



SEWA INTERNATIONAL



MAY 2019

PHASE TWO: KARNATAKA

Toilet and Hygiene Project
for the girl child
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About Our Organization



Sewa International's **Toilet and Hygiene Project for the Girl Child** was conceived to provide **sanitation facilities to girls who belong to the vulnerable section of Indian society** so that they can overcome social and cultural norms of the till now accepted practice of open defecation outside of the home.

Sewa believes in “**Right to Sanitation Facilities**”, for women and girl children in India who face several challenges everyday just to attend nature calls in a safe and secure environment.

In 2015, Sewa started the "**#Yes! I can go to School**" program in the slums and government schools of Bengaluru, Karnataka. We expanded our project to the state of Uttar Pradesh, and other parts of the state of Karnataka and Tamil Nadu in 2016, 2017 and 2018. Since 2015, our sanitation projects have benefited **7,803 families** and **15,119 school children** from various sections of Indian communities.

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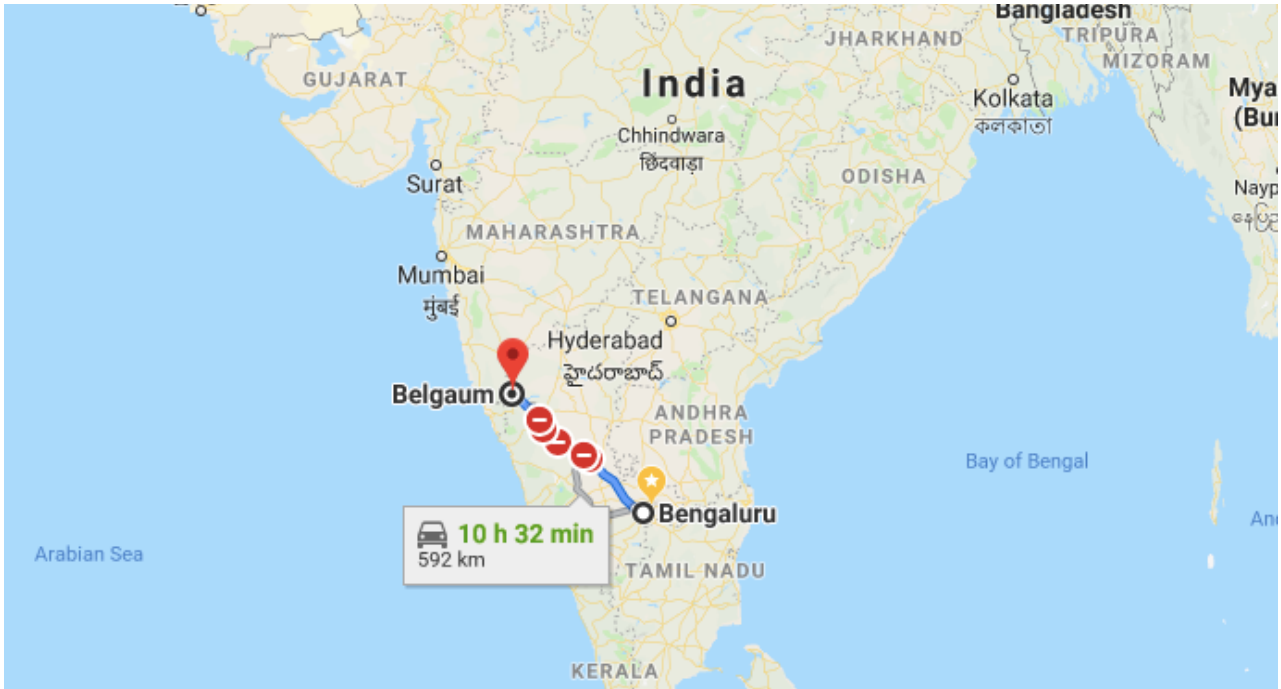
Table 1: List of schools in Belgaum District with the number of beneficiaries, number of existing toilets/urinals and number of toilets to be installed.

Sl. No	School Name	Address	No. of Boys	No. of Girls	Total	No. of Existing Toilets/Urinals	No. of New Toilets/Urinals required
1	KGS No 5 Chawadi Galli, Vadgaon	Belgaum, Karnataka	0	660	660	5 Toilets	6 Toilets
2	School no 17, KPS Bharth nagar	Belgaum, Karnataka	322	280	602	2 Toilets	4 Toilets
3	School KBS Sambaji nagar Wadgaon	Belgaum, Karnataka	60	52	112	2 Toilets	2 Toilets
4	KGS no 15, Malaprabha Nagar	Belgaum, Karnataka	81	152	233	2 Toilets 2 Urinals	3 Toilets
5	HPS GKM No 18, Angol	Belgaum, Karnataka	110	123	233	3 Toilets 7 Urinals	2 Toilets
6	MPS No 5, Vadgaon	Belgaum, Karnataka	100	70	170	-	2 Toilets
7	KHPS No 14, Vadgaon	Belgaum, Karnataka	260	502	762	3 Toilets	6
	Total		933	1,839	2,772	17 Toilets 9 Urinals	25 Toilets

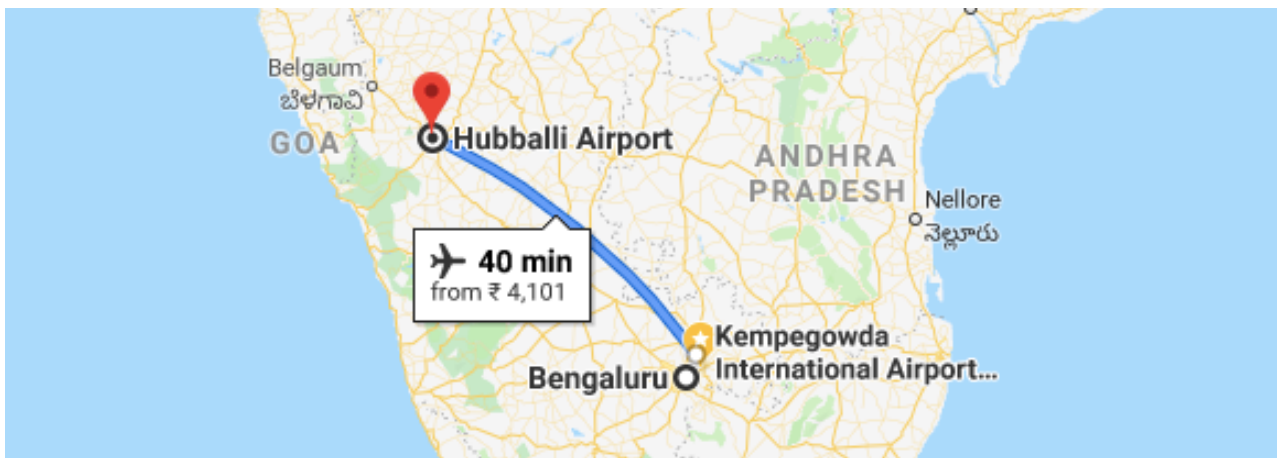
*School no 17: Govt has approved a Wing of Junior college in the premises of the school by dividing the existing area. Due to this, existing Primary school girls and boys will not have toilet facilities.

Project Location

Route 1: The road distance between Bengaluru to Belgaum is 592 km.



Route 2: Bengaluru Airport -> Hubli Airport -> Belgaum



*The road distance between Hubli Airport to Belgaum is 95.5 km



*All the schools are located at 8-10km from Belgaum bus stand.

Bio-toilet Model

Before opting for this model, in the past, we have tried FRP, Galvanised aluminum, and Galvanised steel portable toilet models.

After several trial and errors, we felt this is the most economical and best solution for open defecation. Once it is built, it needs only once a year inspection.

Bio-toilet features:

Zero Underground water pollution
Pathogen-free water output
Minimum usage of Water
Low Maintenance Portable unit.
Cost-effective model



These bio-toilets can be installed anywhere without needing a big septic tank or a sewage facility.

The dimension of the toilet unit: 4ft breadth, 6ft height, and 3.5ft length.
The dimensions of the pit: 6ft depth, 4ft length, and 5ft breadth
(It takes about 2 days to construct a bio-digester pit)

At first, a 1.5-meter triangular pit is dug which has a depth of 1 meter. At the bottom of the pit, a radius of 1 meter in cauldron shape which is 37 cm in depth and 2 meters of a platform is constructed with concrete materials of 7 cm. Again, over the radius, construction is done with a brick in a dome shape. Over the cauldron shape radius after the construction of 62 cm, an outlet is made. According to the outlet, the inlet (main pipeline of the toilet) is set. At the end of the dome (in the upper part) 0.75 inch the gateway for gas pipeline is attached.

In the construction of Bio Toilet, gas is produced in the gas chamber once the outlet is filled and exit through the outlet of purified water. During this process, due to rotten stool, only methane gas and water remains. This gas is released into the atmosphere and the water is left in the fields so that it can be used in irrigation. The methane gas can be stored to use in the Kitchen stove or used in the methane generator to produce the electricity.



Picture 1: Kannada Government school (KGS-No-5) - Belgaum, Karnataka



Picture 2: Government school - Belgaum, Karnataka



Picture 3: Government school, No-17, - Belgaum, Karnataka

Sewa Criteria for Identification of Schools:

1. Schools constructed on government legal land and the school authorities should provide up to date school construction documents.
2. No objection certificate issued by the governing authorities for toilet installations.
3. Unavailability of functional toilets in the school premises.
4. A higher ratio of girl students in the school.
5. Total strength of the school to be a minimum of 50.
6. Support from school authorities and local government/municipal bodies during construction and long term maintenance of the toilets.
7. Provision for water supply for the newly installed toilets or support from school/government/local bodies/individuals for making such a provision.
8. Provision for the sewage system.
9. Availability of space within the school campus for the installation of toilets.

Region-specific Consultants will be hired part-time for the project execution. The consultant will coordinate with the local authorities for survey and licensing. The consultant will work with the vendors for material procurement and installation. Sewa field supervisors will closely work with these consultants for supervision and monitoring.

Project execution updates will be shared in our next report.

Thank You for supporting us,
Sewa T&H Team