



# Rajasthan Need Analysis Report

Jan, 2020

**Sewa International**  
**Toilet and Hygiene Project for a girl child**

**SUPPORTED BY:**  
**SODHANI FOUNDATION**  
(Smt. Mona Khaitan and Shri Vishwanath Khaitan)  
Arvind Sodhani

# Need Analysis

---



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.

There are several 'rights' given to citizens of India but the right to a safe, secure, and healthy life at home and in schools is not one of them. Thus, we believe a "Right to Sanitation Facilities", especially for our women and girl children who face several challenges everyday just to attend nature calls in a safe and secure environment, is much needed.

We are committed to providing such toilet facilities in communities, neighborhoods, and schools, where they are not available so that we can ensure both dignity and safety to women and girl children.

In Rajasthan, we have identified 9 schools which are in dire need of toilet facilities.

# Need Analysis Data

**Table 1: List of schools in Sikar district of Rajasthan with the number of beneficiaries and the number of toilet installations.**

S.No.	Name of the school	Region	Total	No of toilets required	Project details
1	O M Adarsh Vidya Mandir	Sawbly Marg, Sankul, Sikar	220	4	Phase 1
2	Upper Primary Adarsh Vidya Mandir	Mathura Basti, Sankul, Sikar	80	4	Phase 1
3	Shri Madanlal Biyani Ucha Madhyamik Balika Adarsh Vidya Mandir	Rishikul Marg, Sankul, Sikar	64	4	Phase 1
4	Shri. Bala Vais Viyani Prathamik Adarsh Vidya Mandir	Rishikul Marg, Sankul, Sikar	83	4	Phase 1
5	Rajkia Ucha Madhamik Vidyalay	Laxmangarh, Sikar	80	4	Phase 1
6	Raghukul High Sec. School	Laxmangarh, Sikar	850	8	Phase 2
7	Shri Saraswati Sec. School	Laxmangarh, Sikar	1025	8	Phase 2
8	Gov. Sr Sec School	Laxmangarh, Sikar	250	8	Phase 2
9	Govt. Bhadech Sec School	Laxmangarh, Sikar	300	6	Phase 2
		<b>Total</b>	<b>2952</b>	<b>50</b>	

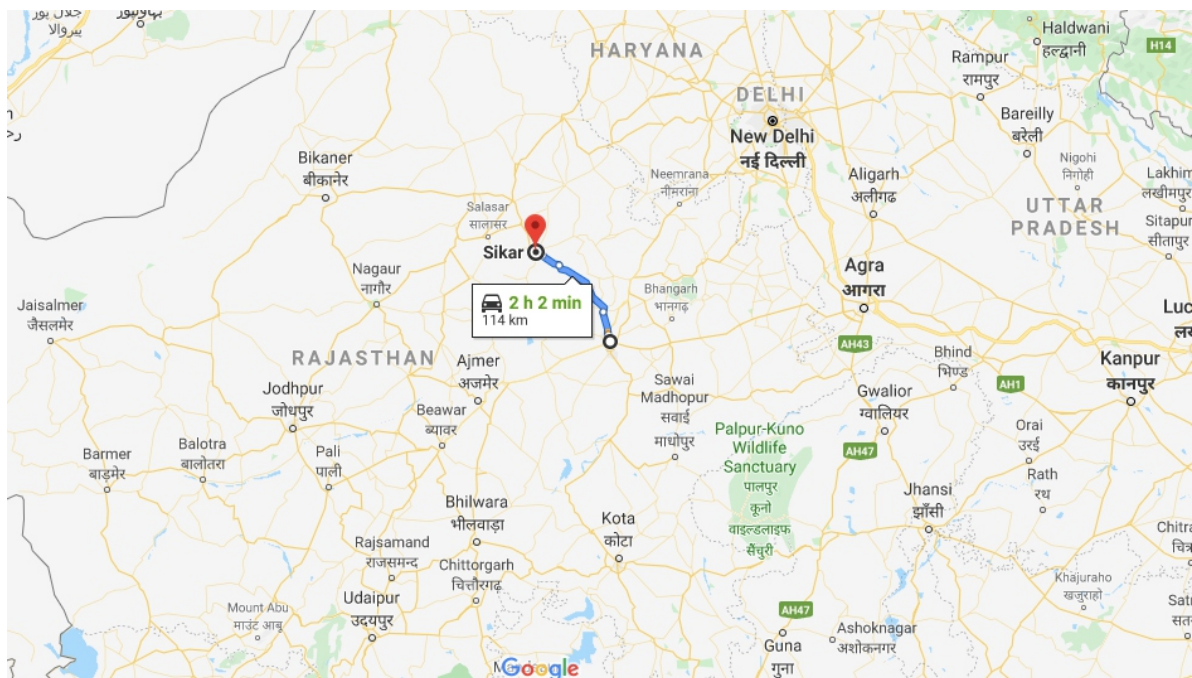
We will be building sewa toilets in these selected schools in two phases. Phase one includes building 4 toilets each (20 toilets) in schools mentioned from row 1 to 5 and Phase two includes building 30 toilets in schools mentioned from row 6 to 9.

# Project Location

\*The aerial distance from New Delhi to Jaipur is 241 km while the road distance between New Delhi to Jaipur is 268 km.



The road distance between Jaipur to Sikar District is 114 km.



# Toilet Model -Bio Toilets

---

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.

# Identified Schools, Rajasthan



---

### **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  
[www.toilets-sewausa.org](http://www.toilets-sewausa.org)