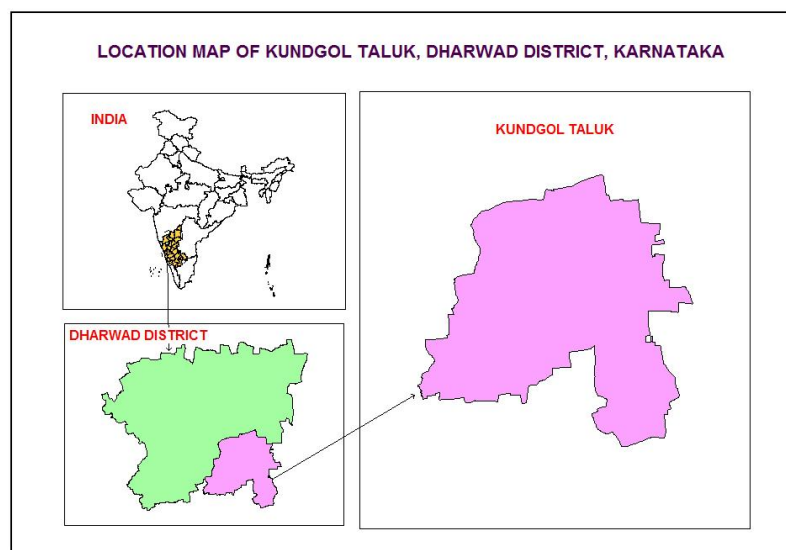


Figure-1: Location map

1.2 Population

According to 2011 census, the population in Kundgol Taluk is 165568. Out of which 84806 are male while 80762 are female. The average sex ratio of the Taluk is 952. The Kundgol Taluk has an overall population density of 256 persons per sq.km. The decadal variation in population from 2001-2011 is 5.1 % in the Taluk.

1.3 Rainfall

Kundgol Taluk has semi-arid climate. The area falls under Northern transitional agro-climatic zone of Karnataka state. November to January are the coolest months and February to May are the hottest months. The maximum temperature is 40.2°C. The monsoon period is from June to October. The normal annual rainfall in Kundgol Taluk for the period 1951 to 2000 is 698 mm. Seasonal rainfall pattern indicates that, major amount of (347 mm) rainfall was recorded during South-West Monsoon seasons which contributes about 58 % of the annual normal rainfall followed by North-East Monsoon season (141 mm) constituting 24 % and remaining (67 mm) 18 % in Pre-Monsoon season (**Table 1**).

Computations were carried out for the 30-year block of 1981-2010, the mean monthly rainfall at Kundgol Taluk is ranging between 3 mm during February to 103 mm during October. The coefficient of variation percent for pre-monsoon, monsoon and post-monsoon season is 71, 37 & 67 percent respectively. Annual CV at this station works out to be 32 percent (**Table 1**). The actual rainfall for the period from 2007 to 2017 is given in **Table 2**.

Table 1: Statistical Analysis of Rainfall Data of Kundgol Taluk, Dharwad district (1971 to 2010)

	JAN	FEB	MAR	APR	MAY	PRE	JUN	JUL	AUG	SEP	SW	OCT	NOV	DEC	NE	Annual
NRM	0	3	9	39	55	107	89	83	81	94	347	103	35	3	141	595
ST.DEV	2	15	22	42	43	76	53	53	41	77	130	84	47	7	94	189
CV%	401	468	234	108	77	71	60	63	50	82	37	81	135	228	67	32

Table 2: The actual rainfall for the period from 2007 to 2017

Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Rainfall	576	627	738	767	579	341	511	683	365	317	516

1.4 Agriculture & Irrigation

Agriculture is the main occupation in Kundgol Taluk. Major Kharif crops are Maize, Bajra, Jowar, Tur, cotton and Vegetables. Main crops of Rabi season are Maize, Bajra, Jowar, wheat, green gram, groundnut, Bengal gram and Sunflower (**Table3**). Water intensive crops like sugarcane and paddy are grown only in negligible area. Jowar is grown in 14% and oil seeds in 19% of total crop area of Taluk. Cotton account 22% of total crop area.

Table 3: Cropping pattern in Kundgol Taluk 2017-2018 (Area in Ha)

Wheat	Maize	Paddy	Jowar	Other cereals	Pulses	Fruits	Vegetables	Oil seeds	Sugarcane	Cotton
6689	1940	125	11376	141	15707	143	435	15460	1	17808

It is observed that net sown area accounts 90% and area sown more than once is 37% of total geographical area in Kundgol Taluk (**Table 4**). Area not available for cultivation and Fallow land cover 3.7% & 5.5% of total geographical area respectively. Irrigation is only from bore wells and is only 203 Hectare. (**Table 5**).

Table 4: Details of land use in Kundgol Taluk 2017-2018 (Ha)

Total Geographical Area	Area under Forest	Area not available for cultivation	Other uncultivable land	Fallow land	Net sown area	Area sown more than once	Total area sown
64859	Nil	2409	603	3588	58259	24083	82342

Source: District at a Glance 2017-18, Govt. of Karnataka

Table 5: Irrigation details in Kundgol Taluk (Ha)

Source of Irrigation	No of structures	Net area irrigated (Ha.)	% of area
Canals		Nil	0
Tanks	14	Nil	0
Wells	106	Nil	0
Bore wells	506	203	100 %
Lift Irrigation		Nil	0

Source: District at a Glance 2017-18, Govt. of Karnataka

1.5 Geomorphology, Physiography & Drainage

The area in general is a peneplain with alternating ridges and valleys in the western and extreme southern parts. The general slope of the area is towards north- northwest direction. The maximum elevation is about 722 m above msl to the south west of Mattikatti in the south western part of the area about 682 m above msl near Kalas in the south east of the area. The minimum elevation is about 600 m above msl around Yerraguppa in the north of the area (**Figure.2**)

About 90% of the area forms part of Malaprabha river sub basin. The western part of the area is drained by Bennihalla, which flows from SW -NE direction. The central part of the area is drained by Kogdihalli, which flows from south to north. The Gugihalla drains the central part of the area and flows from southeast to northwest part of the area. The northeastern part of the area is drained by an

unnamed nala, which flows in the SE- NW direction. All these nalas and their tributaries form dendritic drainage pattern. The Drainage pattern is dendritic to sub-dendritic (**Figure 3**).

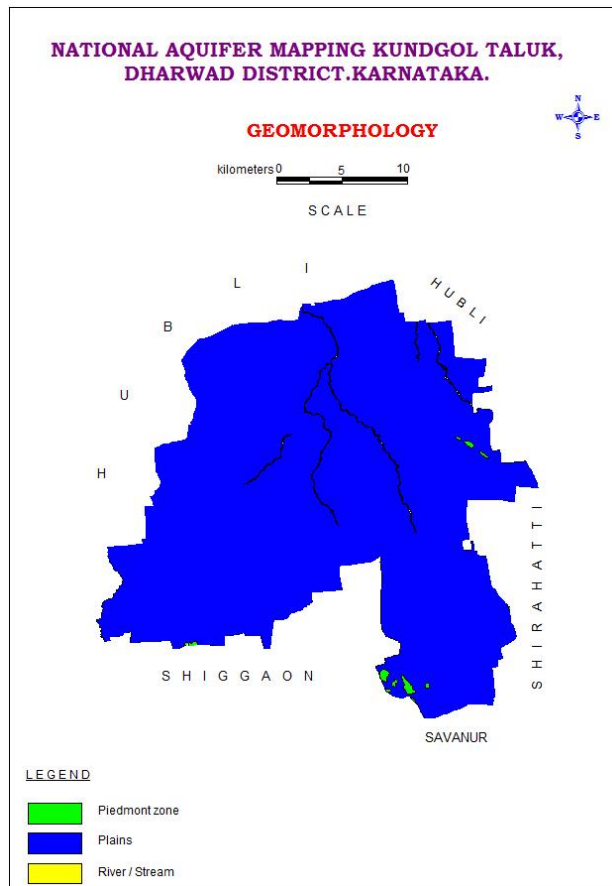


Figure-2: Goemorphology map

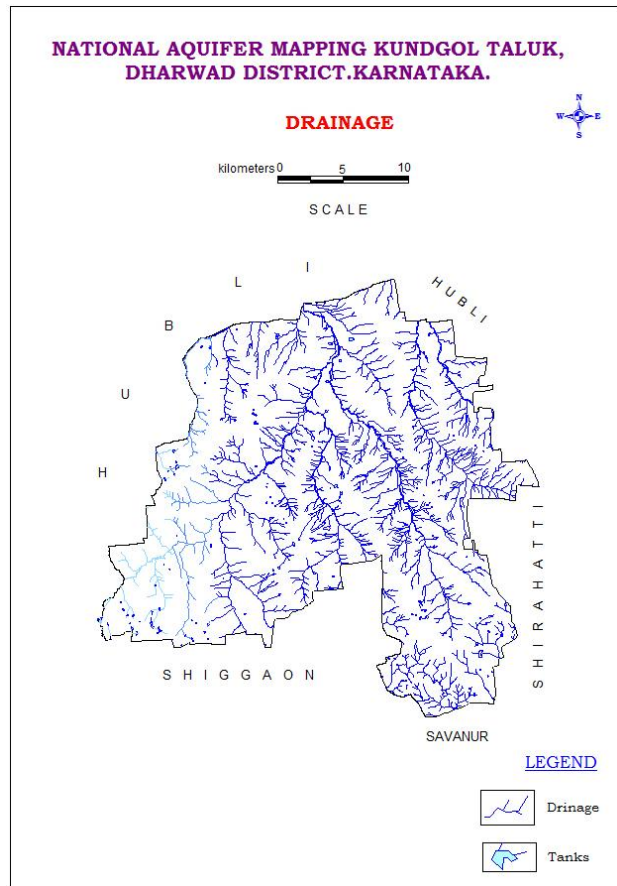


Figure-3: Drainage map

1.6 Soil

The Major part of the Taluk i.e. about 90% of the area is covered by Black cotton soil. These soils are almost natural in nature with pH values between 6 and 8. Generally the black cotton soil is found at lower elevation. The red soil is found in the southern part of the area around Hosamatti, Ramankoppa, Vittapura, Taralghatta, Nallagud, Jiglur, Mattigatti, Mandiganal, Sultanpur, Kalas, Rattigeri, Gaudageri etc. It comprises about 10% of the total area of the Taluk. The red soil has a normal pH value and highly permeable unlike black cotton soil which is mostly impervious. The soil types of the area are shown in **Figure. 4**. The land use map is shown in **Figure.5**. Major part of the taluk is covered by agricultural land.

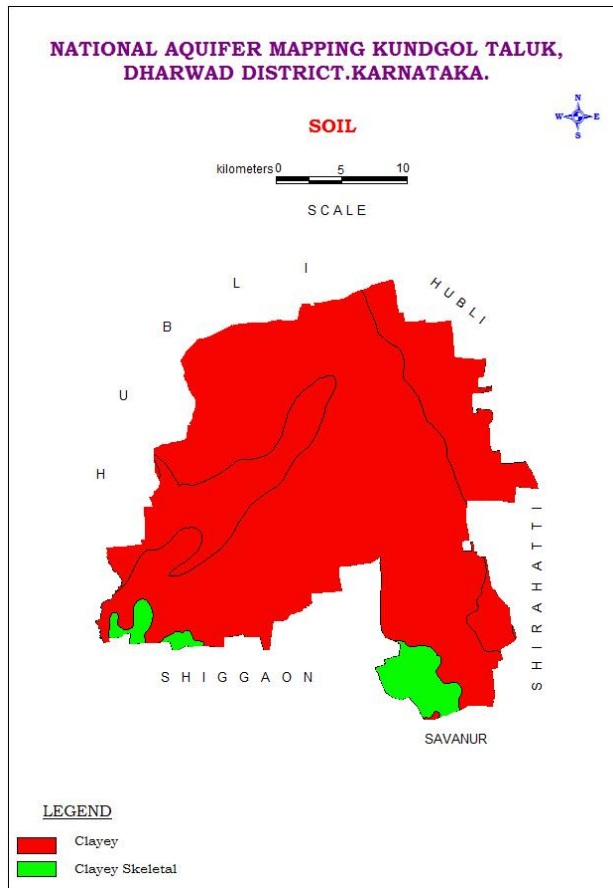


Figure-4: Soil map

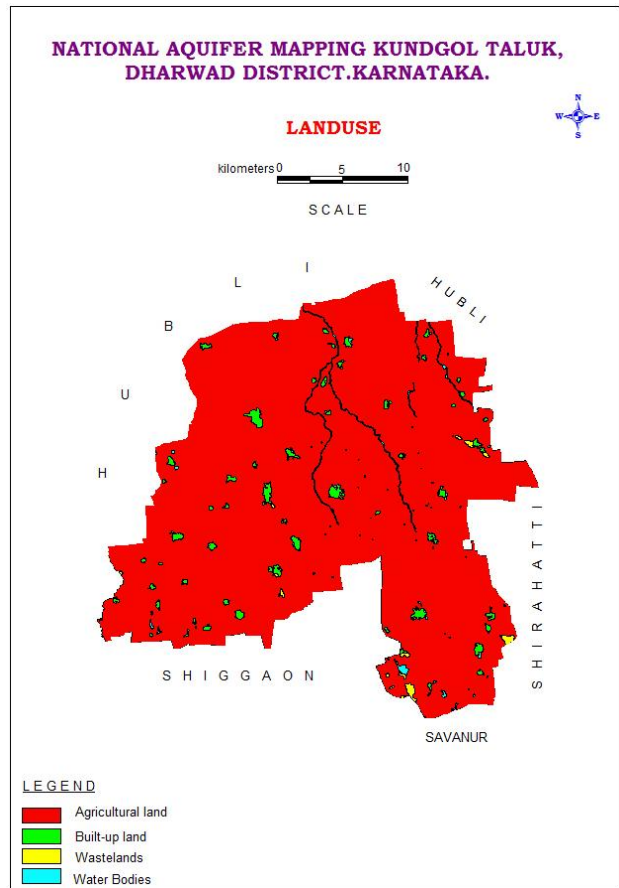


Figure-5: Land use pattern

1.7 Ground water resource availability and extraction

Aquifer wise total ground water resources up to 200 m depth is given in **Table.6.**

Table.6: Total Ground Water Resources (2017) (Ham)

Annual replenishable GW resources	Fresh In-storage GW resources		Total availability of fresh GW resources
	Phreatic	Fractured (Down to 200 m)	
4158	7305	1563	Dynamic + phreatic in-storage + fractured
			13026

1.8 Existing and future water demands (as per GEC-2017)

- Net ground water availability for future irrigation development: 21.20 MCM
- Domestic (Industrial sector) demand for next 25 years : 2.03 MCM

1.9 Water level behavior

The depth to water level of Aquifer-1 (phreatic or shallow representing weathered zone) and Aquifer-2 (representing fractured zone) for pre-monsoon and post-monsoon periods are furnished below.

(a) Depth to water level

Aquifer - I

- Pre-monsoon: 9.45 to 26.50 m bgl (Figure 6)
- Post-monsoon: 0.18 to 19.21 m bgl (Figure 7)

(b) Water level fluctuation

Aquifer-I (Figure 8)

- Seasonal Fluctuation: Rise ranges 4 to 8 m
- Fall ranges Nil

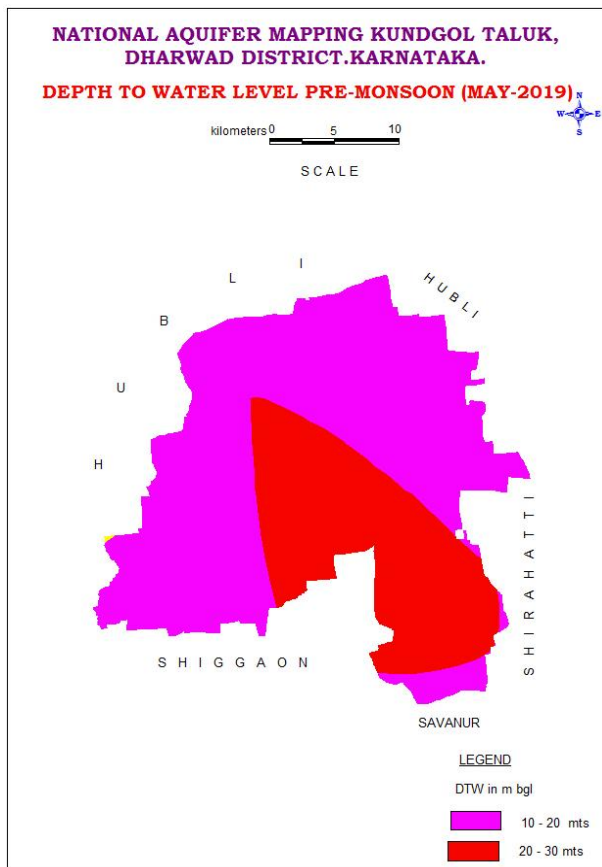


Figure 6: Pre-monsoon DTW (Aq-I)

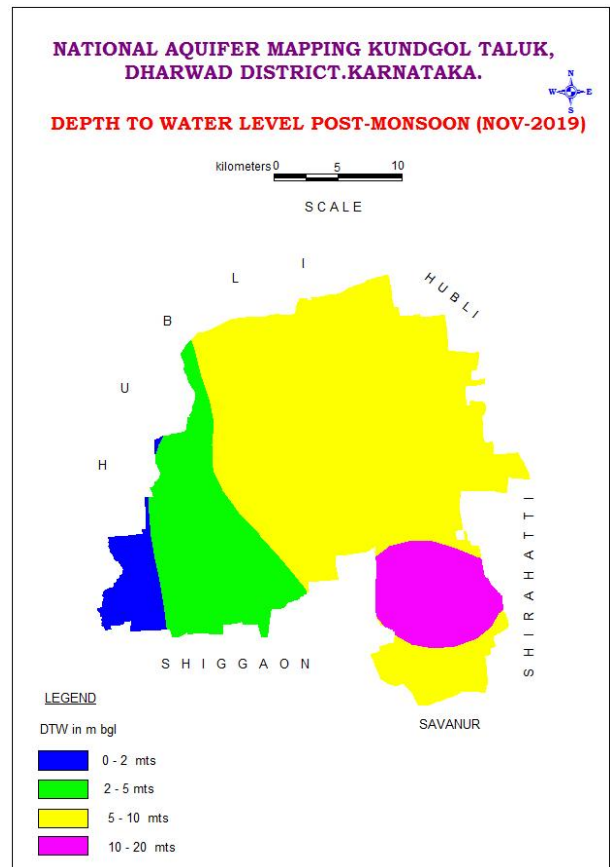


Figure 7: Post monsoon DTW (Aq-I)

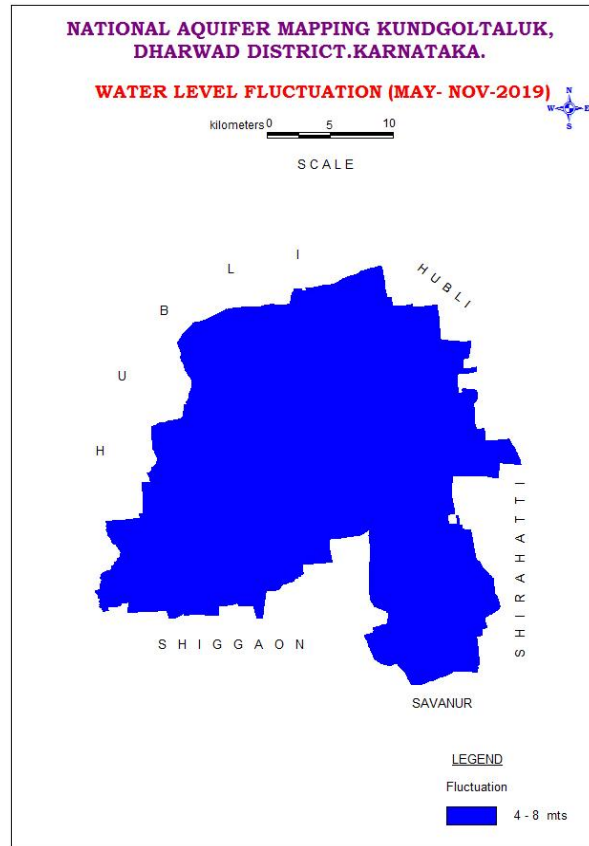


Figure 8 : Water level fluctuation(May-Nov-2019)

2 AQUIFER DISPOSITION

2.1 Aquifer types

In Kundgol Taluk there are mainly two types of aquifer systems

- i. **Aquifer-I (Phreatic aquifer)** - Weathered Basalt
- ii. **Aquifer-II (Fractured aquifer)** - Fractured Basalt and Vesicular Basalt

Kundgol Taluk is underlain by formations of Dharwar schist belt and Peninsular gneiss. The major part of the area is underlain by shale and grey wake. The trend of foliation in the schistose formation is NNW-SSE with dip ranging from 45 to 75° to the northeast direction. The granite gneiss is found in the northeast and eastern part of the area. The weathered mantle generally covers the formations. The weathered thickness of the shale is 60 to 75 m and that of greywacke is 5 to 20 m. The weathered thickness of gneissic formation is about 10 to 15 m. The area has some major lineaments and two of them are Gudageri-Behatti and Yelivala-Yeraguppi. The geology of the area is shown in **Figure.9**.

The ground water occurrence and movement are controlled by the degree of weathering, fracturing and geomorphological set up in the area. It is also controlled by secondary porosity developed

due to weathering. Joints fractures and foliations control the movement of ground water in the unweathered portion of the aquifer.

In general, the ground water in the area occurs under phreatic condition and at times in semi confined conditions. The depth of the dug well ranges from 8 to 20 m bgl. The average depth of bore wells is about 60.00 mbgl.

Under the ground water exploration, 3 exploratory borewells were drilled. The depth of the wells ranges from 128.25 to 165.35 m bgl. The depth of the casing ranges from 32.50 to 44.40 m bgl. The static water level ranges from 6.53 to 31.92 m bgl. The discharge ranges from 1.31 to 4.05 lps. The specific capacity varies from 12.17 to 41.00 lit/min/m and the transmissivity ranges from 5.00 to 33.00 m²/day (**Table.7**). The basic characteristics of each aquifer is shown in **Table.8**.

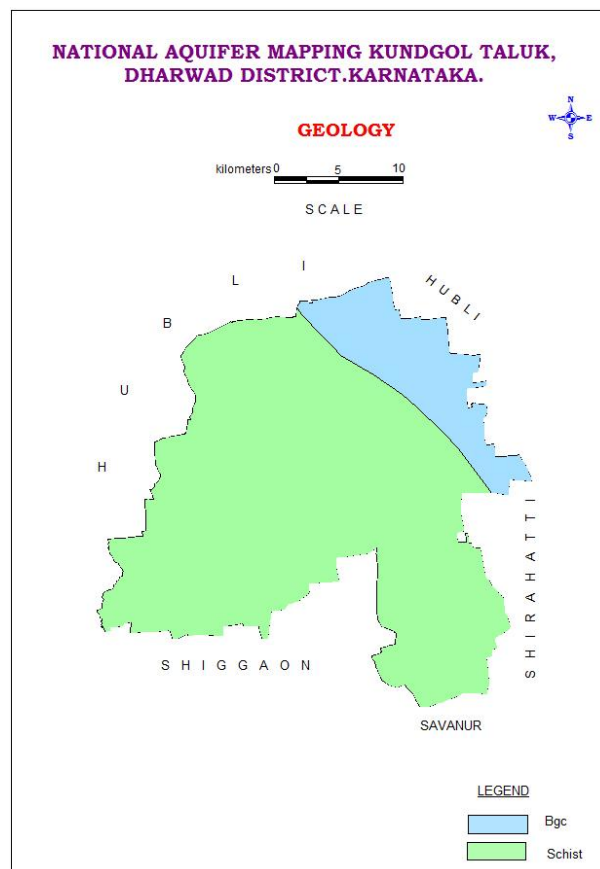


Figure-9: Geology map

Table 7: Details of Ground Water Exploration

Sl. No	Location	Depth drilled (mbgl)	Casing (mbgl)	Aquifer Zones m.bgl	Formation	Q (lpm)	DTW (m bgl)	DD (m)	C (lpm/m)	T (m ² /day)
1.	Kundgol-EW 15°14' 14'' 74°49' 53''	128.25	35.45	20.05-26.15 26.25-36.25 36.40 69.85-70.0 113.55-113.80	Schist/ phyllite	243	14.60	5.92	41.05	32.86
2.	Kundgol-OW	131.85	32.15	30.15-30.25 39.35-39.50 61.50-61.70	Phyllite/ fr.quartz	186.6	14.26	9.40	19.85	16.96
3.	Gudegeri-EW 15°07' 10'' 74°22' 05''	145.05	44.40	31.25 62.65-62.85 76.95-77.20	Phyllite/ meta greywack	136.20	31.92	5.23	26.04	13.06
4	Gudegeri-OW	135.95	32.50	31.25 39.35-39.50 63.00-63.10 76.95-77.20	Phyllite/ meta greywack	127.20	31.79	3.675	34.61	17.65

Table 8: Basic characteristics of each aquifer

Aquifers	Weathered Zone (Aq.-I)	Fractured Zone (Aq.-II)
Prominent Lithology	Weathered phyllite/grewack	Fractured / Jointed Phyllite/Greywack
Thickness range (m bgl)	35	Fractures up to 115 mbgl
Depth range of occurrence of fractures (m bgl)	20-35	10 to191
Range of yield potential (lps)	moderate yield	60.0 to114.0
T (m ² /day)	-	13.0 to 32.0

2.2 2 D, 3 D aquifer disposition and basic characteristics of each aquifer

The sub-surface aquifer disposition of the study area were prepared based on the drilling data obtained from exploratory drilling programme for generating 2D and 3D sections and fence diagrams/models through Rock works software. The outputs thus generated are presented in depicted in **Fig 10(a), Fig 10 (b) and Fig 10 (c)**

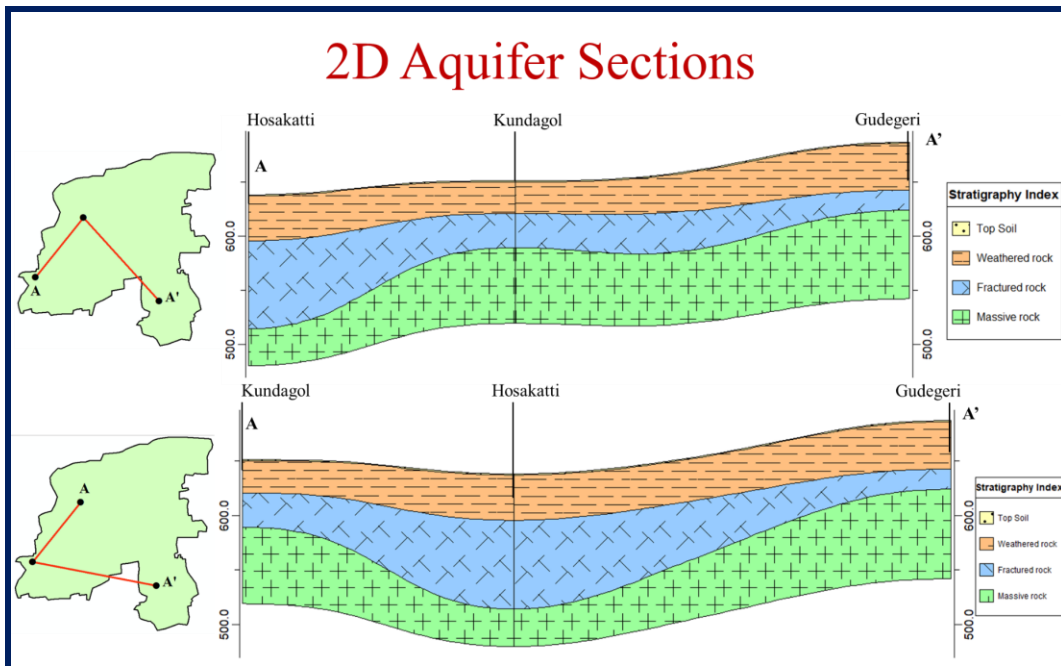


Fig 10 (a): The 2D aquifer disposition

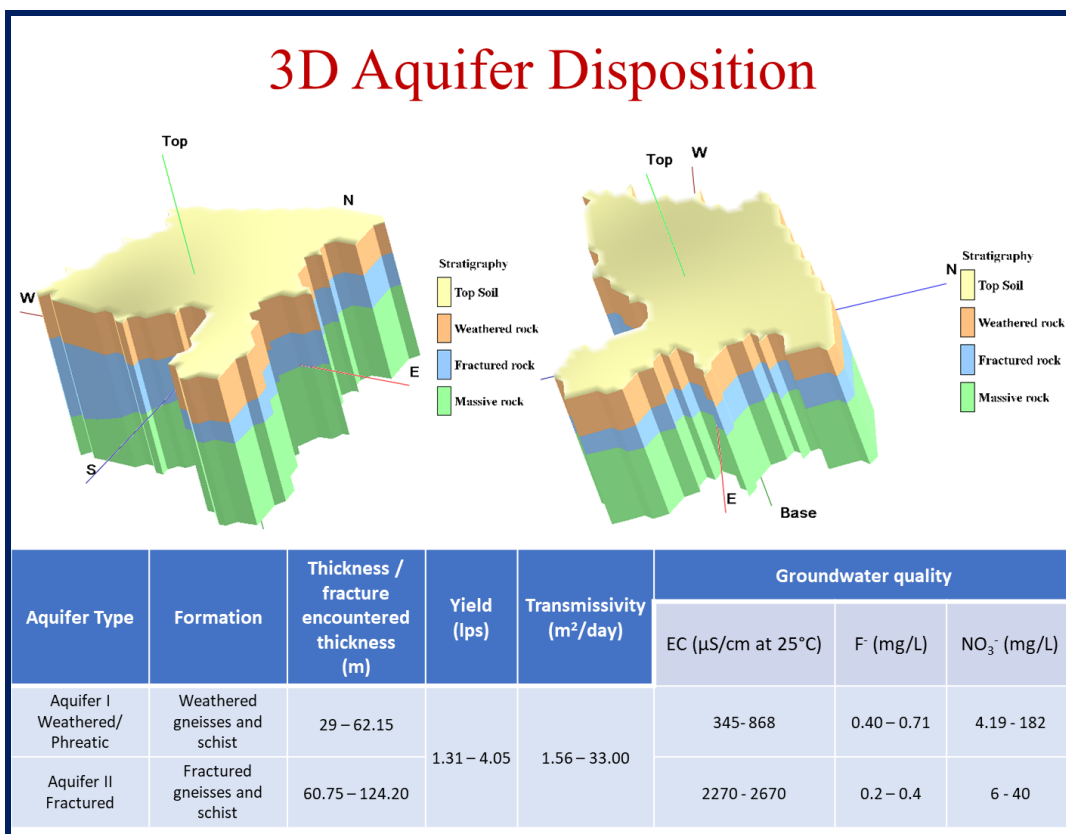


Fig 10 (b): The 3D aquifer disposition

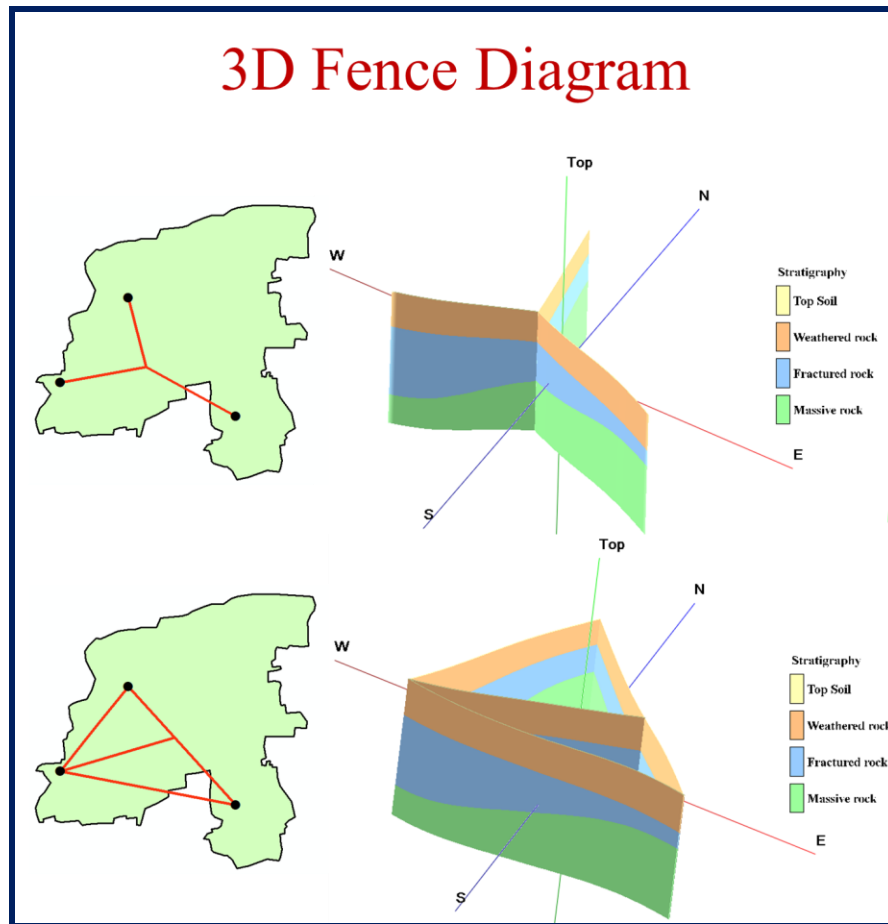


Fig 10 (c): The 3D aquifer disposition

3 Ground water resource, extraction, contamination and other issues

3.1 Aquifer wise resource availability and extraction

The details of ground water resource is given in **Table 9a and 9b**. Total ground water resource available as on 2017 is already presented above. Comparison of ground water availability and draft scenario (Ham) is presented in **Table.9.c**.

Table. 9a. Present Dynamic Ground Water Resource (2017) (Ham)

Taluk	Net Annual Ground Water Availability	Existing Gross Ground Water Draft for Irrigation	Existing Gross Ground Water Draft for Domestic and Industrial Water Supply	Existing Gross Ground Water Draft for All Uses	Allocation for Domestic and Industrial Use for Next 25 Years	Net Ground Water Availability for Future Irrigation Development	Existing Stage of Ground Water Development	Category
Kundgol	4158	1836	187	2022	203	2120	49	Safe

Table.9.b.Ground Water Resource availability and stage of extraction as on 2020

Annual Extractable ground water resource (ham)	GW extraction for Irrigation use (ham)	GW extraction for Industrial use (ham)	GW extraction for Domestic use (ham)	Total GW extraction (ham)	Stage of GW extraction (%)	Category	Annual GW allocation for Domestic use as on 2025 (ham)	Net GW availability for future use (ham)
3723	1798	0	184	1982	53	Safe	196	1729

Table.9c. Comparison of ground water availability and draft scenario (Ham)

Taluk	GW availability (Ham)	GW draft (Ham)	Stage of GW development (%)	GW availability (Ham)	GW draft (Ham)	Stage of GW development (%)	GW availability (Ham)	GW draft (Ham)	Stage of GW Extraction (%)	GW availability (Ham)	GW draft (Ham)	Stage of GW Extraction (%)
	2011			2013			2017			2020		
Kundgol	2883	949	33	2901	1260	43	4158	2022	49	3723	1982	53

It is seen from the above table that the stage of ground water extraction is steadily increased from 33% during 2011 to 53% during 2020. The ground water draft has shown a rise from 2011 to 2017 whereas during 2020, the same is found to be slightly reduced.

3.2 Chemical quality of ground water and contamination

Interpretation from Chemical Analysis results in Kundgol Taluk (**Table 10**) is mentioned as under

ELECTRICAL CONDUCTIVITY: In general, EC values range from 345 to 868 μ /mhos/cm at 25°C in the Aquifer-I. (**Fig-11**)

FLUORIDE: Fluoride concentration in ground water ranges between 0.40 to 0.71 mg/l in the Aquifer-I (**Fig-12**)

NITRATE: Nitrate value ranges from 4.19 and 118 mg/l in the Aquifer –I (**Fig-13**)

Table 10. Quality of ground water (Aquifer-I) in Kundgol Taluk

Location	PH	EC μ /mhos/cm at 25°C	TH	CA	MG	NA	K	CO ₃	HCO ₃	CL	SO ₄	NO ₃	F
			mg/l										
Gudgeri	8.01	868	260	40	39	54	40	0	140	114	58	118	0.71
Kundgol	7.83	345	120	24	15	19	4	0	116	36	19	4.19	0.40

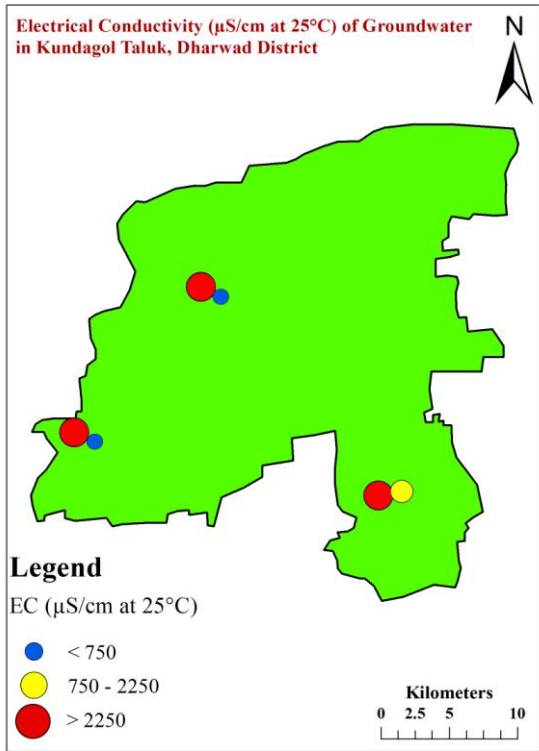


Fig-11: E C distribution map

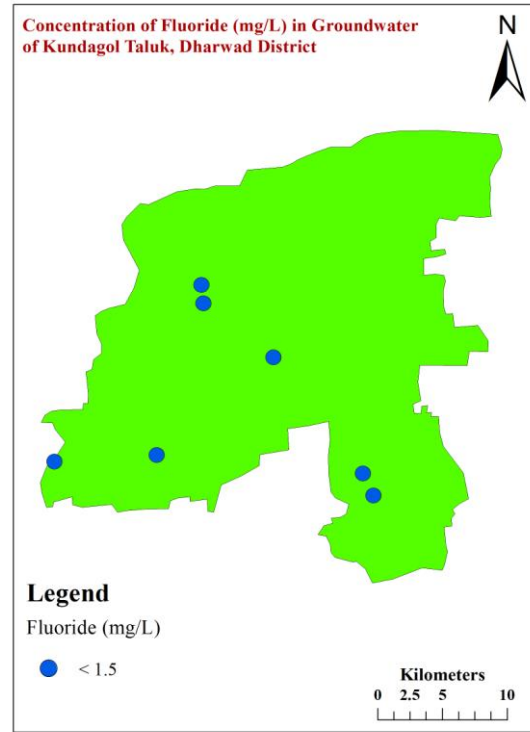


Fig-12: Fluoride distribution map

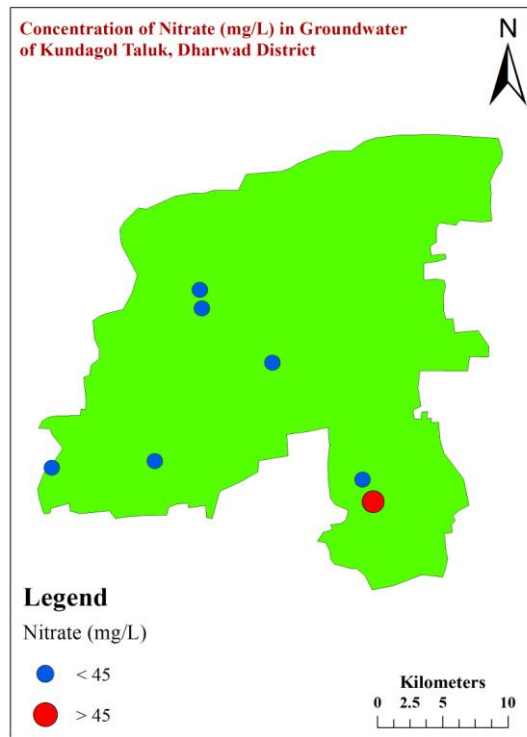


Fig-13: Nitrate distribution map

4 GROUND WATER RESOURCE ENHANCEMENT

4.1 Resource Enhancement by Supply Side Interventions

To enhance the ground water resources the dry phreatic aquifer (Aq-I) in the taluk, artificial recharge structures like check dams, percolation tanks & point recharge structures (Table 11) are recommended by CGWB as per Master Plan 2020. The choice of recharge structures should be site specific and such structures need to be constructed in areas already identified as feasible for artificial recharge. Improvement in Ground water availability is given in Table 12.

Table 11. Quantity of non-committed surface runoff and expected recharge through AR structures

Artificial Recharge Structures Proposed	Kundgol Taluk
Non committed monsoon runoff available (MCM)	149.148
Subsurface dyke	4
Percolation tank	134
Number of Check Dams	779
Tentative total cost of the project (Rs. in lakhs)	10558.780
Expected recharge (MCM)	111.861
Expected rise in water level (m)	0.86
Cost Benefit Ratio (Rupees/ cu.m. of water harvested)	9.44

Area suitable for artificial recharge structures is shown in Fig-14. The choice of recharge structures should be site specific and such structures need to be constructed in areas already identified as feasible for artificial recharge. The tentative locations of sites proposed for artificial recharge is shown in Fig.15. The tentative list of the proposed Percolation tanks and Check dams are listed in Annexure 1.

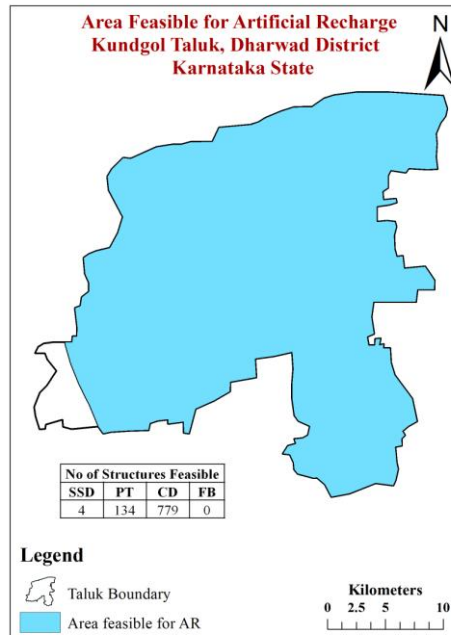


Fig.14. Map showing area feasible for Artificial Recharge

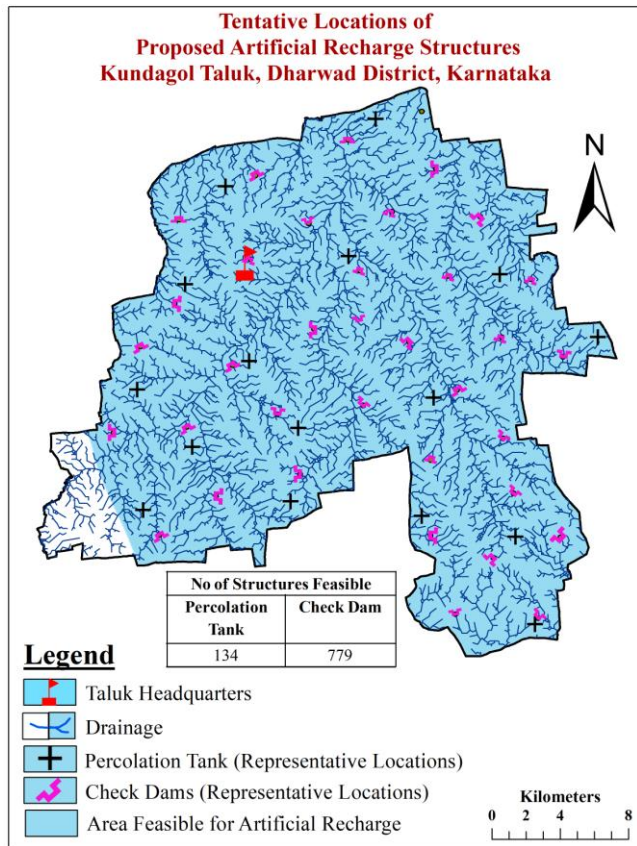


Fig.15 Map showing the tentative locations of Artificial Recharge

Table 12. Improvement in GW availability due to Recharge in Kundgol Taluk

Taluk	Net annual ground water availability	Existing gross ground water draft for all uses	Existing stage of ground water development	Expected recharge from proposed artificial recharge structures	Expected improvement in stage of ground water development after the implementation of the project	Expected improvement in overall stage of ground water development
	Ham	Ham	%	Ham	%	%
Kundgol	4158	2022	49	11186.1	36	13

4.1.2 Regulation and Control

- Kundgol Taluk has been categorized as **Safe**, since the stage of ground water development is 49% (GEC, 2017) and 53% as per 2020 estimates. However, the mandatory guidelines like rainwater harvesting and artificial recharge issued by Karnataka Ground Water Authority (KGWA) needs to be strictly implemented in the taluk so that quality of ground water will improve in due course of time.
- Ground water recharge component needs to be made mandatory in the non-command area of the Taluk for further development of ground water.

4.1.2 Ground water quality problem

- The ground water quality problem is the major issue in Kundgol Taluk. The ground water quality deterioration is a gradual process and might have started many years back. The highly weathered rock formation is the source of the chemical constituents. The ground water quality deterioration is mostly observed in the black cotton soil area. About 90% of the Kundgol Taluk is covered by black cotton soil. The permeability in the black cotton soil is very less. Therefore, the horizontal and vertical flow of ground water is limited which in turn results in reduction in the leaching of the salts. As a result, salt get accumulated and the slow rate of ground water movement and discharge, the salinity of ground water increases day by day. The ground water quality deterioration in general limited up to 640 m amsl contour line, which is also the limit of black cotton soil area. The problems of ground water salinity are related to agriculture and drinking water sector.
- The use of saline water for irrigation is known to cause multifarious problems such as increase in salt built up in the soil leading to soil salinity and alkalinity, Increase in EC and ESP (extractable sodium percentage) of soil, Unusual increase in hardness of soil thereby reducing the infiltration, high proportion of sodium in the exchange process of soil effects the swelling and dispersion of clay particles. The swelling and dispersion of soil clay minerals results in a structural break down and subsequent reduction in soil permeability which in turn results in difficulties in irrigation and drainage. The use of saline water affects the germination of seed, growth of plant and the crop yield. Plant growth is inhibited due to increasing osmotic pressure of the soil solution and consequently decreases the availability of water to the plant and reduction in crop yield. High salt concentration in irrigation water is known to cause salt injury at germination and early seeding stages. Clay pans frequently develop due to high sodium salt content in irrigation water. This salinity of water along with soil type affects the yield of the crops and its quality/nutrient value. The sugar content of cane, the oil content in oil seed like sun flower decreases with increase in

salinity. The protein content of some of cereals and vegetables also decreases with increase in salinity of irrigation water. Even though some of the horticultural crops grows well under salinity conditions but either fruit size or quality is impaired. Water-soluble protein and carbohydrate content of some of the vegetables generally decrease with increase of salinity.

4.1.3 Management/interventions on water quality front

For using the saline water for irrigation, factors such as rainfall, water table, water quality on soils and crops are integrated for evolving approximate crop/agronomic and irrigation management practices. Appropriate management practices will prevent the build-up of salinity, and toxicity in root zone levels with use of saline water. There are some management practices for using the saline water for irrigation.

- **Crop Management:** Crops differ considerably in their ability to tolerate salinity. This intergenetic difference can be exploited for selecting the crops which produce satisfactory yield under a given root zone salinity. The choice of a crop for a given salinity water depends upon the crops potential to build up salts in root zone. Oil seeds and wheat crops that require less water can tolerate higher levels of EC whereas most of the pulses are very sensitive to salts. Comparatively higher salinity waters could be used in coarse textured soils, late sown crops can tolerate only lower levels of EC than timely seeded crops. In summer, crops are less tolerance to salinity than in winter. During the germination period it is better to irrigate with fresh water to enable complete germination.
- **Irrigation management:** When using saline water, irrigation should meet the water requirement of crops and the leaching requirement to maintain favorable salt balance in the root zone. During the intervening periods in between the irrigation cycles, evapo-transpiration by crops reduces the soil water contents which in turn decreases matric as well as solute potentials. Consequently, the water intake by the crop and hence the yields are expected to suffer. It is usually irrigation with saline water should be more frequent to reduce the cumulative water deficit between the irrigation cycles. Increase of depth of irrigation increases in the crop yield.
- **Seeding Practices:** Even though some of the crops are highly tolerant to high salinity, they are highly sensitive during germination period and early seeding stages. When water is applied to pre sowing irrigation, seeds are exposed to soil water of higher salinity as a result of movement of salt towards the surface via evaporative drying both up to seeding and during the periods of germination and emergence. This makes the seed germination and emergence more critical especially for summer crops. To avoid this problem, heavy post sowing irrigation is essential to push the salts deeper and to maintain better moisture conditions.

- **Organic material and Gypsum:** Use of Organic materials and gypsum is highly beneficial for saline water irrigation. The organic material improves the permeability of the soil. The adverse effects of the long-term use of alkali/sodic waters on physical and chemical properties of soils can be mitigated by use of amendments, which contain calcium such as gypsum.
- **Well design:** Saline waters are generally highly corrosive leading to reduction in the strength and life of usual mild steel pipes in construction of borewells. The borewells may be constructed by using PVC, fiber glass and fiber glass reinforced plastic (FRP) wherever feasible, which is free from effect of corrosion.

4.2 Demand Side Interventions

4.2.1 Management/interventions on water quantity front

For agriculture and industrial purpose, if the brackish ground water is used, it will adversely affect the yield of crop and quality of the industrial product. Hence, it is essential to dilute the brackishness of ground water by mixing with fresh water. Rain water harvesting, irrigation practices, change in cropping pattern from water intensive crop to less water requirement crops are some of the management plans in interventions on water quantity front.

The only source of fresh water in the area is rainfall and most part of which goes as flash floods as the infiltration factor of the black cotton soil is less and the rainfall comes for shorter duration. Therefore, it is essential to arrest the water and allow recharging the ground water gradually. For this purpose, a series of structure like percolation tanks, check dams and subsurface dyke have to be constructed at regular intervals at suitable topographic locations. To increase the infiltration factor, the black cotton soil cover may be scrapped off from the bed upstream side of the structure. The ground water recharge borewells may be constructed in the bed of percolation tanks.

Methods of Irrigation: The common method by which the irrigation water is applied to crops is flooding. The surface irrigation method even after following the best design criteria generally results in excessive result and non-uniformity in water application. Consequently, the farm irrigation efficiency is about 60-70%. The irrigation methods such as sprinkler system and drip system are more efficient than water flooding system wherever feasible and save a considerable quantity of water.

Domestic use: The drinking water with high EC may cause gastro intestinal irritation, diarrhea and dysentery. For domestic purpose the Reverse Osmosis and Electrolysis technologies may be used for desalination of the brackish water for providing potable water for local supply. The rainfall annually received can be potentially taped to augment the drinking water requirements. The rain water can be harvested from roof and stored in ground level storage tanks after passing through filter beds. This will meet the requirement during rainy season. The excess water during rainy season can be used for

artificially recharging the ground water. Recharge pits/trench can be constructed to effect maximum recharge of rain water so that it reduces the salinity.

4.2.2 Other interventions proposed

- Periodical maintenance of artificial recharge structures should also be incorporated in the Recharge Plan.
- If any excess nitrate concentration is found in ground water samples require remedial measures like: -
 - Dilution of nitrate rich ground water through artificial recharge & water conservation.
 - Roof top rain water harvesting.

Area specific details:

- Major nalas and tributaries form dendritic drainage pattern and 90% of the area forms part of Malaprabha river sub basin. Southern part forms the part of Tungabhadra river sub basin.
- Black cotton soil is found in about 90% of the areas and red soil is seen in southern part of the area.
- Major part of the area is underlain by schist and eastern part of the area is by gneiss.
- In shallow aquifer, ground water occurs under unconfined condition and in deeper aquifer occurs under unconfined to semi-confined condition.
- The ground water salinity is observed mainly in topographic low area, which is covered by black cotton soil. In general, the quality deterioration is reached up to 640 m amsl contour line. Above this limit red sandy soil is found and the quality of ground water is good.
- The ground water quality deterioration is due to the less recharge and sluggish movement of ground water in the black cotton soil.
- Proper casing pipes should be used to avoid corrosion and sustain for longer period.
- For domestic purpose, desalination of saline water can be done through desalination to plants.

4.3 Ground Water Development Plan

In Kundgol taluk, the present stage of ground water extraction (2020) is 53 % with net ground water availability for future use is 1729 ham and total extraction is 1981 ham (2020). The ground water draft for irrigation purpose is 1796 ham, thus indicating that ground water irrigation needs to be encouraged in the area after considering the safe level of extraction. To overcome these, it is imperative to have a robust ground water resource development plan for the area, which can be implemented in scientific manner. The implementation of the plan needs to be based on site specific detailed hydrogeological, geophysical and scientific surveys for pinpointing the sites for construction of dugwells and Borewells.

As per the conservative estimate and after considering the average unit draft figure for the taluk, about 200 dugwells (10-15 m depth; 3 to 5 m diameter) are recommended to be constructed in feasible areas. Further, as per the estimate about, 2000 borewells (100 to 150 m depth; 150 mm dia) are also recommended to be drilled in feasible areas so as to maintain the safe category of the taluk. The likely additional irrigation potential which can be created considering prevailing crop water requirement for the area is will be 3200 ha.

5 SUMMARY

The summary of Management plan of Kundgol Taluk is given in **Table-13**.

Table-13. Summary of Management plan of Kundgol Taluk

Kundgol Taluk is 'Safe & present stage of GW Development		49%(2017) 53% (2020)
Net Annual Ground Water Availability (MCM) for future use(2020)		17.29
Existing Gross Ground Water Draft for all uses (2020) (MCM)		19.81
Expected additional recharge from monsoon surplus runoff (MCM)		111.861
Excess nitrate concentration	<ul style="list-style-type: none"> • Dilution of nitrate rich ground water through artificial recharge & water conservation. • Roof top rain water harvesting. 	

(a) Tentative Locations of Proposed Percolation tanks

Sl.No	Longitude	Latitude	Village	Gram Panchayath	Taluk
1	75.4048	15.0674	Sanklipura	Goudageri	Kundgol
2	75.3942	15.0752	Kalasa	Kalasa	Kundgol
3	75.3610	15.0758	Gowdageri	Goudageri	Kundgol
4	75.3476	15.0911	Rattigeri	Goudageri	Kundgol
5	75.4020	15.0946	Kalasa	Kalasa	Kundgol
6	75.3761	15.1000	Kalasa	Kalasa	Kundgol
7	75.3903	15.1025	Kalasa	Kalasa	Kundgol
8	75.2049	15.1030	Matthigatti	Mattigatti	Kundgol
9	75.3469	15.1068	Mandiganala	Gudageri	Kundgol
10	75.3704	15.1079	Gudageri	Gudageri	Kundgol
11	75.1873	15.1114	Hanumanahalli	Mattigatti	Kundgol
12	75.3943	15.1137	Kalasa	Kalasa	Kundgol
13	75.2450	15.1162	Ingalagi	Ingalagi	Kundgol
14	75.4214	15.1173	Haralapura	Harlapura	Kundgol
15	75.2140	15.1202	Matthigatti	Mattigatti	Kundgol
16	75.4018	15.1215	Kalasa	Kalasa	Kundgol
17	75.3620	15.1222	Gudageri	Gudageri	Kundgol
18	75.3433	15.1249	Mandiganala	Gudageri	Kundgol
19	75.4128	15.1260	Haralapura	Harlapura	Kundgol
20	75.2054	15.1268	Ramapura	Mattigatti	Kundgol
21	75.1915	15.1281	Kunkura	Malali	Kundgol
22	75.2385	15.1295	Ingalagi	Ingalagi	Kundgol
23	75.2718	15.1327	Nelagudda	Bu.Tarlaggatti	Kundgol
24	75.3561	15.1332	Gudageri	Gudageri	Kundgol
25	75.2084	15.1395	Hirebudhihala	Ingalagi	Kundgol
26	75.3938	15.1403	Kalasa	Kalasa	Kundgol
27	75.2491	15.1418	Bu. Tharlagatta	Bu.Tarlaggatti	Kundgol
28	75.2888	15.1418	Hireharakuni	Hireharakuni	Kundgol
29	75.1845	15.1425	Malali	Malali	Kundgol
30	75.3466	15.1458	Gudageri	Gudageri	Kundgol
31	75.2629	15.1478	Bu. Tharlagatta	Bu.Tarlaggatti	Kundgol
32	75.2612	15.1551	Bu. Tharlagatta	Bu.Tarlaggatti	Kundgol
33	75.2039	15.1553	Khubihala	Kubihal	Kundgol
34	75.2735	15.1597	Bu. Tharlagatta	Bu.Tarlaggatti	Kundgol
35	75.2182	15.1615	Khubihala	Kubihal	Kundgol
36	75.3168	15.1626	Samsi	Saunshi	Kundgol
37	75.2457	15.1639	Bu. Koppa	Bu.Tarlaggatti	Kundgol
38	75.3376	15.1646	Samsi	Saunshi	Kundgol
39	75.1731	15.1657	Hosakatti	Ramanakoppa	Kundgol
40	75.3809	15.1706	Pashupathihala	Pashupathihala	Kundgol

41	75.2760	15.1715	Hireharakuni	Hireharakuni	Kundgol
42	75.3926	15.1728	Yare Bhudhahala	Yarebudihal	Kundgol
43	75.2324	15.1735	Khubihala	Kubihal	Kundgol
44	75.3359	15.1746	Samsi	Saunshi	Kundgol
45	75.2525	15.1755	Kamadolli	Kamadolli	Kundgol
46	75.1993	15.1790	Yaliwala	Yeliwala	Kundgol
47	75.2694	15.1814	Chikkaharakuni	Hireharakuni	Kundgol
48	75.1812	15.1818	Yaliwala	Yeliwala	Kundgol
49	75.2351	15.1862	Devanuru+manasali	Devanur	Kundgol
50	75.3824	15.1866	Yare Bhudhahala	Yarebudihal	Kundgol
51	75.3497	15.1876	Samsi	Saunshi	Kundgol
52	75.2623	15.1876	Chikkaharakuni	Hireharakuni	Kundgol
53	75.3269	15.1876	Samsi	Saunshi	Kundgol
54	75.2048	15.1882	Yaliwala	Yeliwala	Kundgol
55	75.1883	15.1920	Yaliwala	Yeliwala	Kundgol
56	75.2786	15.1920	Kamadolli	Kamadolli	Kundgol
57	75.3774	15.1923	Yare Bhudhahala	Yarebudihal	Kundgol
58	75.1741	15.1947	Yaliwala	Yeliwala	Kundgol
59	75.2577	15.1979	Kamadolli	Kamadolli	Kundgol
60	75.3726	15.2011	Yare Bhudhahala	Yarebudihal	Kundgol
61	75.1789	15.2018	Inamkoppa	Betadur	Kundgol
62	75.3163	15.2024	Samsi	Saunshi	Kundgol
63	75.2258	15.2056	Devanuru+manasali	Devanur	Kundgol
64	75.2066	15.2059	Yaliwala	Yeliwala	Kundgol
65	75.2493	15.2070	Kamadolli	Kamadolli	Kundgol
66	75.3050	15.2080	Samsi	Saunshi	Kundgol
67	75.2760	15.2098	Kamadolli	Kamadolli	Kundgol
68	75.1917	15.2111	Betadura	Betadur	Kundgol
69	75.3300	15.2145	Samsi	Saunshi	Kundgol
70	75.3649	15.2151	Yare Bhudhahala	Yarebudihal	Kundgol
71	75.2670	15.2158	Kamadolli	Kamadolli	Kundgol
72	75.3038	15.2174	Samsi	Saunshi	Kundgol
73	75.4394	15.2195	Chikkagunjala	Hiregunjal	Kundgol
74	75.2305	15.2212	Devanuru+manasali	Devanur	Kundgol
75	75.3825	15.2224	Yare Bhudhahala	Yarebudihal	Kundgol
76	75.2788	15.2225	Kamadolli	Kamadolli	Kundgol
77	75.3161	15.2235	Samsi	Saunshi	Kundgol
78	75.2145	15.2243	Devanuru+manasali	Devanur	Kundgol
79	75.1996	15.2259	Betadura	Betadur	Kundgol
80	75.3594	15.2268	Yare Bhudhahala	Yarebudihal	Kundgol
81	75.2450	15.2279	Bilibala	Devanur	Kundgol
82	75.3014	15.2281	Samsi	Saunshi	Kundgol
83	75.2794	15.2303	Shirura	Shirur	Kundgol
84	75.4173	15.2308	Chikkagunjala	Hiregunjal	Kundgol

85	75.1938	15.2313	Betadura	Betadur	Kundgol
86	75.4087	15.2342	Chikkagunjala	Hiregunjal	Kundgol
87	75.3576	15.2343	Yare Bhudhahala	Yarebudihal	Kundgol
88	75.2108	15.2344	Kundhagola	Kundgol	Kundgol
89	75.1873	15.2386	Betadura	Betadur	Kundgol
90	75.2882	15.2396	Shirura	Shirur	Kundgol
91	75.2450	15.2396	Kundhagola	Kundgol	Kundgol
92	75.3948	15.2406	Hiregunjala	Hiregunjal	Kundgol
93	75.3139	15.2434	Shirura	Shirur	Kundgol
94	75.3562	15.2445	Yare Bhudhahala	Yarebudihal	Kundgol
95	75.2145	15.2477	Kundhagola	Kundgol	Kundgol
96	75.2387	15.2479	Kundhagola	Kundgol	Kundgol
97	75.3068	15.2506	Shirura	Shirur	Kundgol
98	75.3859	15.2528	Hiregunjala	Hiregunjal	Kundgol
99	75.3464	15.2536	Chakalatti	Chakalabbi	Kundgol
100	75.4119	15.2559	Bagawada	Hiregunjal	Kundgol
101	75.2464	15.2569	Pura	Gudenakatti	Kundgol
102	75.3328	15.2570	Chakalatti	Chakalabbi	Kundgol
103	75.2384	15.2611	Pura	Gudenakatti	Kundgol
104	75.2599	15.2616	Kundhagola	Kundgol	Kundgol
105	75.3036	15.2626	Basapura	Hirenarhi	Kundgol
106	75.2150	15.2647	Pura	Gudenakatti	Kundgol
107	75.3272	15.2665	Hirenarhi	Hirenarhi	Kundgol
108	75.3758	15.2668	Baradhawada	Chakalabbi	Kundgol
109	75.2325	15.2732	Pura	Gudenakatti	Kundgol
110	75.2426	15.2743	Pura	Gudenakatti	Kundgol
111	75.3184	15.2752	Hirenarhi	Hirenarhi	Kundgol
112	75.2120	15.2783	Pura	Gudenakatti	Kundgol
113	75.3495	15.2793	Hirenarhi	Hirenarhi	Kundgol
114	75.3727	15.2800	Konkanakurahatti	Rottigawada	Kundgol
115	75.2662	15.2815	Kundhagola	Kundgol	Kundgol
116	75.2493	15.2817	Kundhagola	Kundgol	Kundgol
117	75.3949	15.2857	Kodliwada	Rottigawada	Kundgol
118	75.3119	15.2871	Chikkanarhi	Yaraguppi	Kundgol
119	75.2168	15.2874	Pura	Gudenakatti	Kundgol
120	75.4069	15.2895	Kodliwada	Rottigawada	Kundgol
121	75.2051	15.2910	Pura	Gudenakatti	Kundgol
122	75.2424	15.2914	Gudenakatti	Gudenakatti	Kundgol
123	75.3474	15.2957	Chikkanarhi	Yaraguppi	Kundgol
124	75.2799	15.2972	Mullalli	Yaraguppi	Kundgol
125	75.3849	15.2976	Kodliwada	Rottigawada	Kundgol
126	75.2365	15.2996	Pura	Gudenakatti	Kundgol
127	75.3702	15.3008	Konkanakurahatti	Rottigawada	Kundgol
128	75.2873	15.3050	Mullalli	Yaraguppi	Kundgol

129	75.3169	15.3063	Yaraguppe	Yaraguppi	Kundgol
130	75.3403	15.3155	Yaraguppe	Yaraguppi	Kundgol
131	75.2861	15.3161	Yarinarayanapura	Gudenakatti	Kundgol
132	75.2625	15.3197	Gudenakatti	Gudenakatti	Kundgol
133	75.3292	15.3281	Yaraguppe	Yaraguppi	Kundgol
134	75.3184	15.3352	Yaraguppe	Yaraguppi	Kundgol

(Source: Master Plan, CGWB, 2020. It is likely that the number of structures proposed may vary depending upon the ground truth verification and feasibility criteria)

(b) Tentative Locations of Proposed Check dams

Sl.No	Longitude	Latitude	Village	Gram Panchayath	Taluk
1	75.3724	15.0569	Gowdageri	Goudageri	Kundgol
2	75.4106	15.0648	Sanklipura	Goudageri	Kundgol
3	75.4010	15.0660	Sanklipura	Goudageri	Kundgol
4	75.3831	15.0664	Gowdageri	Goudageri	Kundgol
5	75.3685	15.0679	Gowdageri	Goudageri	Kundgol
6	75.3922	15.0692	Gowdageri	Goudageri	Kundgol
7	75.3536	15.0699	Rattigeri	Goudageri	Kundgol
8	75.4064	15.0704	Sanklipura	Goudageri	Kundgol
9	75.3994	15.0726	Kalasa	Kalasa	Kundgol
10	75.3614	15.0726	Gowdageri	Goudageri	Kundgol
11	75.3477	15.0738	Rattigeri	Goudageri	Kundgol
12	75.3877	15.0755	Gowdageri	Goudageri	Kundgol
13	75.3785	15.0756	Gowdageri	Goudageri	Kundgol
14	75.3712	15.0756	Gowdageri	Goudageri	Kundgol
15	75.3850	15.0802	Gowdageri	Goudageri	Kundgol
16	75.3584	15.0802	Rattigeri	Goudageri	Kundgol
17	75.3748	15.0819	Gowdageri	Goudageri	Kundgol
18	75.3926	15.0821	Kalasa	Kalasa	Kundgol
19	75.4115	15.0826	Sanklipura	Goudageri	Kundgol
20	75.4049	15.0832	Sanklipura	Goudageri	Kundgol
21	75.3441	15.0854	Rattigeri	Goudageri	Kundgol
22	75.3677	15.0865	Gowdageri	Goudageri	Kundgol
23	75.3871	15.0877	Kalasa	Kalasa	Kundgol
24	75.3526	15.0901	Rattigeri	Goudageri	Kundgol
25	75.3734	15.0902	Gowdageri	Goudageri	Kundgol
26	75.3985	15.0914	Kalasa	Kalasa	Kundgol
27	75.3663	15.0925	Rattigeri	Goudageri	Kundgol
28	75.4065	15.0929	Kalasa	Kalasa	Kundgol
29	75.4176	15.0930	Kalasa	Kalasa	Kundgol
30	75.3956	15.0949	Kalasa	Kalasa	Kundgol
31	75.3802	15.0967	Kalasa	Kalasa	Kundgol
32	75.3907	15.0982	Kalasa	Kalasa	Kundgol
33	75.3562	15.0989	Rattigeri	Goudageri	Kundgol

34	75.3682	15.1007	Kalasa	Kalasa	Kundgol
35	75.2542	15.1011	Ingalagi	Ingalagi	Kundgol
36	75.1911	15.1022	Hanumanahalli	Mattigatti	Kundgol
37	75.3956	15.1023	Kalasa	Kalasa	Kundgol
38	75.3820	15.1025	Kalasa	Kalasa	Kundgol
39	75.4185	15.1027	Kalasa	Kalasa	Kundgol
40	75.2092	15.1030	Matthigatti	Mattigatti	Kundgol
41	75.3760	15.1047	Gudageri	Gudageri	Kundgol
42	75.2163	15.1059	Matthigatti	Mattigatti	Kundgol
43	75.3517	15.1060	Gudageri	Gudageri	Kundgol
44	75.2222	15.1060	Matthigatti	Mattigatti	Kundgol
45	75.2030	15.1060	Matthigatti	Mattigatti	Kundgol
46	75.2074	15.1061	Matthigatti	Mattigatti	Kundgol
47	75.4076	15.1072	Kalasa	Kalasa	Kundgol
48	75.3650	15.1083	Gudageri	Gudageri	Kundgol
49	75.3418	15.1087	Mandiganala	Gudageri	Kundgol
50	75.1971	15.1093	Hanumanahalli	Mattigatti	Kundgol
51	75.3569	15.1095	Gudageri	Gudageri	Kundgol
52	75.2523	15.1099	Ingalagi	Ingalagi	Kundgol
53	75.2143	15.1110	Matthigatti	Mattigatti	Kundgol
54	75.3725	15.1113	Gudageri	Gudageri	Kundgol
55	75.2436	15.1117	Ingalagi	Ingalagi	Kundgol
56	75.3970	15.1123	Kalasa	Kalasa	Kundgol
57	75.3910	15.1126	Kalasa	Kalasa	Kundgol
58	75.2239	15.1128	Matthigatti	Mattigatti	Kundgol
59	75.4294	15.1129	Kalasa	Kalasa	Kundgol
60	75.4187	15.1132	Kalasa	Kalasa	Kundgol
61	75.1908	15.1141	Hanumanahalli	Mattigatti	Kundgol
62	75.2107	15.1143	Matthigatti	Mattigatti	Kundgol
63	75.3478	15.1143	Mandiganala	Gudageri	Kundgol
64	75.2002	15.1148	Hanumanahalli	Mattigatti	Kundgol
65	75.3807	15.1161	Gudageri	Gudageri	Kundgol
66	75.1851	15.1167	Kunkura	Malali	Kundgol
67	75.4005	15.1170	Kalasa	Kalasa	Kundgol
68	75.3618	15.1172	Gudageri	Gudageri	Kundgol
69	75.3564	15.1177	Gudageri	Gudageri	Kundgol
70	75.3951	15.1177	Kalasa	Kalasa	Kundgol
71	75.2381	15.1182	Ingalagi	Ingalagi	Kundgol
72	75.2058	15.1183	Ramapura	Mattigatti	Kundgol
73	75.3700	15.1191	Gudageri	Gudageri	Kundgol
74	75.3439	15.1191	Mandiganala	Gudageri	Kundgol
75	75.2303	15.1195	Ingalagi	Ingalagi	Kundgol
76	75.2466	15.1199	Ingalagi	Ingalagi	Kundgol
77	75.4238	15.1199	Haralapura	Harlapura	Kundgol

78	75.4152	15.1199	Haralapura	Harlapura	Kundgol
79	75.2221	15.1201	Matthigatti	Mattigatti	Kundgol
80	75.2595	15.1210	Ingalagi	Ingalagi	Kundgol
81	75.4072	15.1216	Kalasa	Kalasa	Kundgol
82	75.3532	15.1220	Gudageri	Gudageri	Kundgol
83	75.2671	15.1222	Nelagudda	Bu.Tarlaggatti	Kundgol
84	75.3905	15.1222	Kalasa	Kalasa	Kundgol
85	75.1901	15.1225	Kunkura	Malali	Kundgol
86	75.3399	15.1225	Mandiganala	Gudageri	Kundgol
87	75.3791	15.1236	Gudageri	Gudageri	Kundgol
88	75.1816	15.1238	Kunkura	Malali	Kundgol
89	75.3992	15.1241	Kalasa	Kalasa	Kundgol
90	75.3569	15.1244	Gudageri	Gudageri	Kundgol
91	75.2133	15.1246	Hirebudhihala	Ingalagi	Kundgol
92	75.1962	15.1252	Ramapura	Mattigatti	Kundgol
93	75.2088	15.1254	Ramapura	Mattigatti	Kundgol
94	75.3648	15.1256	Gudageri	Gudageri	Kundgol
95	75.2025	15.1257	Ramapura	Mattigatti	Kundgol
96	75.3866	15.1258	Kalasa	Kalasa	Kundgol
97	75.3697	15.1258	Gudageri	Gudageri	Kundgol
98	75.3493	15.1258	Gudageri	Gudageri	Kundgol
99	75.2199	15.1258	Hirebudhihala	Ingalagi	Kundgol
100	75.2442	15.1269	Ingalagi	Ingalagi	Kundgol
101	75.1853	15.1271	Kunkura	Malali	Kundgol
102	75.2257	15.1275	Hirebudhihala	Ingalagi	Kundgol
103	75.2644	15.1277	Nelagudda	Bu.Tarlaggatti	Kundgol
104	75.4081	15.1280	Haralapura	Harlapura	Kundgol
105	75.2331	15.1282	Ingalagi	Ingalagi	Kundgol
106	75.2784	15.1284	Nelagudda	Bu.Tarlaggatti	Kundgol
107	75.2713	15.1284	Nelagudda	Bu.Tarlaggatti	Kundgol
108	75.4175	15.1289	Haralapura	Harlapura	Kundgol
109	75.2082	15.1290	Ramapura	Mattigatti	Kundgol
110	75.3616	15.1294	Gudageri	Gudageri	Kundgol
111	75.3486	15.1299	Gudageri	Gudageri	Kundgol
112	75.3561	15.1303	Gudageri	Gudageri	Kundgol
113	75.3722	15.1303	Gudageri	Gudageri	Kundgol
114	75.2548	15.1315	Ingalagi	Ingalagi	Kundgol
115	75.3673	15.1315	Gudageri	Gudageri	Kundgol
116	75.3977	15.1319	Sulthanapura	Harlapura	Kundgol
117	75.1857	15.1322	Kunkura	Malali	Kundgol
118	75.2656	15.1327	Nelagudda	Bu.Tarlaggatti	Kundgol
119	75.1934	15.1330	Guruvinahalli	Guruvinahalli	Kundgol
120	75.2850	15.1331	Nelagudda	Bu.Tarlaggatti	Kundgol
121	75.1766	15.1332	Kunkura	Malali	Kundgol

122	75.2044	15.1333	Ramapura	Mattigatti	Kundgol
123	75.3594	15.1335	Gudageri	Gudageri	Kundgol
124	75.3868	15.1344	Sulthanapura	Harlapura	Kundgol
125	75.2489	15.1344	Ingalagi	Ingalagi	Kundgol
126	75.2400	15.1351	Ingalagi	Ingalagi	Kundgol
127	75.2310	15.1355	Hirebudhihala	Ingalagi	Kundgol
128	75.3505	15.1364	Gudageri	Gudageri	Kundgol
129	75.3931	15.1367	Sulthanapura	Harlapura	Kundgol
130	75.3663	15.1368	Gudageri	Gudageri	Kundgol
131	75.2714	15.1368	Nelagudda	Bu.Tarlaggatti	Kundgol
132	75.4146	15.1372	Haralapura	Harlapura	Kundgol
133	75.3406	15.1375	Gudageri	Gudageri	Kundgol
134	75.2573	15.1375	Nelagudda	Bu.Tarlaggatti	Kundgol
135	75.2130	15.1378	Hirebudhihala	Ingalagi	Kundgol
136	75.3578	15.1379	Gudageri	Gudageri	Kundgol
137	75.3764	15.1380	Gudageri	Gudageri	Kundgol
138	75.2619	15.1382	Nelagudda	Bu.Tarlaggatti	Kundgol
139	75.1746	15.1383	Malali	Malali	Kundgol
140	75.1828	15.1386	Malali	Malali	Kundgol
141	75.4065	15.1389	Haralapura	Harlapura	Kundgol
142	75.3629	15.1394	Gudageri	Gudageri	Kundgol
143	75.2062	15.1394	Hirebudhihala	Ingalagi	Kundgol
144	75.2875	15.1395	Hireharakuni	Hireharakuni	Kundgol
145	75.1902	15.1396	Guruvinahalli	Guruvinahalli	Kundgol
146	75.3550	15.1397	Gudageri	Gudageri	Kundgol
147	75.3874	15.1397	Sulthanapura	Harlapura	Kundgol
148	75.2977	15.1399	Hireharakuni	Hireharakuni	Kundgol
149	75.2215	15.1405	Hirebudhihala	Ingalagi	Kundgol
150	75.4024	15.1411	Haralapura	Harlapura	Kundgol
151	75.2538	15.1416	Bu. Tharlagatta	Bu.Tarlaggatti	Kundgol
152	75.3981	15.1416	Kalasa	Kalasa	Kundgol
153	75.2009	15.1417	Guruvinahalli	Guruvinahalli	Kundgol
154	75.2612	15.1418	Bu. Tharlagatta	Bu.Tarlaggatti	Kundgol
155	75.2454	15.1418	Bu. Koppa	Bu.Tarlaggatti	Kundgol
156	75.4121	15.1420	Haralapura	Harlapura	Kundgol
157	75.3466	15.1422	Gudageri	Gudageri	Kundgol
158	75.2924	15.1422	Hireharakuni	Hireharakuni	Kundgol
159	75.2114	15.1426	Hirebudhihala	Ingalagi	Kundgol
160	75.1948	15.1427	Guruvinahalli	Guruvinahalli	Kundgol
161	75.2709	15.1434	Bu. Tharlagatta	Bu.Tarlaggatti	Kundgol
162	75.3809	15.1438	Sulthanapura	Harlapura	Kundgol
163	75.3517	15.1443	Gudageri	Gudageri	Kundgol
164	75.3916	15.1447	Sulthanapura	Harlapura	Kundgol
165	75.2076	15.1448	Hirebudhihala	Ingalagi	Kundgol

166	75.3408	15.1452	Gudageri	Gudageri	Kundgol
167	75.1820	15.1453	Malali	Malali	Kundgol
168	75.3015	15.1455	Hireharakuni	Hireharakuni	Kundgol
169	75.2895	15.1455	Hireharakuni	Hireharakuni	Kundgol
170	75.2496	15.1459	Bu. Koppa	Bu.Tarlaggatti	Kundgol
171	75.3572	15.1459	Gudageri	Gudageri	Kundgol
172	75.2240	15.1461	Hirebudhigala	Ingalagi	Kundgol
173	75.2185	15.1465	Hirebudhigala	Ingalagi	Kundgol
174	75.1702	15.1465	Malali	Malali	Kundgol
175	75.4046	15.1466	Sulthanapura	Harlapura	Kundgol
176	75.3692	15.1468	Gudageri	Gudageri	Kundgol
177	75.2768	15.1468	Bu. Tharlagatta	Bu.Tarlaggatti	Kundgol
178	75.1908	15.1474	Guruvinahalli	Guruvinahalli	Kundgol
179	75.2849	15.1480	Hireharakuni	Hireharakuni	Kundgol
180	75.2016	15.1481	Guruvinahalli	Guruvinahalli	Kundgol
181	75.2565	15.1490	Bu. Tharlagatta	Bu.Tarlaggatti	Kundgol
182	75.2136	15.1496	Khubihala	Kubihal	Kundgol
183	75.3439	15.1497	Gudageri	Gudageri	Kundgol
184	75.2671	15.1500	Bu. Tharlagatta	Bu.Tarlaggatti	Kundgol
185	75.4111	15.1500	Sulthanapura	Harlapura	Kundgol
186	75.2415	15.1502	Bu. Koppa	Bu.Tarlaggatti	Kundgol
187	75.3497	15.1505	Gudageri	Gudageri	Kundgol
188	75.2918	15.1505	Hireharakuni	Hireharakuni	Kundgol
189	75.4003	15.1508	Kalasa	Kalasa	Kundgol
190	75.2344	15.1509	Bu. Koppa	Bu.Tarlaggatti	Kundgol
191	75.1826	15.1510	Vitalapura	Guruvinahalli	Kundgol
192	75.3843	15.1513	Sulthanapura	Harlapura	Kundgol
193	75.1862	15.1513	Vitalapura	Guruvinahalli	Kundgol
194	75.2063	15.1520	Khubihala	Kubihal	Kundgol
195	75.1771	15.1529	Vitalapura	Guruvinahalli	Kundgol
196	75.3780	15.1531	Pashupathihala	Pashupathihala	Kundgol
197	75.3945	15.1535	Sulthanapura	Harlapura	Kundgol
198	75.3022	15.1535	Hireharakuni	Hireharakuni	Kundgol
199	75.2145	15.1536	Khubihala	Kubihal	Kundgol
200	75.1975	15.1539	Guruvinahalli	Guruvinahalli	Kundgol
201	75.2472	15.1540	Bu. Koppa	Bu.Tarlaggatti	Kundgol
202	75.3482	15.1544	Gudageri	Gudageri	Kundgol
203	75.2568	15.1545	Bu. Tharlagatta	Bu.Tarlaggatti	Kundgol
204	75.3580	15.1549	Gudageri	Gudageri	Kundgol
205	75.2309	15.1550	Khubihala	Kubihal	Kundgol
206	75.1699	15.1550	Malali	Malali	Kundgol
207	75.2752	15.1551	Bu. Tharlagatta	Bu.Tarlaggatti	Kundgol
208	75.2969	15.1555	Hireharakuni	Hireharakuni	Kundgol
209	75.3085	15.1561	Hireharakuni	Hireharakuni	Kundgol

210	75.3686	15.1564	Gudageri	Gudageri	Kundgol
211	75.4103	15.1564	Sulthanapura	Harlapura	Kundgol
212	75.2642	15.1566	Bu. Tharlagatta	Bu.Tarlaggatti	Kundgol
213	75.2064	15.1569	Khubihala	Kubihal	Kundgol
214	75.2217	15.1574	Khubihala	Kubihal	Kundgol
215	75.3424	15.1581	Gudageri	Gudageri	Kundgol
216	75.2462	15.1581	Bu. Koppa	Bu.Tarlaggatti	Kundgol
217	75.2383	15.1581	Bu. Koppa	Bu.Tarlaggatti	Kundgol
218	75.3975	15.1581	Sulthanapura	Harlapura	Kundgol
219	75.2832	15.1582	Hireharakuni	Hireharakuni	Kundgol
220	75.1819	15.1587	Vitalapura	Guruvinahalli	Kundgol
221	75.2698	15.1588	Bu. Tharlagatta	Bu.Tarlaggatti	Kundgol
222	75.3246	15.1589	Samsi	Saunshi	Kundgol
223	75.2543	15.1590	Bu. Tharlagatta	Bu.Tarlaggatti	Kundgol
224	75.3769	15.1592	Pashupathihala	Pashupathihala	Kundgol
225	75.3155	15.1592	Samsi	Saunshi	Kundgol
226	75.3541	15.1593	Gudageri	Gudageri	Kundgol
227	75.2025	15.1595	Khubihala	Kubihal	Kundgol
228	75.2602	15.1602	Bu. Tharlagatta	Bu.Tarlaggatti	Kundgol
229	75.4043	15.1608	Sulthanapura	Harlapura	Kundgol
230	75.2145	15.1610	Khubihala	Kubihal	Kundgol
231	75.1889	15.1613	Vitalapura	Guruvinahalli	Kundgol
232	75.2929	15.1613	Hireharakuni	Hireharakuni	Kundgol
233	75.1725	15.1617	Hosakatti	Ramanakoppa	Kundgol
234	75.2094	15.1621	Khubihala	Kubihal	Kundgol
235	75.3291	15.1623	Samsi	Saunshi	Kundgol
236	75.2295	15.1624	Khubihala	Kubihal	Kundgol
237	75.1780	15.1624	Hosakatti	Ramanakoppa	Kundgol
238	75.3083	15.1626	Hireharakuni	Hireharakuni	Kundgol
239	75.3985	15.1626	Sulthanapura	Harlapura	Kundgol
240	75.3607	15.1632	Pashupathihala	Pashupathihala	Kundgol
241	75.2722	15.1634	Bu. Tharlagatta	Bu.Tarlaggatti	Kundgol
242	75.2818	15.1642	Hireharakuni	Hireharakuni	Kundgol
243	75.2418	15.1643	Bu. Koppa	Bu.Tarlaggatti	Kundgol
244	75.3211	15.1644	Samsi	Saunshi	Kundgol
245	75.3338	15.1645	Samsi	Saunshi	Kundgol
246	75.2000	15.1648	Khubihala	Kubihal	Kundgol
247	75.2336	15.1657	Khubihala	Kubihal	Kundgol
248	75.3875	15.1658	Pashupathihala	Pashupathihala	Kundgol
249	75.3820	15.1658	Pashupathihala	Pashupathihala	Kundgol
250	75.2206	15.1660	Khubihala	Kubihal	Kundgol
251	75.2950	15.1661	Hireharakuni	Hireharakuni	Kundgol
252	75.3108	15.1668	Hireharakuni	Hireharakuni	Kundgol
253	75.3418	15.1669	Samsi	Saunshi	Kundgol

254	75.1660	15.1673	Hosakatti	Ramanakoppa	Kundgol
255	75.2826	15.1674	Hireharakuni	Hireharakuni	Kundgol
256	75.2588	15.1679	Bu. Tharlagatta	Bu.Tarlaggatti	Kundgol
257	75.2452	15.1679	Kamadolli	Kamadolli	Kundgol
258	75.2069	15.1685	Khubihala	Kubihal	Kundgol
259	75.2726	15.1690	Bu. Tharlagatta	Bu.Tarlaggatti	Kundgol
260	75.3258	15.1691	Samsi	Saunshi	Kundgol
261	75.1752	15.1691	Yaliwala	Yeliwala	Kundgol
262	75.2506	15.1696	Kamadolli	Kamadolli	Kundgol
263	75.2277	15.1701	Khubihala	Kubihal	Kundgol
264	75.3905	15.1701	Sulthanapura	Harlapura	Kundgol
265	75.3735	15.1707	Pashupathihala	Pashupathihala	Kundgol
266	75.2801	15.1713	Hireharakuni	Hireharakuni	Kundgol
267	75.3396	15.1717	Samsi	Saunshi	Kundgol
268	75.3483	15.1719	Samsi	Saunshi	Kundgol
269	75.3330	15.1719	Samsi	Saunshi	Kundgol
270	75.3619	15.1720	Pashupathihala	Pashupathihala	Kundgol
271	75.2151	15.1722	Khubihala	Kubihal	Kundgol
272	75.2982	15.1723	Hireharakuni	Hireharakuni	Kundgol
273	75.3157	15.1730	Samsi	Saunshi	Kundgol
274	75.3839	15.1731	Pashupathihala	Pashupathihala	Kundgol
275	75.2070	15.1736	Yaliwala	Yeliwala	Kundgol
276	75.3087	15.1744	Hireharakuni	Hireharakuni	Kundgol
277	75.2895	15.1745	Hireharakuni	Hireharakuni	Kundgol
278	75.2558	15.1746	Kamadolli	Kamadolli	Kundgol
279	75.3959	15.1747	Yare Bhudihala	Yarebudihal	Kundgol
280	75.1708	15.1750	Yaliwala	Yeliwala	Kundgol
281	75.2347	15.1753	Khubihala	Kubihal	Kundgol
282	75.2406	15.1755	Kamadolli	Kamadolli	Kundgol
283	75.2292	15.1756	Khubihala	Kubihal	Kundgol
284	75.3465	15.1756	Samsi	Saunshi	Kundgol
285	75.2482	15.1758	Kamadolli	Kamadolli	Kundgol
286	75.1860	15.1759	Yaliwala	Yeliwala	Kundgol
287	75.2785	15.1761	Hireharakuni	Hireharakuni	Kundgol
288	75.3883	15.1764	Pashupathihala	Pashupathihala	Kundgol
289	75.2028	15.1771	Yaliwala	Yeliwala	Kundgol
290	75.3746	15.1774	Pashupathihala	Pashupathihala	Kundgol
291	75.3287	15.1775	Samsi	Saunshi	Kundgol
292	75.3799	15.1777	Pashupathihala	Pashupathihala	Kundgol
293	75.2738	15.1778	Hireharakuni	Hireharakuni	Kundgol
294	75.1803	15.1780	Yaliwala	Yeliwala	Kundgol
295	75.2236	15.1787	Khubihala	Kubihal	Kundgol
296	75.2645	15.1788	Chikkaharakuni	Hireharakuni	Kundgol
297	75.3360	15.1789	Samsi	Saunshi	Kundgol

298	75.3594	15.1790	Pashupathihala	Pashupathihala	Kundgol
299	75.2962	15.1793	Samsi	Saunshi	Kundgol
300	75.3211	15.1796	Samsi	Saunshi	Kundgol
301	75.2305	15.1799	Khubihala	Kubihal	Kundgol
302	75.2870	15.1799	Hireharakuni	Hireharakuni	Kundgol
303	75.3449	15.1799	Samsi	Saunshi	Kundgol
304	75.2761	15.1812	Chikkaharakuni	Hireharakuni	Kundgol
305	75.3836	15.1818	Yare Bhudhahala	Yarebudihal	Kundgol
306	75.1757	15.1818	Yaliwala	Yeliwala	Kundgol
307	75.2233	15.1820	Khubihala	Kubihal	Kundgol
308	75.1950	15.1823	Yaliwala	Yeliwala	Kundgol
309	75.1861	15.1824	Yaliwala	Yeliwala	Kundgol
310	75.2499	15.1825	Kamadolli	Kamadolli	Kundgol
311	75.2056	15.1827	Yaliwala	Yeliwala	Kundgol
312	75.2100	15.1832	Yaliwala	Yeliwala	Kundgol
313	75.2659	15.1834	Chikkaharakuni	Hireharakuni	Kundgol
314	75.3113	15.1834	Samsi	Saunshi	Kundgol
315	75.2010	15.1835	Yaliwala	Yeliwala	Kundgol
316	75.3920	15.1835	Yare Bhudhahala	Yarebudihal	Kundgol
317	75.2381	15.1839	Kamadolli	Kamadolli	Kundgol
318	75.1710	15.1841	Yaliwala	Yeliwala	Kundgol
319	75.2848	15.1845	Hireharakuni	Hireharakuni	Kundgol
320	75.2791	15.1847	Chikkaharakuni	Hireharakuni	Kundgol
321	75.2586	15.1849	Kamadolli	Kamadolli	Kundgol
322	75.3429	15.1852	Samsi	Saunshi	Kundgol
323	75.1818	15.1853	Yaliwala	Yeliwala	Kundgol
324	75.2700	15.1855	Chikkaharakuni	Hireharakuni	Kundgol
325	75.3224	15.1856	Samsi	Saunshi	Kundgol
326	75.2959	15.1856	Samsi	Saunshi	Kundgol
327	75.3531	15.1857	Samsi	Saunshi	Kundgol
328	75.2292	15.1858	Devanuru+manasali	Devanur	Kundgol
329	75.2162	15.1865	Khubihala	Kubihal	Kundgol
330	75.3311	15.1867	Samsi	Saunshi	Kundgol
331	75.3763	15.1869	Yare Bhudhahala	Yarebudihal	Kundgol
332	75.2777	15.1877	Chikkaharakuni	Hireharakuni	Kundgol
333	75.2913	15.1891	Samsi	Saunshi	Kundgol
334	75.2736	15.1893	Chikkaharakuni	Hireharakuni	Kundgol
335	75.1989	15.1894	Yaliwala	Yeliwala	Kundgol
336	75.1835	15.1894	Yaliwala	Yeliwala	Kundgol
337	75.2529	15.1899	Kamadolli	Kamadolli	Kundgol
338	75.3165	15.1901	Samsi	Saunshi	Kundgol
339	75.2278	15.1902	Devanuru+manasali	Devanur	Kundgol
340	75.3910	15.1903	Yare Bhudhahala	Yarebudihal	Kundgol
341	75.1747	15.1906	Yaliwala	Yeliwala	Kundgol

342	75.2462	15.1906	Kamadolli	Kamadolli	Kundgol
343	75.2117	15.1907	Yaliwala	Yeliwala	Kundgol
344	75.2175	15.1910	Hanchinala	Kubihal	Kundgol
345	75.3006	15.1912	Samsi	Saunshi	Kundgol
346	75.2645	15.1912	Kamadolli	Kamadolli	Kundgol
347	75.3332	15.1913	Samsi	Saunshi	Kundgol
348	75.3623	15.1915	Yare Bhudhahala	Yarebudihal	Kundgol
349	75.3486	15.1917	Samsi	Saunshi	Kundgol
350	75.3841	15.1918	Yare Bhudhahala	Yarebudihal	Kundgol
351	75.2332	15.1921	Devanuru+manasali	Devanur	Kundgol
352	75.1810	15.1927	Yaliwala	Yeliwala	Kundgol
353	75.1935	15.1938	Yaliwala	Yeliwala	Kundgol
354	75.3261	15.1942	Samsi	Saunshi	Kundgol
355	75.1702	15.1942	Yaliwala	Yeliwala	Kundgol
356	75.3436	15.1946	Samsi	Saunshi	Kundgol
357	75.2809	15.1946	Kamadolli	Kamadolli	Kundgol
358	75.3061	15.1949	Samsi	Saunshi	Kundgol
359	75.3535	15.1949	Samsi	Saunshi	Kundgol
360	75.2539	15.1950	Kamadolli	Kamadolli	Kundgol
361	75.2738	15.1954	Kamadolli	Kamadolli	Kundgol
362	75.2878	15.1956	Samsi	Saunshi	Kundgol
363	75.2074	15.1962	Yaliwala	Yeliwala	Kundgol
364	75.3714	15.1963	Yare Bhudhahala	Yarebudihal	Kundgol
365	75.3152	15.1963	Samsi	Saunshi	Kundgol
366	75.2961	15.1969	Samsi	Saunshi	Kundgol
367	75.1779	15.1970	Inamkoppa	Betadur	Kundgol
368	75.1877	15.1977	Yaliwala	Yeliwala	Kundgol
369	75.2486	15.1979	Kamadolli	Kamadolli	Kundgol
370	75.2413	15.1979	Kamadolli	Kamadolli	Kundgol
371	75.3773	15.1988	Yare Bhudhahala	Yarebudihal	Kundgol
372	75.3392	15.1990	Samsi	Saunshi	Kundgol
373	75.2752	15.1998	Kamadolli	Kamadolli	Kundgol
374	75.2661	15.2000	Kamadolli	Kamadolli	Kundgol
375	75.3332	15.2001	Samsi	Saunshi	Kundgol
376	75.3219	15.2006	Samsi	Saunshi	Kundgol
377	75.3864	15.2015	Yare Bhudhahala	Yarebudihal	Kundgol
378	75.2592	15.2015	Kamadolli	Kamadolli	Kundgol
379	75.2030	15.2016	Yaliwala	Yeliwala	Kundgol
380	75.3101	15.2016	Samsi	Saunshi	Kundgol
381	75.2151	15.2019	Hanchinala	Kubihal	Kundgol
382	75.2858	15.2021	Samsi	Saunshi	Kundgol
383	75.1754	15.2021	Inamkoppa	Betadur	Kundgol
384	75.3428	15.2023	Samsi	Saunshi	Kundgol
385	75.2253	15.2023	Devanuru+manasali	Devanur	Kundgol

386	75.3641	15.2028	Yare Bhudhahala	Yarebudihal	Kundgol
387	75.2955	15.2033	Samsi	Saunshi	Kundgol
388	75.2482	15.2035	Kamadolli	Kamadolli	Kundgol
389	75.3056	15.2042	Samsi	Saunshi	Kundgol
390	75.1829	15.2044	Inamkoppa	Betadur	Kundgol
391	75.2403	15.2046	Kamadolli	Kamadolli	Kundgol
392	75.2789	15.2050	Kamadolli	Kamadolli	Kundgol
393	75.4067	15.2050	Hiregunjala	Hiregunjal	Kundgol
394	75.2163	15.2052	Devanuru+manasali	Devanur	Kundgol
395	75.3706	15.2053	Yare Bhudhahala	Yarebudihal	Kundgol
396	75.4301	15.2063	Chikkagunjala	Hiregunjal	Kundgol
397	75.3234	15.2064	Samsi	Saunshi	Kundgol
398	75.3170	15.2064	Samsi	Saunshi	Kundgol
399	75.3954	15.2066	Yare Bhudhahala	Yarebudihal	Kundgol
400	75.2691	15.2067	Kamadolli	Kamadolli	Kundgol
401	75.3602	15.2071	Yare Bhudhahala	Yarebudihal	Kundgol
402	75.3515	15.2071	Yare Bhudhahala	Yarebudihal	Kundgol
403	75.2525	15.2077	Kamadolli	Kamadolli	Kundgol
404	75.1880	15.2079	Inamkoppa	Betadur	Kundgol
405	75.3332	15.2080	Samsi	Saunshi	Kundgol
406	75.1962	15.2085	Yaliwala	Yeliwala	Kundgol
407	75.3832	15.2085	Yare Bhudhahala	Yarebudihal	Kundgol
408	75.4202	15.2088	Chikkagunjala	Hiregunjal	Kundgol
409	75.3148	15.2090	Samsi	Saunshi	Kundgol
410	75.2960	15.2090	Samsi	Saunshi	Kundgol
411	75.2583	15.2094	Kamadolli	Kamadolli	Kundgol
412	75.2082	15.2100	Betadura	Betadur	Kundgol
413	75.2460	15.2102	Kamadolli	Kamadolli	Kundgol
414	75.3769	15.2105	Yare Bhudhahala	Yarebudihal	Kundgol
415	75.2843	15.2111	Samsi	Saunshi	Kundgol
416	75.3091	15.2112	Samsi	Saunshi	Kundgol
417	75.3231	15.2119	Samsi	Saunshi	Kundgol
418	75.3017	15.2119	Samsi	Saunshi	Kundgol
419	75.4443	15.2120	Chikkagunjala	Hiregunjal	Kundgol
420	75.3441	15.2123	Samsi	Saunshi	Kundgol
421	75.2650	15.2124	Kamadolli	Kamadolli	Kundgol
422	75.4291	15.2130	Chikkagunjala	Hiregunjal	Kundgol
423	75.2157	15.2130	Devanuru+manasali	Devanur	Kundgol
424	75.3691	15.2132	Yare Bhudhahala	Yarebudihal	Kundgol
425	75.2724	15.2132	Kamadolli	Kamadolli	Kundgol
426	75.3617	15.2136	Yare Bhudhahala	Yarebudihal	Kundgol
427	75.2786	15.2147	Kamadolli	Kamadolli	Kundgol
428	75.1899	15.2148	Betadura	Betadur	Kundgol
429	75.1828	15.2150	Inamkoppa	Betadur	Kundgol

430	75.4246	15.2155	Chikkagunjala	Hiregunjal	Kundgol
431	75.4153	15.2159	Chikkagunjala	Hiregunjal	Kundgol
432	75.2025	15.2159	Betadura	Betadur	Kundgol
433	75.3182	15.2162	Samsi	Saunshi	Kundgol
434	75.2995	15.2162	Samsi	Saunshi	Kundgol
435	75.2393	15.2163	Devanuru+manasali	Devanur	Kundgol
436	75.3114	15.2163	Samsi	Saunshi	Kundgol
437	75.2928	15.2167	Samsi	Saunshi	Kundgol
438	75.4362	15.2168	Chikkagunjala	Hiregunjal	Kundgol
439	75.2531	15.2170	Kamadolli	Kamadolli	Kundgol
440	75.1971	15.2171	Betadura	Betadur	Kundgol
441	75.3365	15.2171	Samsi	Saunshi	Kundgol
442	75.2145	15.2182	Devanuru+manasali	Devanur	Kundgol
443	75.2285	15.2186	Devanuru+manasali	Devanur	Kundgol
444	75.3661	15.2187	Yare Bhudhahala	Yarebudihal	Kundgol
445	75.4326	15.2189	Chikkagunjala	Hiregunjal	Kundgol
446	75.4086	15.2190	Hiregunjala	Hiregunjal	Kundgol
447	75.2828	15.2193	Samsi	Saunshi	Kundgol
448	75.3868	15.2194	Yare Bhudhahala	Yarebudihal	Kundgol
449	75.3775	15.2198	Yare Bhudhahala	Yarebudihal	Kundgol
450	75.3081	15.2200	Samsi	Saunshi	Kundgol
451	75.3017	15.2203	Samsi	Saunshi	Kundgol
452	75.2756	15.2203	Kamadolli	Kamadolli	Kundgol
453	75.3246	15.2205	Samsi	Saunshi	Kundgol
454	75.3586	15.2208	Yare Bhudhahala	Yarebudihal	Kundgol
455	75.1804	15.2209	Betadura	Betadur	Kundgol
456	75.2618	15.2214	Kamadolli	Kamadolli	Kundgol
457	75.3694	15.2220	Yare Bhudhahala	Yarebudihal	Kundgol
458	75.2441	15.2222	Bilibala	Devanur	Kundgol
459	75.4165	15.2224	Chikkagunjala	Hiregunjal	Kundgol
460	75.3527	15.2228	Yare Bhudhahala	Yarebudihal	Kundgol
461	75.2687	15.2228	Kamadolli	Kamadolli	Kundgol
462	75.2234	15.2228	Devanuru+manasali	Devanur	Kundgol
463	75.2031	15.2228	Betadura	Betadur	Kundgol
464	75.4240	15.2234	Chikkagunjala	Hiregunjal	Kundgol
465	75.2844	15.2239	Samsi	Saunshi	Kundgol
466	75.1942	15.2247	Betadura	Betadur	Kundgol
467	75.3209	15.2248	Samsi	Saunshi	Kundgol
468	75.2082	15.2249	Betadura	Betadur	Kundgol
469	75.2956	15.2258	Samsi	Saunshi	Kundgol
470	75.3645	15.2260	Yare Bhudhahala	Yarebudihal	Kundgol
471	75.2494	15.2260	Bilibala	Devanur	Kundgol
472	75.3094	15.2265	Samsi	Saunshi	Kundgol
473	75.4068	15.2266	Hiregunjala	Hiregunjal	Kundgol

474	75.4143	15.2272	Chikkagunjala	Hiregunjal	Kundgol
475	75.3960	15.2274	Hiregunjala	Hiregunjal	Kundgol
476	75.2766	15.2277	Shirura	Shirur	Kundgol
477	75.3511	15.2277	Samsi	Saunshi	Kundgol
478	75.3288	15.2281	Samsi	Saunshi	Kundgol
479	75.2689	15.2283	Shirura	Shirur	Kundgol
480	75.2396	15.2284	Bilibala	Devanur	Kundgol
481	75.1822	15.2288	Betadura	Betadur	Kundgol
482	75.3809	15.2290	Yare Bhudhahala	Yarebudihal	Kundgol
483	75.2314	15.2302	Kundhagola	Kundgol	Kundgol
484	75.2125	15.2303	Devanuru+manasali	Devanur	Kundgol
485	75.3180	15.2303	Samsi	Saunshi	Kundgol
486	75.3901	15.2305	Hiregunjala	Hiregunjal	Kundgol
487	75.3720	15.2306	Yare Bhudhahala	Yarebudihal	Kundgol
488	75.1989	15.2308	Betadura	Betadur	Kundgol
489	75.2250	15.2310	Devanuru+manasali	Devanur	Kundgol
490	75.2978	15.2313	Samsi	Saunshi	Kundgol
491	75.3612	15.2317	Yare Bhudhahala	Yarebudihal	Kundgol
492	75.2169	15.2320	Devanuru+manasali	Devanur	Kundgol
493	75.2739	15.2321	Shirura	Shirur	Kundgol
494	75.1851	15.2322	Betadura	Betadur	Kundgol
495	75.3106	15.2325	Samsi	Saunshi	Kundgol
496	75.1907	15.2326	Betadura	Betadur	Kundgol
497	75.2072	15.2331	Betadura	Betadur	Kundgol
498	75.2480	15.2333	Kundhagola	Kundgol	Kundgol
499	75.3237	15.2334	Samsi	Saunshi	Kundgol
500	75.3328	15.2339	Samsi	Saunshi	Kundgol
501	75.4033	15.2343	Hiregunjala	Hiregunjal	Kundgol
502	75.3958	15.2343	Hiregunjala	Hiregunjal	Kundgol
503	75.2579	15.2345	Kundhagola	Kundgol	Kundgol
504	75.2903	15.2347	Shirura	Shirur	Kundgol
505	75.3687	15.2350	Yare Bhudhahala	Yarebudihal	Kundgol
506	75.2346	15.2354	Kundhagola	Kundgol	Kundgol
507	75.2807	15.2357	Shirura	Shirur	Kundgol
508	75.3507	15.2358	Samsi	Saunshi	Kundgol
509	75.1838	15.2362	Betadura	Betadur	Kundgol
510	75.2419	15.2370	Kundhagola	Kundgol	Kundgol
511	75.2482	15.2373	Kundhagola	Kundgol	Kundgol
512	75.2086	15.2373	Betadura	Betadur	Kundgol
513	75.2295	15.2375	Kundhagola	Kundgol	Kundgol
514	75.2169	15.2377	Kundhagola	Kundgol	Kundgol
515	75.2597	15.2381	Kundhagola	Kundgol	Kundgol
516	75.3054	15.2384	Shirura	Shirur	Kundgol
517	75.4102	15.2385	Chikkagunjala	Hiregunjal	Kundgol

518	75.3580	15.2386	Yare Bhudhahala	Yarebudihal	Kundgol
519	75.1962	15.2387	Betadura	Betadur	Kundgol
520	75.3286	15.2396	Samsi	Saunshi	Kundgol
521	75.3893	15.2399	Hiregunjala	Hiregunjal	Kundgol
522	75.3814	15.2403	Hiregunjala	Hiregunjal	Kundgol
523	75.2488	15.2404	Kundhagola	Kundgol	Kundgol
524	75.2711	15.2407	Shirura	Shirur	Kundgol
525	75.2202	15.2410	Kundhagola	Kundgol	Kundgol
526	75.3656	15.2412	Yare Bhudhahala	Yarebudihal	Kundgol
527	75.3531	15.2412	Samsi	Saunshi	Kundgol
528	75.3170	15.2413	Shirura	Shirur	Kundgol
529	75.2013	15.2417	Betadura	Betadur	Kundgol
530	75.3101	15.2423	Shirura	Shirur	Kundgol
531	75.2368	15.2433	Kundhagola	Kundgol	Kundgol
532	75.4033	15.2435	Hiregunjala	Hiregunjal	Kundgol
533	75.2849	15.2436	Shirura	Shirur	Kundgol
534	75.2773	15.2438	Shirura	Shirur	Kundgol
535	75.2427	15.2440	Kundhagola	Kundgol	Kundgol
536	75.2565	15.2444	Kundhagola	Kundgol	Kundgol
537	75.2133	15.2450	Kundhagola	Kundgol	Kundgol
538	75.3610	15.2453	Yare Bhudhahala	Yarebudihal	Kundgol
539	75.2035	15.2454	Betadura	Betadur	Kundgol
540	75.4085	15.2454	Hiregunjala	Hiregunjal	Kundgol
541	75.2212	15.2456	Kundhagola	Kundgol	Kundgol
542	75.3966	15.2456	Hiregunjala	Hiregunjal	Kundgol
543	75.2901	15.2457	Shirura	Shirur	Kundgol
544	75.3504	15.2459	Samsi	Saunshi	Kundgol
545	75.2332	15.2469	Kundhagola	Kundgol	Kundgol
546	75.3878	15.2470	Hiregunjala	Hiregunjal	Kundgol
547	75.3141	15.2482	Shirura	Shirur	Kundgol
548	75.2500	15.2485	Kundhagola	Kundgol	Kundgol
549	75.2869	15.2488	Shirura	Shirur	Kundgol
550	75.3032	15.2495	Shirura	Shirur	Kundgol
551	75.4028	15.2500	Bagawada	Hiregunjal	Kundgol
552	75.3200	15.2501	Shirura	Shirur	Kundgol
553	75.2167	15.2502	Kundhagola	Kundgol	Kundgol
554	75.3477	15.2503	Chakalatti	Chakalabbi	Kundgol
555	75.2100	15.2504	Kundhagola	Kundgol	Kundgol
556	75.3428	15.2504	Chakalatti	Chakalabbi	Kundgol
557	75.2254	15.2508	Kundhagola	Kundgol	Kundgol
558	75.3797	15.2508	Hiregunjala	Hiregunjal	Kundgol
559	75.2777	15.2509	Kundhagola	Kundgol	Kundgol
560	75.2370	15.2513	Kundhagola	Kundgol	Kundgol
561	75.3579	15.2518	Chakalatti	Chakalabbi	Kundgol

562	75.2037	15.2521	Kundhagola	Kundgol	Kundgol
563	75.3340	15.2526	Chakalatti	Chakalabbi	Kundgol
564	75.2589	15.2527	Kundhagola	Kundgol	Kundgol
565	75.2419	15.2531	Kundhagola	Kundgol	Kundgol
566	75.2701	15.2532	Kundhagola	Kundgol	Kundgol
567	75.3911	15.2533	Hiregunjala	Hiregunjal	Kundgol
568	75.3774	15.2536	Baradhawada	Chakalabbi	Kundgol
569	75.4075	15.2538	Bagawada	Hiregunjal	Kundgol
570	75.3990	15.2548	Bagawada	Hiregunjal	Kundgol
571	75.3096	15.2550	Shirura	Shirur	Kundgol
572	75.2502	15.2554	Kundhagola	Kundgol	Kundgol
573	75.3705	15.2558	Baradhawada	Chakalabbi	Kundgol
574	75.3431	15.2562	Chakalatti	Chakalabbi	Kundgol
575	75.3507	15.2564	Chakalatti	Chakalabbi	Kundgol
576	75.2987	15.2565	Shirura	Shirur	Kundgol
577	75.3271	15.2567	Chakalatti	Chakalabbi	Kundgol
578	75.2821	15.2567	Shirura	Shirur	Kundgol
579	75.2088	15.2569	Kundhagola	Kundgol	Kundgol
580	75.3384	15.2571	Chakalatti	Chakalabbi	Kundgol
581	75.2417	15.2582	Kundhagola	Kundgol	Kundgol
582	75.2360	15.2586	Kundhagola	Kundgol	Kundgol
583	75.2210	15.2586	Kundhagola	Kundgol	Kundgol
584	75.2581	15.2590	Kundhagola	Kundgol	Kundgol
585	75.2161	15.2592	Kundhagola	Kundgol	Kundgol
586	75.3840	15.2594	Baradhawada	Chakalabbi	Kundgol
587	75.2869	15.2598	Shirura	Shirur	Kundgol
588	75.3787	15.2599	Baradhawada	Chakalabbi	Kundgol
589	75.3050	15.2602	Basapura	Hirenarhi	Kundgol
590	75.3451	15.2602	Chakalatti	Chakalabbi	Kundgol
591	75.2656	15.2603	Kundhagola	Kundgol	Kundgol
592	75.3882	15.2603	Baradhawada	Chakalabbi	Kundgol
593	75.4093	15.2605	Bagawada	Hiregunjal	Kundgol
594	75.2719	15.2607	Kundhagola	Kundgol	Kundgol
595	75.2500	15.2609	Kundhagola	Kundgol	Kundgol
596	75.3340	15.2614	Chakalatti	Chakalabbi	Kundgol
597	75.3732	15.2630	Baradhawada	Chakalabbi	Kundgol
598	75.2096	15.2634	Pura	Gudenakatti	Kundgol
599	75.3250	15.2635	Hirenarhi	Hirenarhi	Kundgol
600	75.2997	15.2636	Basapura	Hirenarhi	Kundgol
601	75.2342	15.2640	Pura	Gudenakatti	Kundgol
602	75.2778	15.2641	Kundhagola	Kundgol	Kundgol
603	75.2419	15.2642	Pura	Gudenakatti	Kundgol
604	75.3819	15.2646	Baradhawada	Chakalabbi	Kundgol
605	75.3202	15.2650	Hirenarhi	Hirenarhi	Kundgol

606	75.2613	15.2653	Kundhagola	Kundgol	Kundgol
607	75.3631	15.2654	Baradhawada	Chakalabbi	Kundgol
608	75.3520	15.2655	Chakalatti	Chakalabbi	Kundgol
609	75.2268	15.2658	Pura	Gudenakatti	Kundgol
610	75.3328	15.2660	Chakalatti	Chakalabbi	Kundgol
611	75.3121	15.2670	Hirenarhi	Hirenarhi	Kundgol
612	75.2386	15.2674	Pura	Gudenakatti	Kundgol
613	75.2965	15.2693	Hirenarhi	Hirenarhi	Kundgol
614	75.3704	15.2698	Baradhawada	Chakalabbi	Kundgol
615	75.2197	15.2701	Pura	Gudenakatti	Kundgol
616	75.2695	15.2703	Kundhagola	Kundgol	Kundgol
617	75.2116	15.2703	Pura	Gudenakatti	Kundgol
618	75.2882	15.2708	Hirenarhi	Hirenarhi	Kundgol
619	75.3761	15.2711	Baradhawada	Chakalabbi	Kundgol
620	75.3888	15.2713	Baradhawada	Chakalabbi	Kundgol
621	75.3598	15.2713	Baradhawada	Chakalabbi	Kundgol
622	75.3444	15.2719	Chakalatti	Chakalabbi	Kundgol
623	75.3113	15.2722	Hirenarhi	Hirenarhi	Kundgol
624	75.3330	15.2724	Hirenarhi	Hirenarhi	Kundgol
625	75.2278	15.2726	Pura	Gudenakatti	Kundgol
626	75.3813	15.2736	Baradhawada	Chakalabbi	Kundgol
627	75.2948	15.2742	Hirenarhi	Hirenarhi	Kundgol
628	75.2477	15.2743	Kundhagola	Kundgol	Kundgol
629	75.2648	15.2745	Kundhagola	Kundgol	Kundgol
630	75.3249	15.2746	Hirenarhi	Hirenarhi	Kundgol
631	75.3986	15.2747	Baradhawada	Chakalabbi	Kundgol
632	75.3535	15.2750	Hirenarhi	Hirenarhi	Kundgol
633	75.2770	15.2752	Benakanahalli	Hirenarhi	Kundgol
634	75.2356	15.2755	Pura	Gudenakatti	Kundgol
635	75.3646	15.2757	Baradhawada	Chakalabbi	Kundgol
636	75.2055	15.2766	Pura	Gudenakatti	Kundgol
637	75.2193	15.2772	Pura	Gudenakatti	Kundgol
638	75.2579	15.2775	Kundhagola	Kundgol	Kundgol
639	75.3813	15.2784	Baradhawada	Chakalabbi	Kundgol
640	75.3413	15.2784	Hirenarhi	Hirenarhi	Kundgol
641	75.3074	15.2785	Hirenarhi	Hirenarhi	Kundgol
642	75.3706	15.2786	Baradhawada	Chakalabbi	Kundgol
643	75.2512	15.2787	Kundhagola	Kundgol	Kundgol
644	75.2696	15.2791	Kundhagola	Kundgol	Kundgol
645	75.2818	15.2798	Benakanahalli	Hirenarhi	Kundgol
646	75.2410	15.2799	Pura	Gudenakatti	Kundgol
647	75.3205	15.2801	Hirenarhi	Hirenarhi	Kundgol
648	75.3919	15.2807	Kodliwada	Rottigawada	Kundgol
649	75.2929	15.2809	Hirenarhi	Hirenarhi	Kundgol

650	75.2175	15.2818	Pura	Gudenakatti	Kundgol
651	75.2110	15.2818	Pura	Gudenakatti	Kundgol
652	75.3973	15.2828	Kodliwada	Rottigawada	Kundgol
653	75.3549	15.2832	Konkanakurahatti	Rottigawada	Kundgol
654	75.3752	15.2832	Konkanakurahatti	Rottigawada	Kundgol
655	75.2715	15.2833	Benakanahalli	Hirenarhi	Kundgol
656	75.2317	15.2835	Pura	Gudenakatti	Kundgol
657	75.2025	15.2839	Pura	Gudenakatti	Kundgol
658	75.3131	15.2839	Hirenarhi	Hirenarhi	Kundgol
659	75.3699	15.2842	Konkanakurahatti	Rottigawada	Kundgol
660	75.2463	15.2843	Kundhagola	Kundgol	Kundgol
661	75.2638	15.2844	Kundhagola	Kundgol	Kundgol
662	75.3431	15.2859	Chikkanarhi	Yaraguppi	Kundgol
663	75.3271	15.2861	Chikkanarhi	Yaraguppi	Kundgol
664	75.2516	15.2862	Kundhagola	Kundgol	Kundgol
665	75.2394	15.2862	Pura	Gudenakatti	Kundgol
666	75.4065	15.2864	Kodliwada	Rottigawada	Kundgol
667	75.2802	15.2867	Benakanahalli	Hirenarhi	Kundgol
668	75.2911	15.2869	Benakanahalli	Hirenarhi	Kundgol
669	75.3904	15.2874	Kodliwada	Rottigawada	Kundgol
670	75.3047	15.2878	Chikkanarhi	Yaraguppi	Kundgol
671	75.3175	15.2880	Chikkanarhi	Yaraguppi	Kundgol
672	75.3547	15.2889	Konkanakurahatti	Rottigawada	Kundgol
673	75.2560	15.2890	Kundhagola	Kundgol	Kundgol
674	75.3669	15.2895	Konkanakurahatti	Rottigawada	Kundgol
675	75.2725	15.2896	Benakanahalli	Hirenarhi	Kundgol
676	75.4010	15.2902	Kodliwada	Rottigawada	Kundgol
677	75.2325	15.2906	Pura	Gudenakatti	Kundgol
678	75.2008	15.2906	Pura	Gudenakatti	Kundgol
679	75.2167	15.2908	Pura	Gudenakatti	Kundgol
680	75.3459	15.2912	Chikkanarhi	Yaraguppi	Kundgol
681	75.3740	15.2914	Konkanakurahatti	Rottigawada	Kundgol
682	75.3378	15.2926	Chikkanarhi	Yaraguppi	Kundgol
683	75.2672	15.2930	Gudenakatti	Gudenakatti	Kundgol
684	75.3104	15.2930	Chikkanarhi	Yaraguppi	Kundgol
685	75.3158	15.2933	Chikkanarhi	Yaraguppi	Kundgol
686	75.4069	15.2940	Kodliwada	Rottigawada	Kundgol
687	75.2108	15.2940	Pura	Gudenakatti	Kundgol
688	75.2907	15.2942	Mullalli	Yaraguppi	Kundgol
689	75.2217	15.2944	Pura	Gudenakatti	Kundgol
690	75.2039	15.2952	Pura	Gudenakatti	Kundgol
691	75.2516	15.2955	Gudenakatti	Gudenakatti	Kundgol
692	75.2363	15.2956	Pura	Gudenakatti	Kundgol
693	75.2615	15.2957	Kundhagola	Kundgol	Kundgol

694	75.2844	15.2959	Mullalli	Yaraguppi	Kundgol
695	75.3321	15.2960	Chikkanarathi	Yaraguppi	Kundgol
696	75.2475	15.2965	Gudenakatti	Gudenakatti	Kundgol
697	75.3567	15.2966	Konkanakurahatti	Rottigawada	Kundgol
698	75.3050	15.2966	Chikkanarathi	Yaraguppi	Kundgol
699	75.3883	15.2967	Kodliwada	Rottigawada	Kundgol
700	75.2708	15.2972	Gudenakatti	Gudenakatti	Kundgol
701	75.2408	15.2975	Gudenakatti	Gudenakatti	Kundgol
702	75.2952	15.2980	Mullalli	Yaraguppi	Kundgol
703	75.3748	15.2985	Rottigawada	Rottigawada	Kundgol
704	75.3514	15.2991	Konkanakurahatti	Rottigawada	Kundgol
705	75.2331	15.2996	Pura	Gudenakatti	Kundgol
706	75.2583	15.2997	Gudenakatti	Gudenakatti	Kundgol
707	75.2081	15.3002	Pura	Gudenakatti	Kundgol
708	75.3218	15.3010	Yaraguppe	Yaraguppi	Kundgol
709	75.2790	15.3011	Mullalli	Yaraguppi	Kundgol
710	75.3392	15.3014	Chikkanarathi	Yaraguppi	Kundgol
711	75.3855	15.3021	Rottigawada	Rottigawada	Kundgol
712	75.3467	15.3021	Chikkanarathi	Yaraguppi	Kundgol
713	75.2229	15.3025	Pura	Gudenakatti	Kundgol
714	75.2162	15.3042	Pura	Gudenakatti	Kundgol
715	75.2907	15.3043	Mullalli	Yaraguppi	Kundgol
716	75.2416	15.3044	Gudenakatti	Gudenakatti	Kundgol
717	75.2357	15.3046	Pura	Gudenakatti	Kundgol
718	75.3646	15.3050	Rottigawada	Rottigawada	Kundgol
719	75.3345	15.3050	Yaraguppe	Yaraguppi	Kundgol
720	75.2982	15.3050	Mullalli	Yaraguppi	Kundgol
721	75.2528	15.3053	Gudenakatti	Gudenakatti	Kundgol
722	75.2668	15.3055	Gudenakatti	Gudenakatti	Kundgol
723	75.2832	15.3058	Mullalli	Yaraguppi	Kundgol
724	75.3717	15.3059	Rottigawada	Rottigawada	Kundgol
725	75.3573	15.3059	Rottigawada	Rottigawada	Kundgol
726	75.3423	15.3062	Yaraguppe	Yaraguppi	Kundgol
727	75.3293	15.3071	Yaraguppe	Yaraguppi	Kundgol
728	75.2211	15.3074	Pura	Gudenakatti	Kundgol
729	75.3512	15.3086	Yaraguppe	Yaraguppi	Kundgol
730	75.2621	15.3089	Gudenakatti	Gudenakatti	Kundgol
731	75.2402	15.3089	Gudenakatti	Gudenakatti	Kundgol
732	75.3163	15.3095	Yaraguppe	Yaraguppi	Kundgol
733	75.2292	15.3097	Pura	Gudenakatti	Kundgol
734	75.2179	15.3101	Pura	Gudenakatti	Kundgol
735	75.2911	15.3107	Mullalli	Yaraguppi	Kundgol
736	75.2706	15.3112	Gudenakatti	Gudenakatti	Kundgol
737	75.3069	15.3114	Yaraguppe	Yaraguppi	Kundgol

738	75.2828	15.3125	Yarinarayanapura	Gudenakatti	Kundgol
739	75.3372	15.3127	Yaraguppe	Yaraguppi	Kundgol
740	75.2562	15.3128	Gudenakatti	Gudenakatti	Kundgol
741	75.2970	15.3133	Yarinarayanapura	Gudenakatti	Kundgol
742	75.2333	15.3137	Gudenakatti	Gudenakatti	Kundgol
743	75.3463	15.3138	Yaraguppe	Yaraguppi	Kundgol
744	75.3782	15.3145	Rottigawada	Rottigawada	Kundgol
745	75.3203	15.3146	Yaraguppe	Yaraguppi	Kundgol
746	75.3850	15.3160	Rottigawada	Rottigawada	Kundgol
747	75.2432	15.3162	Gudenakatti	Gudenakatti	Kundgol
748	75.2907	15.3164	Yarinarayanapura	Gudenakatti	Kundgol
749	75.2645	15.3164	Gudenakatti	Gudenakatti	Kundgol
750	75.2375	15.3166	Gudenakatti	Gudenakatti	Kundgol
751	75.3534	15.3172	Yaraguppe	Yaraguppi	Kundgol
752	75.2312	15.3174	Pura	Gudenakatti	Kundgol
753	75.3341	15.3177	Yaraguppe	Yaraguppi	Kundgol
754	75.3430	15.3196	Yaraguppe	Yaraguppi	Kundgol
755	75.3148	15.3196	Yaraguppe	Yaraguppi	Kundgol
756	75.2787	15.3200	Yarinarayanapura	Gudenakatti	Kundgol
757	75.3804	15.3203	Rottigawada	Rottigawada	Kundgol
758	75.3601	15.3205	Rottigawada	Rottigawada	Kundgol
759	75.2899	15.3209	Yarinarayanapura	Gudenakatti	Kundgol
760	75.2680	15.3210	Gudenakatti	Gudenakatti	Kundgol
761	75.2599	15.3216	Gudenakatti	Gudenakatti	Kundgol
762	75.3392	15.3224	Yaraguppe	Yaraguppi	Kundgol
763	75.3290	15.3228	Yaraguppe	Yaraguppi	Kundgol
764	75.3031	15.3240	Yarinarayanapura	Gudenakatti	Kundgol
765	75.2834	15.3244	Yarinarayanapura	Gudenakatti	Kundgol
766	75.3108	15.3246	Yaraguppe	Yaraguppi	Kundgol
767	75.3509	15.3267	Yaraguppe	Yaraguppi	Kundgol
768	75.3231	15.3278	Yaraguppe	Yaraguppi	Kundgol
769	75.3355	15.3288	Yaraguppe	Yaraguppi	Kundgol
770	75.3146	15.3301	Yaraguppe	Yaraguppi	Kundgol
771	75.3398	15.3324	Yaraguppe	Yaraguppi	Kundgol
772	75.2959	15.3334	Yaraguppe	Yaraguppi	Kundgol
773	75.3259	15.3350	Yaraguppe	Yaraguppi	Kundgol
774	75.3141	15.3356	Yaraguppe	Yaraguppi	Kundgol
775	75.3048	15.3368	Yaraguppe	Yaraguppi	Kundgol
776	75.3207	15.3383	Yaraguppe	Yaraguppi	Kundgol
777	75.3434	15.3391	Yaraguppe	Yaraguppi	Kundgol
778	75.3315	15.3414	Yaraguppe	Yaraguppi	Kundgol
779	75.3404	15.3467	Yaraguppe	Yaraguppi	Kundgol

(Source: Master Plan, CGWB, 2020. It is likely that the number of structures proposed may vary depending upon the ground truth verification and feasibility criteria)