

Government of Karnataka
Rural Drinking water & Sanitation Department

Swachh Bharat Mission (G)

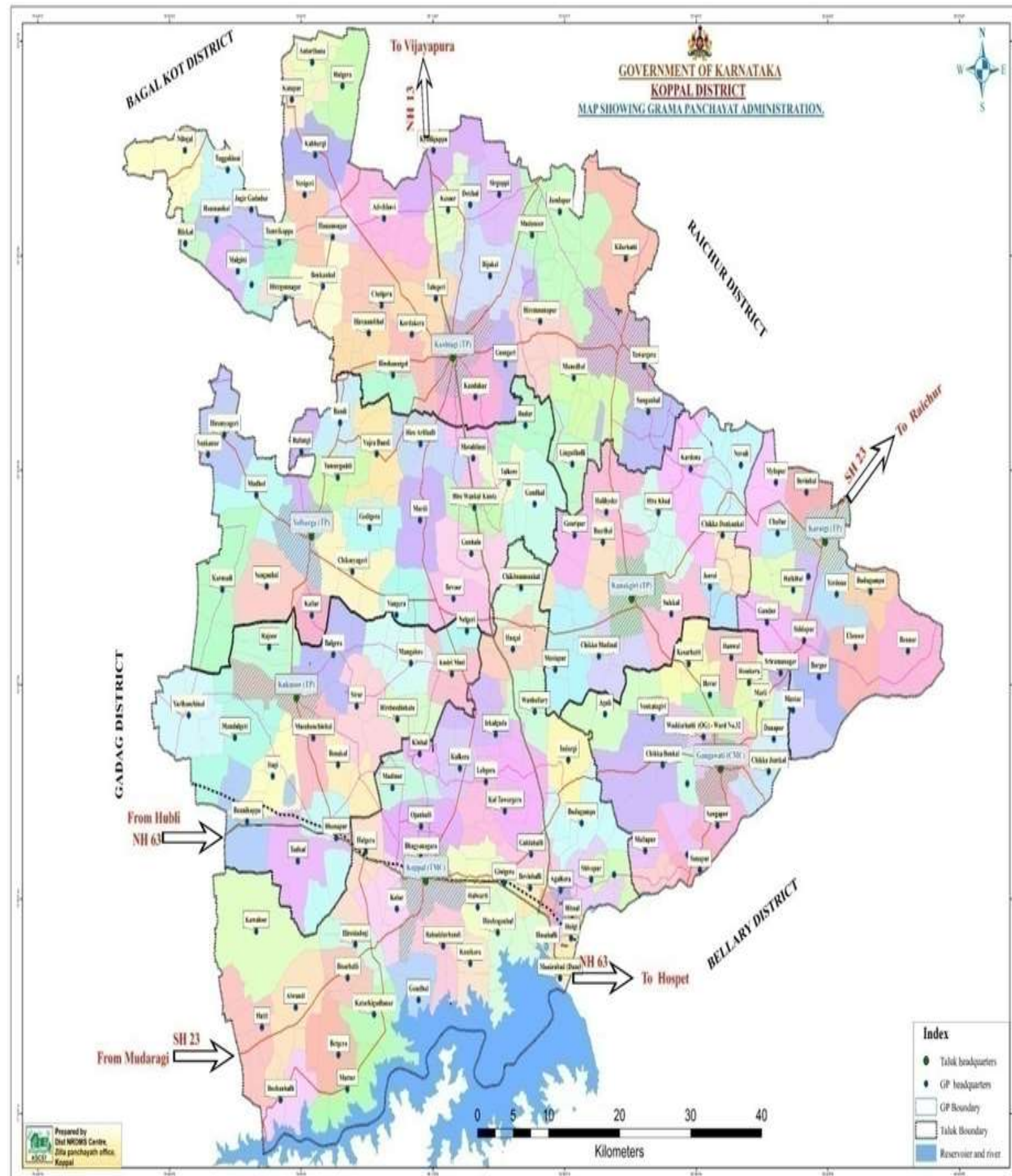
Grey Water Management (GWM)

In Koppal District, Karnataka

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Koppal District- Over view



- Population: 16,39,730
- Rural Population: 13,64,016 (83%)
- Urban Population: 2,75,706 (17%)
- No. of Blocks : 7
- No. of Gram Panchayaths : 153
- No. of Villages: 580
- No. of GWM DPR Approved: 580
- No. of Individual Soak Pit Covered: 10123
- No. of Community Soak Pit Covered: 18
- No. of Kitchen Garden: 308
- No. of Inline Treatment at Out Falls:604

Grey Water Management Work

- Koppal district has Total 153 Gram Panchayath, 580 villages, In all villages have started grey water management works.
- GWM work such as individual soak pit, kitchen garden, leach pit at Household level.
- GWM works such as community soak pit, constructed wetlands, DEWATS, WSP at community level.

Grey Water Management Work



Bedavatti Village

- Village has total population of 1071 with 214 households.
- JJM (Jal Jeevan Mission) is envisioned to provide safe and adequate drinking water 58905 Lpd.
- Grey water generated as Approx 12238 Lpd in this outfalls.

Estimate and Source of funding:

Particulars	Connecting drain	Settler/Silt trap				Stone pitching and Wet land				Grand Total
1	2	3	4	5	6	7	8	9	10	11=(2+6+10)
Length/Area	305m	2.2*1.8*1.1				48 m				
Source of Funding	MGNREGA	SBM(G) 70%	15 th FC 30%	MGNREGA	Total	SBM-G	15 th FC	MGNREGA	Total	
Est Amount	4.50	2.50	1.0	0.00	3.70	4.60	0.30	0.00	4.90	
Expenditure	4.50	2.50	1.0	0.0	3.70	4.60	0.30	0.00	4.90	12.90

Pre Implementation

- Previously the grey water generated in the households would join the [Hirehalla](#).
- Before starting the grey water management contaminating water directly disposal to natural water bodies then a survey was carried out to ascertain the quantity of grey water.



During the Execution

Inline treatment unit consisting of.

- Screen bars
- Inspection Chamber
- Silt trap/ settler
- Stone pitching/Constructed wetland



Placement of Screen Bars

Inline treatment started with divergent drains and then adopting screen in large, medium and small sizes to arrest the solid particles to enter the unit.



Settler:-

Settler can achieve a significant initial reduction in **Suspended solid** (50-70%) removal and **organic solid** (20-22%) of **BOD** with ensure that the Constituent impair subsequent treatment process.



Baffled wall & BOD indicators : -

Baffled walls Constructed to enhance the efficiency of constructed wetland in

Sedimentation basin, simulation and optimise of hydraulic performance.

A small baffled walls constructions at every 10-15 metres to reduce BOD.



Stone pitching Drain /Constructed wetland : -

It is a sanitation technology that initiates natural removal mechanism provided by vegetation which reduces the Biological oxygen demand (BOD) and Removal of contaminants, Phosphorus, Suspended solids.



GWM – Community Soakpit

GWM – Community Soakpit

GP – HALAVARTHI

Village - Belavinal

- Total population- 396
- Total Households- 89
- JJM (Jal Jeevan Mission) is providing 21780 Lpd.
- Grey water generated as 16335 Lpd
- End point 1 is getting 60% (9801 Lpd) as Grey water.

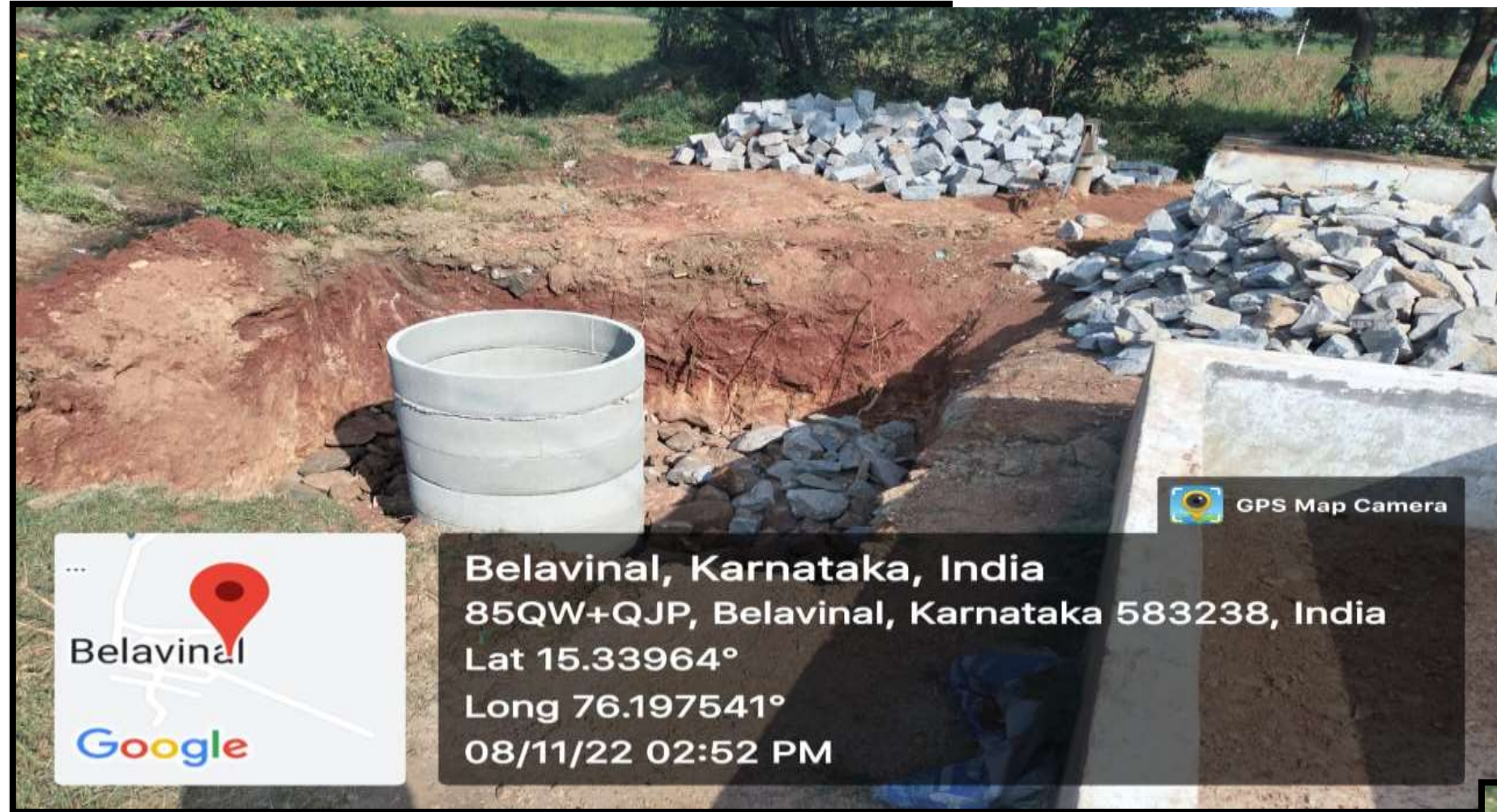
Pre Implementation



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During the Execution



Kerala SBM-G Team and Executive officers Taluk Panchayath Yelburga Visited the site.



