IMPACT ASSESSMENT STUDY OF BHARTI FOUNDATION'S 'SATYA BHARTI ABHIYAN' SANITATION PROGRAM COMMISSIONED BY



**Bharti Foundation** 

REPORT BY





# **Declaration**

This study report on 'Impact Assessment of Bharti Foundation's Satya Bharti Abhiyan' program is undertaken by Sattva Consulting Pvt. Ltd. The study was conducted in regions of Amritsar Rural, Ludhiana Rural and Ludhiana Urban.

The Sattva team extends its warm thanks to all the primary and secondary stakeholders, who shared their experiences, thoughts and suggestions and their valuable time during the execution of the study.

The Sattva team would like to extend our sincere thanks to the Bharti Foundation team and all its functionaries who extended their wholehearted cooperation in accomplishing the study at different levels. Our team is immensely grateful to Ms. Sameen Adeeb, Ms. Abha Mishra, Mr. Antony Nellissery, Ms. Mamta Saikia, Mr. Kamal Singh, Mr. Rajmohan Singh and the entire team at Bharti Foundation for their priceless cooperation and for offering valuable suggestions and inputs. We are immensely thankful for the guidance, precious support and valuable suggestions and inputs during field work and each step of the way. We would also like to extend our sincere regards to the Department of Water Supply and Sanitation, Panchayats, Municipal Corporations, ASHA Workers, Headmasters, School Teachers, and Implementation Partners of the Satya Bharti Abhiyan program who have supported our study throughout.

# **Table of Contents**

Declaration	2
Table of Contents	3
Abbreviations	4
Executive Summary	5
Chapter 1: Overview	8
Chapter 2: Sattva's Approach and Methodology	.15
Chapter 3: Findings of the Impact Assessment Study	18
Chapter 4: Key Recommendations	50
Annexures	54

# **Abbreviations**

ASHA : Accredited Social Health Activist DAC : Development Assistance Committee DHS : Demographic and Health Survey DWSS : Department of Water Supply and Sanitation FGD : Focus Group Discussion GDP : Gross domestic product HH : Household IEC : Information, Education and Communication M&E : Monitoring & Evaluation ODF : Open Defecation Free OECD : Organization for Economic Cooperation and Development PHH : Priority Household SGD : Sustainable Development Goals SMC : School Management Committee SOP : Standard Operating Procedure

# **Executive Summary**

Bharti Foundation commissioned Sattva to conduct an Impact Assessment Study of its 'Satya Bharti Abhiyan' program based in Amritsar and Ludhiana districts of Punjab. The program focused on improving sanitation conditions by providing toilets to households and institutions and fostering behavioral change in the community. So far, Satya Bharti Abhiyan has provided toilets to over 32,149 households as well as institutions in Ludhiana and rural Amritsar, successfully benefiting over 2,19,872 people.

## Key insights from the Impact Assessment Study

The following key insights have been formulated based on the data collected from different stakeholders across villages of Ludhiana and Amritsar in Punjab.



- **93%** of the HHs who had functional toilets, reported that the toilets were being used by all family members, whereas 7% HHs reported that at least some of their family members use the toilet.
- 97% HHs highlighted that they use soap/liquid hand wash after using the toilet.

# > Households have taken the effort to maintain their toilets and some of the households have also added features to the base toilets.

- Deep cleaning **(83%)** and scrubbing of grim **(72%)** are some common activities that majority HHs are undertaking to sustain their status of having a toilet in the HH.
- **1 out of 3** respondents have upgraded their toilet by adding features to it.

Positive benefit of the availability of toilets at household level is that time saved by family members is being used to generate additional income and help with household work.

- 98% of the respondents from the study highlighted that their time was being saved as a result of toilets in their HHs since the respondents do not have to travel to far distances for the purpose of relieving themselves.
- **39%** of the respondents used the extra time to help with household work whereas 48% of the respondents engaged in productive work.

Construction of toilets in the village along with awareness about good sanitation practices among households has led to significant reduction in occurrence of diseases.

- **78%** HHs noticed a decrease in the frequency of them falling sick after construction of the toilets
- There has been a fall in health expenditure of about **32%** before vs after the intervention from an average of Rs. 4,788 to Rs. 3,249 a year.

# IEC activities have successfully translated into behaviour change in the community leading to 94% HHs continuing to have toilets that are still functional.

- Rallies/School March (56%) and Gram Sabha (51%) are major IEC awareness activities that HHs recall.
- **68%** of the total respondents recalled receiving information on good sanitation practices.
- **94%** HHs highlighted that the toilets were currently **functional**.

Women now feel safer using toilets since they did not have to travel to distant locations for the purpose of relieving themselves.

- **84%** respondents believe that the program helped women and had an impact on them.
- 93% respondents believed that the major issue that the program helped with, is safety.
- 48% of the respondents said that women had more time for their personal activities.
- 42% of the respondents said that women had an increase in confidence level
- 93% of the respondents believed that the program helped with children's safety.
- **46%** of the respondents felt that their girl child had more time for hobbies, studying etc.

# The provision of a separate toilet for female Police Officers has helped them feel safer while using toilet facilities

- 'Feeling unsafe' while using the toilet was a challenge before the toilet was constructed by Bharti Foundation.
- Female Police Officers reported saving time and feeling more comfortable at work after the construction of the toilet.
- Toilets in all police stations where surveys were conducted were functional and clean. The toilets are checked and repaired regularly.

## The program is aligned with national and international priorities

- The program is aligned with global priorities (SDG 6 to "ensure availability and sustainable management of water and sanitation for all", Target 6.2), national priorities (Swachh Bharat Mission) as well as state priorities (Objectives of Punjab Water Supply & Sanitation Department).

## **Key recommendations**



Collaborating with key stakeholders within the government will strengthen the program by ensuring that the program is in line with government plans.



Using geo tagging technology to monitor location of toilets after construction will solve challenges caused by regular change in ward boundaries and location of the beneficiaries required to monitor and evaluate the progress of the program.



Enabling the creation of Self Help Groups at location of intervention will ensure and improve maintenance of toilets and positive behaviour change outcomes.



Supporting all citizens to avail of sanitation and allied government schemes by creating awareness and sharing information about the same will increase the sustainability of the program and improve outcomes.



Increasing frequency and type of behaviour change activities with focus on 'benefits of using a toilet', and including information about different types of sanitation related diseases, symptoms and cures will increase the effectiveness of the behaviour change programs conducted.



Building the capacity of public and private organisations who are working on sanitation related issues will exponentially increase the success of the Satya Bharti Abhiyan program and the efforts taken within the ecosystem towards shared goals.

# **Chapter 1: Overview**

## **Sanitation**

Basic sanitation is described as having access to facilities for the safe disposal of human waste (feces and urine), as well as having the ability to maintain hygienic conditions, through services such as garbage collection, industrial/hazardous waste management, and wastewater treatment and disposal.<sup>1</sup> Without improved sanitation – a facility that safely separates human waste from human contact – people have no choice but to use inadequate communal latrines or to practise open defecation. In the immediate environment, exposed faecal matter will be transferred back into people's food and water resources, helping to spread serious diseases such as cholera. Beyond the community, the lack of effective waste disposal or sewerage systems can contaminate ecosystems and contribute to disease pandemics.<sup>2</sup>

### Sanitation Challenges in the Global context

Inadequate sanitation has a dire impact on families, on communities and on society more widely. In total, around 1.6 million people die every year due to poor sanitation and hygiene – that's more than 4,500 people every day. For sanitation alone, the death toll is nearly 900,000 people per year, or around 2,460 people every day. For households, there can be tremendous economic impacts from a lack of sanitation, including time spent looking for a safe space 'to go' or queuing at public toilets, impact on productivity due to sickness, and long-term impact on health, especially for children.<sup>3</sup> 'In 2015, 91% of the global population is using an improved drinking water source, compared to 76% in 1990. However, 2.5 billion people lack access to basic sanitation services, such as toilets or latrines.'<sup>4</sup>

Share of the population with access to sanitation facilities, 2020



Source: WHO/UNICEF Joint Monitoring Programme (JMP) for Water Supply and Sanitation OurWorldInData.org/sanitation • CC BY

<sup>2</sup> "Water, Sanitation and Hygiene", United Nations UN Water

<sup>4</sup> <u>"6 Clean Water and Sanitation", NITI Ayoq</u>

<sup>&</sup>lt;sup>1</sup> "Sanitation and Hygiene", Centers for Disease Control and Prevention, 2017

<sup>&</sup>lt;sup>3</sup> "3 hard truths about the global sanitation crisis", World Bank Blogs, 2018

A lack of sanitation also holds back economic growth. Poor sanitation costs billions to some countries, amounting to the equivalent of 6.3% of GDP in Bangladesh (2007), 6.4% of GDP in India (2006), 7.2% of GDP in Cambodia (2005), 2.4% of GDP in Niger (2012), and 3.9% of GDP in Pakistan (2006). The economic losses are mainly driven by premature deaths, the cost of health care treatment, lost time and productivity seeking treatment, and lost time and productivity finding access to sanitation facilities. Pollution resulting from improper disposal and treatment of wastewater and domestic fecal sludge also affects both water resources and ecosystems.<sup>5</sup>

The United Nations has made universal access to clean water and sanitation one of its main Sustainable Development Goals (SDGs), aiming to achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations by 2030.<sup>6</sup>

### **Sanitation Challenges in India**

India also faces significant challenges in the provision of quality water, sanitation, solid waste management and drainage. Inequality in access is acute, with more than 90% of urban residents accessing sanitation facilities compared to only 39% in rural India.<sup>7</sup> India's most recent Demographic and Health Survey (DHS), conducted between January 2015 and December 2016, estimates that the percentage of households practicing open defecation decreased from 55% in 2005-06 to 39% in 2015-16.<sup>8</sup>



Water relates to 21 percent of diseases in India. Around 99 million people have no access to safe water and 500 children in India each day cannot survive through their fifth year on the earth due to diarrheal disease. A research conducted for the rural population of north India suggests that even in rural households with toilets or latrines, some of the household members prefer open defecation because they believe it is more pleasurable and desirable compared to the use of available toilets.<sup>9</sup>

<sup>&</sup>lt;sup>5</sup> <u>"Understanding Poverty -Sanitation", World Bank, 2021</u>

<sup>&</sup>lt;sup>6</sup> "The 17 Goals", United Nations

<sup>&</sup>lt;sup>7</sup> <u>"Health, Water and Sanitation", United Nations in India</u>

<sup>&</sup>lt;sup>8</sup> <u>"National Family Health Survey"</u>. Ministry of Health and Family Welfare. 2017

<sup>&</sup>lt;sup>9</sup> <u>"10 Facts about Sanitation in India". The Borgen Project, 2020</u>

### Efforts Undertaken to Improve Sanitation in India

- Since independence in 1947, India has been committed to provide water and sanitation to its people. After 1960, India started making progress on clean water and sanitation issues, keeping hygiene education as a primary goal. Central Rural Sanitation Programme (CRSP), the first nationwide sanitation programme was launched in 1986 by the Ministry of Rural Development, Government of India. Several sanitation programmes have been launched since then.<sup>10</sup>
- In 2012, the Nirmal Bharat Abhiyan (NBA) (Clean India Campaign), which was adapted from the TSC (1999-2012), was launched. NBA adopted the community-based approach in rural India. The provision of incentives for individual household latrine (IHHL) units were widened to cover all Above the Poverty Line (APL) households constituted by Scheduled Castes (SCs)/Scheduled Tribes (ST), small and marginal farmers, landless labourers, physically challenged or women-headed households as well as for all Below the Poverty Line (BPL) households.<sup>11</sup>
- The Ministry of Jal Shakti (MoJS) was formed in May 2019 by merging the two erstwhile ministries—the Ministry of Water Resources, River Development & Ganga Rejuvenation and the Ministry of Drinking Water and Sanitation – to deal with water and sanitation issues in India both at national and international levels.<sup>12</sup>
- A significant step was taken in 2014, when the Swachh Bharat Abhiyan (SBA), or Clean India Campaign was launched. As per data from Global Health Observatory, child diarrhoea deaths in India decreased from 1.21,889 in 2014 to 1,17,285 in 2015 to 1,02,813 in 2016. In the two years since Swachh Bharat Abhiyan was launched, the percentage of under-five children dying from diarrhoea came down from 13% to 9%.<sup>13</sup>



Urban sanitation gained tremendous importance with the country's first comprehensive National Urban Sanitation Policy (NUSP) in 2008 by MoUD. The vision of NUSP was to transform all urban areas into community- driven, totally sanitised, healthy, and livable cities and towns ensuring and sustaining good public health and environmental outcomes for all the citizens with special focus on developing hygienic and affordable sanitation facilities for the urban poor and women. For achieving the urban sanitation goals, the NUSP provided the State Governments with a framework mandating each State to prepare State Level Sanitation Strategy and the cities to adopt a City Sanitation Plan (CSP). Under the SBM (Urban), 4023 out of 4238 ULBs in India (94.93%) have been declared ODF.14

### Initiatives of other corporates and NGOs in India

Corporate India responded enthusiastically to the Government's call-to-action on WASH. 90% of companies reported at least one CSR intervention in WASH over the last three years with a total of 164 programs being implemented – indicating a high level of interest from corporate India in addressing the sanitation crisis. 25 companies (nearly a third), reported an exclusive focus on sanitation. Of the 90 companies that supported WASH programs, 45 companies belonged to the Heavy Engineering and Manufacturing industry, 19 to Banking, 11 to IT & Finance, 6 were Healthcare companies, 5 were from the Fast- Moving Consumer Goods (FMCG) sector, 3 from the Telecommunication industry and 1 was a Media and Entertainment undertaking.<sup>15</sup>

<sup>&</sup>lt;sup>10</sup> 'Aligning India's Sanitation Policies With Sustainable Development Goals', TERI, 2020

<sup>&</sup>lt;sup>11</sup> 'Aligning India's Sanitation Policies With Sustainable Development Goals', TERI, 2020

<sup>12 &</sup>quot;Govt forms 'Jal Shakti'", Business Standard, 2019

<sup>&</sup>lt;sup>13</sup> "Swachh Bharat Abhiyan", ENVIS Centre on Hygiene, Sanitation, Sewage Treatment Systems and Technology, 2022

<sup>&</sup>lt;sup>14</sup> 'Aligning India's Sanitation Policies With Sustainable Development Goals', TERI, 2020

<sup>&</sup>lt;sup>15</sup> <u>"CSR in Water, Sanitation & Hygiene", Samhita & India Sanitation Coalition</u>

Under sanitation, private and public companies such as Dabur, Tata Consultancy Services, L&T, GAIL, Indian Oil and NTPC came forward to support the Swachh Bharat Mission.

- Dabur: Through its brand Sanifresh, Dabur took the initiative to help construct toilets for women and girls in 2014-2015. The campaign was titled '700 Se 7 Kadam'. Project activities were conducted in Uttar Pradesh, Uttarakhand and Himachal Pradesh (Rural). The scope of the project extended to cover 42 villages in 2017-2018. The foundation constructed 2,343 toilets till 2016-2017. 'Dabur representatives spread awareness about the need for maintaining hygiene and also encouraged the households to adopt sanitation and hygiene techniques. A specially designed toilet cleaning kit was also distributed free of cost to all households.'<sup>16</sup>
- TCS: Tata Consultancy Services built 'sanitation facilities for girl students in 1000 schools across Andhra Pradesh, Telangana and Bihar States'.<sup>17</sup> 'To ensure the ongoing maintenance and regular cleaning of toilets built by TCS under the 'Swach Bharat' initiative, TCS has aligned with two maintenance partners across the selected states.<sup>18</sup> Additionally, to encourage and impart behavioral change in the target audience, TCS' maintenance partners have designed programs and activities to spread awareness on the importance of hygiene and cleanliness in every school.<sup>15</sup>
- **GAIL:** The PSU GAIL created the 'Swachh Bharat Swachh Vidhyalaya Abhiyan (SBSVA)' which aimed to 'construct toilet blocks in government schools'. GAIL has constructed 3614 school toilets in Govt. schools of Odisha, Andhra Pradesh and Madhya Pradesh with maintenance for two years and reached 150585 students.'<sup>19</sup>

## Sanitation Challenges and Efforts taken in Punjab

- As per Census of India 2011, 20.7% of households in the state of Punjab did not have a toilet, compared to 43.2% households in 2001. Among the rural population of Punjab, 29.6% of the households did not have a toilet. In Urban Punjab, 6.6.% of the households did not have a toilet as of 2011.<sup>20</sup>
- Between 1999 and 2014, only about 11% of the funds in Nirmal Bharat Abhiyan allocations had been earmarked for IEC activities. There is wide variation in IEC expenditure across states. Punjab had spent only 2% of the funds allocated to IEC since the start of the programme.<sup>21</sup>
- Mission Swachh & Swasth Punjab aims to enhance the sanitation and hygiene status in the villages by leveraging out the capacity of individuals and communities to create a people's movement for ensuring a Sustained Open Defecation Free (ODF) status in the villages and people continue to practice safe hygienic behaviour.<sup>22</sup>

## Geographical context of Ludhiana and Amritsar

### 1. Ludhiana

The district of Ludhiana is in central Punjab, has an area of 3767 square kilometers and consists of 916 villages. Its population according to the 2011 Census is 34,98,739 people, with male population of 18,67,816 people and a female population of 16,30,923 people. Most of the population in the district is engaged in agriculture.<sup>23</sup> 'The

<sup>&</sup>lt;sup>16</sup> <u>"700 SE 7 KADAM, DABUR", Indian Sanitation Coalition</u>

<sup>&</sup>lt;sup>17</sup> <u>"TCS completes building sanitation facilities for girls in 1000 schools under 'Swachh Bharat' initiative", Tata</u> <u>Consultancy Services, 2015</u>

<sup>&</sup>lt;sup>18</sup> <u>"TCS Contributes to "Clean India: Clean Schools"</u>, Tata Consultancy Services

<sup>&</sup>lt;sup>19</sup> <u>"SWACHH BHARAT SWACHH VIDHYALAYA ABHIYAN, GAIL", India Sanitation Coalition</u>

<sup>&</sup>lt;sup>20</sup> "Availability and Type of Latrine Facility", Census of India 2011

<sup>&</sup>lt;sup>21</sup> "Budget Briefs - Nirmal Bharat Abhiyan GOI 2014-15", Accountability Initiative

<sup>&</sup>lt;sup>22</sup> <u>"Swachh Punjab Swasth Punjab". Sujal Swachh Sangraha. 2020</u>

<sup>&</sup>lt;sup>23</sup> <u>"Punjab District Handbook", Indiastatpublications</u>

population increases substantially during the crop harvesting season due to migration of labourers from states like Uttar Pradesh, Bihar, Orissa and Delhi'.<sup>24</sup> 'The city stands on the former bank of the Sutlej River, 8 miles (13 km) south of its present course and about 170 miles (270 km) northwest of Delhi. The area surrounding Ludhiana is mostly cultivated, much of it irrigated by the Sirhind Canal.'<sup>25</sup>

# As per Nirmal Bharat Abhiyan baseline survey conducted in 2012, 10 percent of the households in rural Ludhiana did not have a toilet.<sup>26</sup>

### 2. Amritsar

The district of Amritsar is in northern Punjab and has an area of 2683 square kilometers. Its population according to the 2011 Census is 24,90,656 people, with male population of 13,18,408 people and a female population of 11,72,248 people. It has 750 villages.<sup>27</sup> The main source of income in the district is from agriculture.<sup>28</sup>

As per Nirmal Bharat Abhiyan baseline survey conducted in 2012, 41 percent of households in rural Amritsar did not have a toilet.<sup>29</sup>

<sup>&</sup>lt;sup>24</sup> <u>"Ludhiana". Government of Punjab</u>

<sup>&</sup>lt;sup>25</sup> <u>"Ludhiana, India", Britannica</u>

 <sup>&</sup>lt;sup>26</sup> "Deprived Of Toilets For The Longest Time, Residents Of Ludhiana In Punjab Witness A Sanitation Revolution", NDTV, 2019
 <sup>27</sup> "Amritsar", Government of Punjab

<sup>&</sup>lt;sup>28</sup> "Puniab District Handbook", Indiastatpublications

<sup>&</sup>lt;sup>29</sup> "Deprived Of Toilets For The Longest Time, Residents Of Ludhiana In Punjab Witness A Sanitation Revolution", NDTV, 2019

## **About Bharti Foundation's Sanitation Program**

Bharti Foundation had launched the '**Satya Bharti Abhiyan**' initiative in 2014 to improve sanitation conditions by providing toilets to households and institutions and foster **behavioral change** among community members. The Foundation has adopted Ludhiana (urban and rural) and Amritsar (rural) as its focus area for the improvement of sanitation facilities. It worked with a mandate to:



Provide a toilet in every household that doesn't have one

Provide a girls' toilet in every Government school that does not have a separate girls' toilet

Bring about behavioural change towards improving sanitation conditions in Ludhiana and Amritsar

Implement the Abhiyan independently, without any support from the government or beneficiaries in the form of funds, resources, etc.

So far, Satya Bharti Abhiyan has provided toilets to over 32,149 households as well as institutions in Ludhiana and rural Amritsar, directly benefiting over 2,19,872 people.<sup>30</sup>

### **Key Interventions**

The Satya Bharti Abhiyan aimed at improving sanitation conditions in large geographic areas by fostering access to toilets to all these households as well as creating awareness through Information, Education and Communication.



# Construction of toilets

The individual toilets built under Satya Bharti Abhiyan follow the twin-pit pour flush technology. These easy-to-maintain toilets are ideal for rural households.



# Activities to promote behavioural change

Engaging with beneficiaries and community members across the region to increase awareness on the importance of adopting healthy sanitation practices.

<sup>&</sup>lt;sup>30</sup> <u>"Satya Bharti Abhiyan", Bharti Foundation</u>

### Importance of Behaviour Change in Sanitation

Sustainable water, sanitation, and hygiene do not only rely on the provision of technology and services, but also on proper usage. Behaviour Change is a critical component of improving access to and practices around water, sanitation, and hygiene. While traditionally, the WASH sector has focused primarily on the delivery of "hardware" solutions, it is becoming increasingly evident that the "software" component of WASH, such as Behaviour Change, must be prioritised.<sup>31</sup> Achieving sustainable behaviour change is context-specific, and successful interventions may be delivered in different ways depending on the target behaviour and context. Understanding barriers and opportunities for delivering behaviour change interventions can help improve how we approach implementation.<sup>32</sup>

Bharti Foundation in collaboration with stakeholders conducted the following Behaviour Change activities in Ludhiana and Amritsar:

- 1. Rallies or marches through certain villages
- 2. Poster making competition
- 3. Gram sabha and village community meetings
- 4. One to one interaction with beneficiaries
- 5. Display of banners
- 6. Distribution of booklets

### Coherence of Satya Bharti Abhiyan with Global, National and State Priorities

- Global Priorities: The United Nations (UN) Sustainable Development Goal 6 is to "ensure availability and sustainable management of water and sanitation for all". Specifically, the program contributed to the achievement of Target 6.2 i.e. "By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations".<sup>33</sup>
- National Priorities: To accelerate the efforts to achieve universal sanitation coverage and to put the focus on sanitation, the Prime Minister of India had launched the Swachh Bharat Mission on 2nd October 2014. The program contributes to the Government's initiative in this aspect, by adopting Ludhiana and Amritsar districts (rural) as its focus area for the improvement of sanitation facilities.<sup>34</sup>
- State Priorities: The Punjab Water Supply & Sanitation Department (earlier known as Public Health Department) is primarily entrusted with the responsibility of providing safe drinking water to the Rural



Population, execution of Sanitation works apart from the Water Supply, Sewerage, Sanitation. The objectives of the department are "to improve rural hygiene by providing individual toilets and sewerage systems" and "to encourage the rural population to properly manage water supply and sanitation facilities to make villages Nirmal Gram".<sup>35</sup>

<sup>&</sup>lt;sup>31</sup> <u>"Behaviour Change", Sustainable Sanitation Alliance</u>

<sup>&</sup>lt;sup>32</sup> "Behaviour Change for Water, Sanitation and Hygiene", SHARE, 2018

<sup>&</sup>lt;sup>33</sup> "The 17 Goals", United Nations

<sup>&</sup>lt;sup>34</sup> <u>"Satva Bharti Abhivan". Bharti Foundation</u>

<sup>&</sup>lt;sup>35</sup> <u>"Mandate of Department", Department of Water Supply and Sanitation, Government of Punjab</u>

# **Chapter 2: Sattva's Approach and Methodology**

In order to provide insights on the implementation of the program, the study needs to be tailored to the program activities and objectives. Sattva considers a wide range of study designs including quantitative, qualitative, mixed-method approach, and Randomized Control Trials at the design stage of the study. The most feasible and scientific method is chosen. Based on our experience in conducting research we have developed a methodology that ensures the sanctity of the study design and adds credibility to the findings.

## **Objectives of the Impact Assessment study**

The objective of the study was to assess the impact of the program and provide actionable insights and recommendations to the program team. The infographic below details the assessment matrix developed.

## Framework of the study

The Organization for Economic Cooperation and Development's (OECD) Development Assistance Committee (DAC) principles<sup>36</sup> are contextualized for assessment of the program :

RELEVANCE	COHERENCE	EFFECTIVENESS	IMPACT	SUSTAINABILITY	
Assessing to what extent the program objectives and design respond to the target group's global, country, and partner/institution needs, policies, and priorities, and continue to do so if the circumstances change	Assessing the alignment of the program, or what it is likely to deliver with the needs of the community. Also checking its alignment with the priorities of the region, at a state, national or international level	Assessing the supporting systems and processes influencing the achievement or non-achievement of program objectives, through concurrent measurement of program outputs	Assessing the extent to which the program has generated significant positive or negative, intended or unintended, in terms of local, social, economic, environmental and other development indicators	Assessing to what extent the impact of the program is likely to continue after funding support has been withdrawn by determining operational, financial and institutional sustainability	
INPUT & PROCESS			OUTCOME & IMPACT		

Insights for the study were mapped at four levels :

- The **relevance** and **coherence** of the program in assessing the extent to which the program is aligned to the needs of the community and its coherence with national and international priorities.
- The rigour of on-ground implementation, stakeholder involvement, and monitoring and evaluation processes undertaken to ensure operational **effectiveness** of the program.
- The extent to which the intervention has **impacted** the lives of the beneficiaries.

<sup>&</sup>lt;sup>36</sup> Applying Evaluation Criteria Thoughtfully, OECD, 2021

- The ability of the beneficiaries to **sustain** the program financially, socially and environmentally, post the program intervention period.

## **Study Design and Approach**

Methodology and

Quantitative &

Tool Design

**Tool Pilot** 

qualitative framework

Sampling

- Sattva has undertaken a **descriptive cross-sectional study** where data has been collected from the beneficiaries around the past and current status of outcome indicators to quantify the changes affected by the intervention. The study was retrospective since this program began in 2014 and was completed in 2021.
- The study incorporated a mixed-methods design consisting of quantitative and qualitative data collected from primary and secondary sources. This helped gather valuable impact related insights from a 360-degree perspective across the stakeholders involved and was fundamental to providing recommendations towards fine-tuning the model and scaling up in the long term.

Sattva conducted the impact assessment study in the following phases as mentioned below :

**Operation** plan

Data collection

Data collection pilot

Back/spot checking

training

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# Data Sources

The study uses two kinds of data, primary and secondary. Primary data is collected via quantitative and qualitative methods of data collection. Secondary data is gathered from program documents and various reports.

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Data coding

Data cleaning

**Descriptive analysis** 

**Detailed analysis** 

Draft report

**Final report** 



# Sampling & Outreach

Sattva followed a stratified random sampling approach for quantitative data collection. The sample size was

calculated using the population frame (all beneficiaries of the intervention) with 95% confidence level and 5% margin of error.

For qualitative data collection, we have considered a significant sample size ( $n\geq 2$ ) for different stakeholders such as HH members, Sarpanch, DWSS officials across each of the districts required for the study.

STAKEHOLDERS	SURVEY		FGD		INTERVIEW	
	Planned	Actual	Planned	Actual	Planned	Actual
Households	1007	1014				2
Community leaders					10	9
Government Schools Girls			5	-		
School Principal and Teachers			5	2	-	3
Police Commissionerate Staff (Female)	-	4			10	2
Local administration			3	0	-	3
Officials at the DWSS					3	3
Project Implementing Partners			-	1	5	3
Bharti Foundation Team			1	1		

## Limitations of the study

- 1. **Risk of Recall:** Since the study was conducted seven years after the program began:
  - There is a risk of low recall of program details by beneficiaries and stakeholders.
  - Stakeholders who were present at the time of implementation have moved on from their posts and organisations.
- 2. **Risk of COVID:** The study was conducted during COVID. This impacted its activities and findings in the following ways:
  - Schools were shut. Few schools were conducting classes online. Even of those the attendance was dismal, and close to zero. We were not able to collect data from school children.
  - We followed the method of tele data collection i.e. we conducted our interviews with School Teachers and Principals over the phone since schools were closed.
  - The health outcomes of the beneficiaries could be impacted by COVID. This has been accounted for in the findings and recommendations.
- 3. Lack of baseline study for comparison of findings: There was no baseline or needs assessment conducted for this program. The Satya Bharti Abhiyan responded to the government's call to action via the Swachh Bharat Mission.

# **Chapter 3: Findings of the Impact Assessment Study**

The following section of the report details the key results and insights of the impact assessment study across the DAC standard parameters as outlined in the framework for the study. The insights have been drawn using the 360-degree approach of data collection by gathering data from qualitative and quantitative methods by engaging with different stakeholders of the program.

# A. All Regions

This section includes findings from all the locations of the sample study, i.e, Amritsar (Rural), Ludhiana (Rural) and Ludhiana (Urban).

## **Overall Beneficiary Demographics**

- Overall, approximately 74% of the respondents covered in the survey are male and around 26% of the respondents covered, are female.
- The average number of members in each respondent's family was 5 people.
- Majority (65%) of the respondents fall between the age groups of 30-53. Average age of men as well as women respondents is 46.
- 89% of the respondents hold a ration card, out of which a majority of 85% respondents have a Priority Household (PHH) ration card.
- The average annual income of the households was found to be approximately Rs.74,000.





# **Overall Challenges and Gaps**

This section aims to understand if the needs of the community with respect to sanitation have been identified systematically; if the program objectives and activities are aligned with the identified needs of the community and if the program targets the right geographies and stakeholders.

Bharti Foundation was called to action by the Government of India to support the Swachh Bharat Mission. The State Education Department, School Management Committee, Police Commissionerate and the Police Public Foundation provided a list of schools and police stations where toilets were needed. The Bharti Foundation Program Team conducted checks and visited these locations. This was the basis for the design of the key interventions of the program. The strong and close relationships built with the citizens, government, and implementation partners helped to develop a good understanding of the primary needs of the community. Taking all these factors into consideration, the needs of the community and the beneficiary selection criteria were identified in a scientific and systematic manner. The program is therefore relevant to the community.

Sattva further confirmed these findings through the Impact Assessment Study.

- 1. The problem of lack of safety faced by a majority (70%) of the beneficiaries was solved by the provision of the toilet and the 'superstructure' (room) by the program
- Challenges with respect to sanitation: **96%** of the respondents mentioned that they faced issues relating to sanitation, before the construction of toilets in their HHs.
- Major Challenges: When probed further, lack of safety (70%) and long distances from toilets (43%) were the major problems that the respondents faced, prior to the intervention.



- Diseases caused by poor sanitation conditions: Additionally, poor sanitation is linked to transmission of diseases such as cholera, diarrhoea, dysentery, hepatitis A, typhoid and polio and exacerbates stunting.

Inadequate sanitation is estimated to cause 432,000 diarrhoeal deaths annually and is a major factor in several neglected tropical diseases, including intestinal worms, schistosomiasis, and trachoma. Poor sanitation also contributes to malnutrition.<sup>37</sup> Rotavirus, the major case of diarrhea, is caused by contact with stool.38

Health status of beneficiaries: When asked about the frequency with which the HHs fell sick prior to the intervention, 27% respondents highlighted that they fell sick approximately once a month, whereas 33% respondents fell sick once in a few months.



- Major challenges are faced by women and children with respect to sanitation: Without access to a private toilet, too often women and girls are forced to find isolated places out in the open or sometimes even wait until after dark to relieve themselves. As per studies, especially young women report feeling vulnerable to attacks from animals – particularly being bitten by snakes – or being assaulted by people.<sup>39</sup>
- Financial support required to access toilets: 89% of respondents owned a ration card thus proving their financial status for support needed to build a toilet.

<sup>&</sup>lt;sup>37</sup> <u>"Sanitation", World Health Organisation, 2019</u>

<sup>&</sup>lt;sup>38</sup> "Rotavirus". Cleveland Clinic. 2020

<sup>&</sup>lt;sup>39</sup> "Access to toilets and the safety, convenience and self-respect of women in rural India", UNICEF and BMGF



### Challenges related to use of toilet prior to the intervention

- Lack of awareness prior to the program: During qualitative interviews, an ASHA worker mentioned that the community wasn't aware of good sanitation practices. Additionally, a DWSS Official highlighted that before the program, the majority of the male members in HHs which had toilets weren't using the toilets out of habit.
- Existence of social taboos/prejudices: Reasons for being against the use of toilets or having resistance is due to beliefs, social taboos according to the working paper 'Understanding open defecation in rural India: Untouchability, pollution, and latrine pits'. Ritual impurity and concerns related to emptying pits also discouraged use of affordable latrines.<sup>40</sup>

## **Overall Solutions of the program**

This section aims to understand if the program has been designed with the defined processes and systems to bring the desired outcomes in a timely manner.

- 1. The project design and system of monitoring and evaluation was defined well and helped to deliver high quality of toilet construction and IEC activities.
- A step-by-step procedure is followed to select beneficiaries schemes and implement the construction of toilets by the program team. The process also includes social audits, creation of a school management committee, authentication of toilets along with taking periodic inputs from the community.



- Feedback taken into account and resolved regularly. For example, feedback from quality checks of toilets in

<sup>&</sup>lt;sup>40</sup> <u>"Understanding open defecation in rural India", IGC, 2016</u>

the field was reported to the Program team. If toilets were found to be of low quality they were broken down and reconstructed.

- All stakeholders are given resources, information and knowledge required to conduct the project in a sustainable manner
- Detailed SOPs were developed and shared with all Implementing Partners. The Bharti Foundation Program Team worked with the Implementation Partners to ensure that SOPs were understood.
- Beneficiaries are provided with instruction manuals and booklets.
- Sarpanches were provided with behaviour change program resources.
- Implementing Partners were provided with the list of beneficiaries, specifications of the toilets required, amongst other details.
- Bharti Foundation Program Team and engineers were given resources required to conduct quality checks on constructed toilets.

# 2. HHs are given proper awareness and knowledge on maintenance activities in an efficient manner through IEC activities which has helped to sustain the positive impact created.

- The field team engaged with direct beneficiaries and also with the community members across the region to increase awareness on the importance of adopting healthy sanitation practices.
- A well-structured IEC consisting of elements enumerated below was used to encourage regular use and proper operation and maintenance of toilets.



- 3. Well defined grievance-redressal process helped to cater to the needs of the beneficiaries and the citizens who did not directly benefit from the program emphasising the relevance and effectiveness of the program.
- The community and the beneficiaries are empowered through a structured Grievance redress system, which provides them with a platform at various stages to share their inputs with the Foundation.
- A poster containing a list of beneficiaries and contact details of Bharti Foundation representatives is displayed in every village. Any complaint/suggestion can be reported directly to the Foundation or through the construction partner or the Sarpanch.
- During the village meeting, as part of IEC, everyone is given a chance to submit their grievance/suggestion.
- Periodic contact with randomly chosen Sarpanches is made by the Foundation team to get inputs/ suggestions from them.
- Citizens who were not selected to benefit from the program were also welcomed and their grievances were listened to with care and patience.

- 4. Strong relationship of the Panchayat and Department of Water and Sanitation with beneficiaries and choice of stakeholders helped make the program effective.
- Because of the close and strong relationships of the Panchayat and Department of Water Supply and Sanitation with beneficiaries, and with the systems and infrastructure required, this program was successful.
- It was observed that the choice of departments and bodies the program collaborated with increased its effectiveness. It was noted that it is effective to work directly with the Department of Water and Sanitation and the Local Government bodies (Eg. Panchayat) to implement this sanitation related program.

## **Overall Impact of the program**

This section aims to understand the short term, medium term and long term impact created by the program through its initiatives.

- 1. 94% of households surveyed have a functional toilet provided by Bharti foundation, of which 93% of the toilets were being used by all members of the household proving that the need for the toilet had been identified correctly and the IEC program activities were effective in ensuring active status of toilet and usage.
- **2%** of the HHs did not currently have a toilet provided by Bharti Foundation.
- Following reasons were discovered during the study for beneficiaries to not have toilets provided by Bharti Foundation:

### Toilets broken down by beneficiaries:

- It was damaged (n = 4)<sup>41</sup>
- Removed toilet to use as a room or for storage (n=1)
- Location of toilet was felt to be incorrect by beneficiary (n=2)
- Water from toilet was leaking (n=2)
- Others (n = 1)

### Toilets taken down by railway authorities.

- Some beneficiaries living close to the railway line in Sahnewal and other areas of Ludhiana Urban reported that railway authorities removed their toilet since it was too close to the railway line, and for other unreported reasons (n=5)

The remaining beneficiaries specified 'Others' as a reason for not having a toilet, i.e. no reason provided (n=3)



- During qualitative interviews, a DWSS Official, highlighted that the major risk of the program is the risk of the toilet rooms being used as storage rooms (for fodder etc.) instead of as washrooms.

<sup>&</sup>lt;sup>41</sup> Beneficiaries reported toilet 'kharab ho gayi' in Hindi and Punjabi. Damage could be due to natural causes, external factors caused by additional construction around the house, not taking care of the available infrastructure, etc.

# 2. IEC activities have translated into positive behaviour change in the community leading to 94% HHs having toilets that are still functional.

- **94%** HHs highlighted that the toilets were currently **functional**.
  - Some beneficiaries reported that the reason for their toilets not being functional was that their toilets were closed or blocked (n = 4). The other beneficiaries did not respond on reasons for the toilet not being functional.
- (IEC) activities have helped in behaviour change among the HHs to sustain the functioning of the toilets. Rallies/School March (56%) and Gram Sabha meetings (51%) are the major IEC awareness activities that the Households recall.
- 68% of the total respondents recalled receiving information on good sanitation practices. When probed further, they highlighted that they received this information via IEC activities (49%), Media<sup>42</sup> (47%) and via initiatives by the Government and other organisations (21%).
- Out of all the IEC activities conducted:
  - 48% respondents recalled the topic: 'Introduction to the IHHL'
  - 70% respondents recalled the topic: 'Maintenance of the IHHL'
  - 41% respondents recalled the topic: 'Benefits of using IHHL'
  - 5% respondents recalled the topic: 'Others'
- According to a study supported by Bill and Melinda Gates Foundation, the scale of IEC activities under Swachh Bharat Mission (Grameen) has created a paradigm shift in how India thinks, not only about sanitation, but also about other policy issues that entail a strong behaviour change component, speaking to the level of impact that IEC activities can have.<sup>43</sup>
- Some of the major factors which helped HHs to maintain functioning toilets are :
- HHs understand the importance of the toilet and are not using it as a store room or for other purposes
- HHs are taking ownership of the toilet and taking care of it after the intervention has been completed



#### Information received by HHs on good sanitation practices (n = 1014)

<sup>&</sup>lt;sup>42</sup> Media: Print/ Social/ Digital

<sup>&</sup>lt;sup>43</sup> <u>An assessment of the reach and value of IEC activities under Swachh Bharat Mission (Grameen), Bill & Melinda Gates Foundation, 2019</u>

IEC Activities that have helped HHs with awareness



- 3. Households are using the toilets provided, they are making efforts to maintain them and they are following the good sanitation practices taught during the behaviour change activities thus proving the effectiveness of the program.
- 93% of the HHs who had functional toilets, reported that the toilets were being used by all family members, whereas 7% HHs reported that at least some of their family members use the toilet. This coincides with data from the National Annual Rural Sanitation Survey, which reports that around 90.7% of the population in rural Punjab were using safe, functional and hygienic toilets.<sup>44</sup>
- When asked about the sanitation practices being followed by the HHs, **97%** HHs highlighted that they use soap/liquid hand wash to wash their hands after using the toilet.



- 4. Households are saving time because toilets are installed in their homes. This time saved by family members is being used for productive paid work and to help with household work.
- **98%** of the respondents in total, from the study highlighted that their time was being saved as a result of toilets in their HHs.
- **39%** of the respondents used the extra time to help with household work whereas 48% of the respondents engaged in productive work.
- A study done by the UNICEF and Bill and Melinda Gates Foundation (BMGF) on the impact of the Swachh Bharat Mission (Gramin) on rural women found that women save up to one hour of their day which they earlier spent to walk to places to defecate.<sup>45</sup> Considering this, and the average MNREGA wage rate for Punjab, a

<sup>&</sup>lt;sup>44</sup> National Annual Rural Sanitation Survey, Ministry of Jal Shakti, 2019-20

<sup>&</sup>lt;sup>45</sup> "Access to toilets and the safety, convenience and self-respect of women in rural India", UNICEF and BMGF

household could earn **Rs. 29 for each hour** saved and spent in productive work, according to the average MNREGA wage rate.<sup>46</sup>



- 5. Positive Impact on women and children is observed as an outcome of the program activities since 75% of female respondents believe that the program has helped women and 77% of all respondents believe that the program has helped children with 'increase in feeling of safety' being the major benefit.
- Secondary data suggests that a toilet in the HH helps women from physically and mentally controlling the urge to defecate or urinate till after sunset or before sunrise. This increases their privacy and safety. This helps them to save time which can be used for household chores or personal activities, and also improves their health and well being. Additionally, toilets tend to benefit women more than men because they are expected to clean up the feces of ailing relatives and small children.<sup>47</sup>
- 84% of total respondents believe that the program helped women and had an impact on them. When probed further, 93% of respondents believed that the major issue that the program helped with, is improvement in safety. The toilet and the 'superstructure' (room) provided by the program and the proximity of the toilet to the house solved this problem.
- Women now felt safer using toilets since they did not have to travel to distant locations to relieve themselves.
  48% of the respondents said that the women had more time for their personal activities.
  42% of the respondents said that the women had more time for their personal activities.
- Out of 260 female respondents, 75% (i.e. 194 female respondents) believed that the program helped women.
  - 178 out of 194 women responded that they feel safer (91%)
  - 78 out of 194 women responded that there was an increase in confidence level of women (40%)
  - 80 out of 194 women responded that there was more time for personal activities (41%)
- Women were also empowered in the following ways through the program:
  - They monitored the construction of their own toilets.
  - The construction partners appointed women as their "motivators" to conduct personal meetings with beneficiaries as a part of IEC activities and to monitor usage.
  - They participated in behaviour change activities. For example, they conducted and participated in Rallies and Road Marches through villages to spread awareness.
  - The Department of Water and Sanitation Services appointed women in their "Nigrani committees" formed as a process to help villages achieve ODF status.

<sup>&</sup>lt;sup>46</sup> State-wise wage rate for unskilled manual workers under MGNREGA, Vikaspedia

<sup>&</sup>lt;sup>47</sup> "Understanding open defecation in rural India", IGC, 2016

77% of the respondents felt that the program helped children. When asked specifically about children, 93% respondents believed that the program improved children's safety. 46% of the respondents felt that their girl child had more time for hobbies, studying etc.



# 6. Construction of toilets in the village along with awareness about good sanitation practices among households has led to significant reduction in occurrence of diseases

- **78%** HHs have noticed a decrease in the frequency of them falling sick after construction of the toilets.
- There has been a fall in healthcare expenditure of about **32%** from an average of Rs. 4,788 a year before the intervention to Rs. 3,249 a year after the intervention.
- Research shows that cases of diarrhea in India have seen a downward trend between 1990 and 2019. This coincides with the improvement in sanitation facilities through various initiatives across the country.<sup>48</sup>
- Non-ODF areas in India, where people still defecate in the open, have 17% higher cases of stunting and 58%

<sup>&</sup>lt;sup>48</sup> <u>"Diarrheal Diseases", Our World in Data, 2019</u>

higher cases of wasting among children.49



- During interviews, ASHA workers highlighted that since the construction of toilets in the village, the number of diseases has reduced to a great extent. They also highlighted that people have become aware about their health, which encourages them to use toilets more and that no one defecates in the open.
- Households mentioned that they have learned a lot about hygiene since these toilets were built. A lot of people's attitude towards cleanliness has changed greatly after they started using toilets.

## **Overall Sustainability of the program**

This section aims to understand if the community is well equipped to take ownership of the program and sustain the initiatives after the exit of the implementing team.

The impact of the program is likely to continue since there are factors to ensure operational, economic and organisational sustainability.

- 1. Households have taken the effort to maintain their toilets and some of the households have also added features to the base toilets helping to sustain and increase the positive impact of the program
- Majority of the respondents have undertaken important maintenance activities to sustain their toilets. This reflects a sense of responsibility with regard to sanitation and a sense of ownership of the toilet. Deep cleaning (83%) and scrubbing of grim (72%) are some common activities that majority HHs are undertaking to sustain their status of having a toilet in the HH.
- A significant proportion of the respondents (approximately 1 out of 3) have upgraded their toilet by adding features to it. Out of the HHs who have added features, majority HHs have added taps (76%) and bathing facilities (51%) to their toilets.

<sup>&</sup>lt;sup>49</sup> <u>"Swachh Bharat Mission (Grameen) Report Card", Department of Drinking Water and Sanitation, Government of India</u> (2019)



- This behaviour speaks to the aspiration of the HHs. Their ownership of the toilet, reflected in their maintenance activities and addition of features, shows that they aspire to have sanitation facilities and are willing to make efforts to maintain their access to such facilities which will lead to a better standard of living.
- 2. Governance institutions and systems which have been enabled helps to ensure the maintenance, use and proper functioning of the toilets
- Women joined DWSS Nigrani Committees to help track ODF status.
- Sarpanches, Local Government groups have been enabled to understand and lead project activities.
- Women and children have been involved in creating, leading and conducting IEC activities.
- DWSS and Swachh Bharat Mission have been supported and enabled to achieve their mission.

# Voices from the ground

"Since the construction of toilets in the school, a change in the behavior of children has been observed. Because when there were no toilets, children were not aware of that behavior although, now that toilets have been built children have learned how to bring good habits to life and If it is implemented, then in this way the children are learning and at the same time they also tell their parents about this then the parents also become aware." - A School Faculty Member

"I would say that the toilet has been built in a very good way because even though we are not able to do as much for the children as the Bharti Foundation has given us, we are very grateful to the Foundation." - A Teacher

"This program was also done very well, most successfully, being a private organisation, Bharti Foundation having their own expertise in management. I found Satya Bharti Abhiyan the best program in my career which has been so successful. It is not only the money they have contributed, their contribution has touched the lives of so many people." - A District Sanitation Officer at the time of the project" - A District Sanitation Officer

"When toilets were made in the school and the parents of the children saw those toilets, the houses where toilet facilities were not available, those people approached the Bharti Foundation to come and build toilets at our house. In this way, awareness has been developed among the people." - A Head Teacher

# **Case studies of household beneficiaries**

### Case Study 1:

"The Bharti Foundation team visited the village and spoke to all of us about sanitation and hygiene. They told us about the Satya Bharti Abhiyan and that they will build toilets in our village. Before they visited us, there was a lack of understanding about sanitation and people did not care much about safe defecation because people did not have access to toilets. People started understanding the importance of toilets after the toilets were built. The Gram Sabha and local bodies have also shown support for this program.

Before the toilets were built, people would regularly defecate in open spaces. This was especially harmful for women, who felt unsafe while doing so. People also faced health problems often due to unsafe sanitation practices. But women feel safer now that they have access to personal toilets, and people's attitude and behavior towards hygiene and sanitation practices has also shifted positively. Since the toilets are built, there is a feeling of increased awareness in the village. The Bharti Foundation team taught us about ways to keep the toilets clean. We use acid and toilet cleaners to keep the toilets in our home clean. They also taught us about hand-washing practices and how to maintain personal hygiene after using the toilets.

People that previously were against the use of toilets have also started using the toilets built by Bharti Foundation as they have realized the benefits of these toilets such as lesser disease outbreaks, saving time by not having to go to fields for defecation, etcetera. There has been a change in behaviour of these people and they gradually stopped defecating in the open altogether. All people are using the toilets that were built in their homes. However, the railways took down some toilets so those families no longer have access to toilets."

# **B. Region-wise Insights**

# i. Ludhiana Rural

### Beneficiary Demographic trends of the community

In Ludhiana Rural, approximately 78% of the respondents covered in the survey are male whereas around 22% of the respondents covered are female. Majority of the respondents fall in the age group of 30-53. The average number of members in each respondent's family was 5 people. 92% of the respondents hold a ration card, out of which a majority of 87% respondents have a Priority Household (PHH) ration card. The average annual income of the households was found to be approximately Rs. 82,000.



## Challenges faced due to lack of toilets

- **95%** of the respondents in Ludhiana Rural, faced challenges with regard to using the bathroom prior to the intervention.
- Major challenges faced were lack of safety (79%) and long distances from the toilet (57%). A significant portion of the respondents also felt that the toilets that were available were dirty and not usable.



### Community's views on implementation of the project

- **77%** of the respondents mentioned receiving information regarding ideal sanitation practices.
- IEC activities have been a major source of this information. The most recalled IEC activity in Ludhiana Rural were Rallies and School Marches (76%).
- As a result of the behaviour change activities among other factors, **98%** of the households in Ludhiana Rural wash their hands thoroughly with soap after using the toilet.
- Ownership aspect of the toilets is also seen among the respondents as **46%** of them undertake regular cleaning of the toilets to maintain functionality.



#### IEC Activities that have helped HHs with awareness

#### Sanitation practices followed by HHs



### Toilets created in the village

- During the surveys conducted for the study, it was found that **1%** of the respondents no longer had a toilet. When probed further into the reasons of such cases, the toilets were broken down by the HHs due to issues such as :
  - Water from toilet was leaking (n = 2)
  - Removed toilet to use as a room or for storage (n = 1)
  - Location of toilet was felt to be incorrect by beneficiary (n = 1)

The remaining beneficiaries specified 'Others' as a reason for not having a toilet, i.e. no reason provided (n=1)



#### Reasons for not having a toilet currently

### Impact of the program on community, women and children

- **99%** of the respondents believed that their time was saved since the toilet construction.
  - **48%** of these respondents used the extra time for work and **40%** used the extra time to help with household work.
- **96%** of the respondents who believed the program helped women felt that the construction of toilets has helped with women feeling safe. Out of the respondents who reported this, 21% of the respondents were female.
- A significant portion (38%) of the respondents also felt that women now have time for personal activities.
- **95%** of the respondents believe that children feel safer using toilets. 39% of the respondents also felt that girls had more time to study.



### Long term sustainability of the program

- **92%** of respondents undertake deep cleaning of the toilets and 73% of respondents scrub the grims of the toilets to maintain it and keep the toilets in good condition.



# ii. Ludhiana (Urban)

## Beneficiary Demographic trends of the community

In Ludhiana Urban, approximately 71% of the respondents covered in the survey are male whereas around 29% of the respondents covered are female. Majority of the respondents fall in the age group of 30-47. The average number of members in each respondent's family was 6 people. 91% of the respondents hold a ration card, out of which a majority of 90% respondents have a Priority Household (PHH) ration card. The average annual income of the households was found to be approximately Rs. 64,700.



## Challenges

- **99%** of the respondents in Ludhiana Rural, faced challenges with regard to using the bathroom prior to the intervention.
- Major challenge faced was lack of safety (71%). A significant portion of the respondents also felt that the toilets were located at a long distance from them.



Challenges related to use of toilet prior to the intervention

## Community's views on implementation of the project

- **76%** of the respondents mentioned receiving information regarding ideal sanitation practices.
- IEC activities have been a major source of this information. The most recalled IEC activity in Ludhiana Rural were Rallies and School Marches (52%) as well as Gram Sabhas (46%).
- As a result of the behaviour change activities among other factors, **99%** of the households in Ludhiana Rural wash their hands thoroughly with soap after using the toilet.
- Ownership aspect of the toilets is also seen among the respondents as **35%** of them undertake regular cleaning of the toilets to maintain functionality.


#### Sanitation practices followed by HHs



#### Toilets created in the village

- During the surveys conducted for the study, it was found that **4%** of the respondents no longer had a toilet.
- When probed further into the reasons for such cases, it was found that 50% of those toilets were broken down by railway authorities. Some beneficiaries living close to the railway line in Sahnewal and other areas of Ludhiana Urban reported that railway authorities removed their toilet since it was too close to the railway line, and for other unreported reasons.
- The toilets were broken down by the HHs due to issues such as :
  - Location of toilet was felt to be incorrect by beneficiary (n = 1)
  - It was damaged (n = 4)<sup>50</sup>
- Railway authorities broke down the toilets (n = 5)



#### Impact of the program on women and children

- 98% of the respondents believed that their time was saved since the toilet construction.
  - **52%** of these respondents used the extra time for work and **36%** used the extra time to help with household work.
- **92%** of the respondents believe that the construction of toilets has helped with women feeling safe. 25% of these respondents were female.
- A significant portion (59%) of the respondents also felt that women now have time for personal activities.
- **95%** of the respondents believe that children feel safer using toilets. 55% of the respondents also felt that girls had more time to study.

<sup>&</sup>lt;sup>50</sup> Beneficiaries reported toilet 'kharab ho gayi' in Hindi and Punjabi. Damage could be due to natural causes, external factors caused by additional construction around the house, not taking care of the available infrastructure, etc.



#### Long term sustainability of the program

- **87%** of respondents undertake deep cleaning of the toilets and 71% of respondents scrub the grims of the toilets to maintain it and keep the toilets in good condition.



## iii. Police

'Feeling unsafe' while defecating or urinating before the toilet was constructed by Bharti Foundation was a major challenge reported by all female police officers.

A Police Officer in Ludhiana stated that they suffered from a lot of problems before the toilet was constructed by Bharti Foundation. Some of the problems were:

- There was one male toilet which men and women had to use
- The condition of the previous toilets was not good
- They had to go out to defecate because of which they suffered from infections
- Reported feeling unsafe while defecating or urinating

The provision of a separate toilet for female officers has helped them as they reported:

- Feeling safer while using toilets, defecating and/or urinating
- Saving time
- Feeling more comfortable at work

Toilets in all police stations were functional and clean. They are checked and repaired regularly.





### iv. Schools

- It was reported that the Bharti Foundation Operations Team worked closely with schools to identify the right location of the toilet on the school premises, and to monitor construction.
- There was no separate toilet for girl school children in the schools earlier. School Teachers and Principals reported an improvement in the safety and sense of security of girl children after the construction of the toilets.
- It was observed that the schools have taken ownership of the toilet. Out of the 5 Schools from whom data was collected, all schools reported that regular maintenance activities for the toilets were conducted.
- A school reported that staff was hired to take care of the toilet.
- All schools reported an increase in awareness of sanitation related best practices and behaviours.
- A trickle down effect of the construction and IEC activities was reported.
- A school reported that children were made aware of good sanitation and practices. And they shared this information with their parents who also became aware.
- A school reported that children and parents were made aware of sanitation practices in school meetings.
  When parents of children saw the toilets in the school, they came forward and requested for toilets to be constructed in their homes as well.
- Schools reported inviting parents with their children to school meetings, where they were made aware of good sanitation practices.
- Schools helped to organise rallies in the village.



### iii. Amritsar (Rural)

#### Demographic trends of the community

In Amritsar Rural, approximately 70% of the respondents covered in the survey are male whereas around 30% of the respondents covered are female. Majority of the respondents fall in the age group of 30-53. The average number of members in each respondent's family was 6 people. 85% of the respondents hold a ration card, out of which a majority of 79% respondents have a Priority Household (PHH) ration card. The average annual income of the households was found to be approximately Rs. 69,700.



#### Challenges faced due to lack of toilets

- **95%** of the respondents in Ludhiana Rural, faced challenges with regard to using the bathroom prior to the intervention.

 Major challenge faced was lack of safety (60%). A significant portion of the respondents also felt that the toilets were located at a long distance from them.



#### Community's views on implementation of the project

- **51%** of the respondents mentioned receiving information regarding ideal sanitation practices.
- IEC activities have been a major source of this information. The most recalled IEC activity in Ludhiana Rural were Gram Sabhas (67%).
- As a result of the behaviour change activities among other factors, **94%** of the households in Ludhiana Rural wash their hands thoroughly with soap after using the toilet.
- Additionally, it was found that the recall for the topic 'benefits of using Individual Household Latrine (IHHL)' was 33%, showing a need for more focus on this topic. This is crucial to increase the motivation of beneficiaries to use the toilets provided to them, and to sustain positive behaviour change.



#### IEC Activities that have helped HHs with awareness



#### Sanitation practices followed by HHs

#### Toilets created in the village

- During the surveys conducted for the study, it was found that 1% (n = 3) of the respondents no longer had a \_ toilet.
- When probed further into the reasons of such cases, the toilets were broken down by the HHs due to other issues (n=1).
- The remaining HHs did not have toilets for 'other' reasons (n=2). No further explanation was provided.

#### Impact of the program on women and children

- 97% of the respondents believed that their time was saved since the toilet construction.
  - 44% of these respondents used the extra time for work and 37% used the extra time to help with household work.
- 88% of the respondents believe that the construction of toilets has helped with women feeling safe. Out of the respondents who reported this, 25% of the respondents were female.
- A significant portion (57%) of the respondents also felt that women now have time for personal activities.
- 90% of the respondents believe that children feel safer using toilets. 53% of the respondents also felt that girls had more time to study.



Respondents who believe that their time





#### Long term sustainability of the program

- **70%** of respondents undertake deep cleaning of the toilets and 72% of respondents scrub the grims of the toilets to maintain it and keep the toilets in good condition.



#### Maintenance activities undertaken by HHs

# **C. Information on Implementation partners**

Bharti Foundation worked with section AFHTAC, Humana, Sintex, Sulabh International, Turnstone Global and the Department of Water Supply and Sanitation (Punjab) on this project.

	Sulabh	Turnstone	Humana	AFHTAC	Sintex	DWSS
Types of IEC activities conducted	Village rally with community leader and school students, Gram Sabha, Booklet distributions and Wall poster	Village rally with community leader and school students, Gram Sabha, Booklet distributions and Wall poster	Village rally with community leader and school students, Gram Sabha, Booklet distributions and Wall poster	Village rally with community leader and school students, Gram Sabha, Booklet distributions and Wall poster	Village rally with community leader and school students, Gram Sabha, Booklet distributions and Wall poster	School students. Staff Competition. Dialogues with Sarpanchs, SDE/JEs, Motivators; onsite
Who conducted IEC activities?	Sulabh	Turnstone	Humana	AFHTAC	Bharti Foundation	DWSS
Construction model	Brick Mortar	Brick Mortar	Brick Mortar	Brick Mortar	Upto Plinth: Brick Mortar, Superstructure: Prefabricated	As per MoU, choices are: - 'Twin pit latrine with rural pan, septic tank latrine connected to soak pit, bath cum toilet with bath water going to village drain and toilet waste discharging into leach pit or septic tank.' - Bio tank toilet - Any other safe and sanitary latrine option - All toilets should have provision for hand washing

# **D. Information on status of toilets according to location and Implementation Partners**

Village	Implementation Partner	Total HHs having a toilet provided by Bharti Foundation	Functional Toilets	% of functional toilets
Bhinder	DWSS	27	24	89%
Dalla rajputtan	DWSS	49	46	94%
Kandowali	DWSS	21	20	95%
Kolowal	DWSS	26	26	100%
Mahadipur	DWSS	13	12	92%
Nanoke	DWSS	23	23	100%
Pandori	DWSS	6	6	100%
Sant Gurbachan Singh Nagar	DWSS	19	19	100%
Shaheed Malkit Singh Nagar Dhardeo	DWSS	52	49	94%
Tera Khurd	DWSS	51	50	98%
Tera Rajputtan	DWSS	53	53	100%
Udhoke Khurd	DWSS	1	1	100%
Alipur	Humana	7	7	100%
Balliawal	Sulabh	124	122	98%
Chehlan	Turnstone	74	71	96%
Dhoula	Sintex	26	24	92%
	BhinderDalla rajputtanKandowaliKandowaliKolowalMahadipurMahadipurNanokePandoriSant Gurbachan Singh Nagar DhardeoShaheed Malkit Singh Nagar DhardeoTera KhurdTera RajputtanUdhoke KhurdAlipurBalliawalChehlan	PartnerBhinderDWSSDalla rajputtanDWSSKandowaliDWSSKolowalDWSSKolowalDWSSMahadipurDWSSNanokeDWSSPandoriDWSSSant Gurbachan Singh NagarDWSSShaheed Malkit Singh Nagar DhardeoDWSSTera KhurdDWSSTera RajputtanDWSSUdhoke KhurdDWSSAlipurHumanaBalliawalSulabhChehlanTurnstone	Partnerhaving a tollet provided by Bharti FoundationBhinderDWSS27Dalla rajputtanDWSS49KandowaliDWSS21KolowalDWSS26MahadipurDWSS26ManokeDWSS13PandoriDWSS6Sant Gurbachan Singh NagarDWSS52Shaheed Malkit Singh NagarDWSS51Tera KhurdDWSS51Tera RajputtanDWSS1AlipurHumana7BalliawalSulabh124ChehlanTurnstone74	Partnerhaving a toilet Bharti FoundationToilets Toilets Bharti FoundationBhinderDWSS2724Dalla rajputtanDWSS4946KandowaliDWSS2120KolowalDWSS2626MahadipurDWSS1312NanokeDWSS2323PandoriDWSS66Sant Gurbachan Singh NagarDWSS5249Shaheed Malkit Singh Nagar DhardeoDWSS5150Tera RajputtanDWSS5353Udhoke KhurdDWSS11AlipurHumana77BalliawalSulabh124122ChehlanTurnstone7471

Ludhiana Rural	Garcha	Sintex	9	8	89%
	Jalajan	Sulabh	30	30	100%
	Jhorran	Sulabh	52	51	98%
	Paddi Colony	AFHTAC	24	24	100%
	Rajgarh (Raikot)	Sulabh	10	9	90%
	Rajgarh, Doraha	Sintex	38	35	92%
	Rupalon	Turnstone	24	24	100%
	Sultanpura	Turnstone	8	8	100%
	Bazigar Basti, Doraha	PMIDC	11	10	91%
	Indra Colony (Mullanpur)	PMIDC	8	6	75%
	Maloud Ward 6	PMIDC	1	1	100%
	Sahebajpura Rd,Moh.Kann Malliya (Raikot)	Sulabh	20	20	100%
	W.No.12,H.No.98,Jaip ura Rd (Doraha)	PMIDC	1	0	0%
	Ward no. 4 (Payal)	Sulabh	9	8	89%
	Ward no. 6 (Sahnewal)	Sulabh	18	15	83%
Ludhiana Urban	Ward No. 9 Indra Colony (Macchiwara)	Sulabh	14	13	93%
	Ward No.10,Indra Colony (Mullanpur)	PMIDC	23	23	100%
	Ward No.12, Prem Nagar (Mullanpur)	PMIDC	26	24	92%
	Ward No.2 (Maloud)	PMIDC	23	23	100%
	Ward No.3 (Maloud)	PMIDC	18	17	94%

Ward No.5,Ravidas Mohalla (Samrala)	PMIDC	6	5	83%
Ward No.6,Prem Nagar (Mullanpur)	PMIDC	18	18	100%
Ward No.7 (Payal)	PMIDC	17	16	94%

# **Chapter 4: Key Recommendations**

A 360 degrees assessment of the impact of the program revealed positive outcomes. Enablers and risks of the program were identified, and a few areas of improvement were highlighted. The following recommendations have been formulated to bridge existing gaps in the program and to adhere to global best practices.

# 1. Collaborating with key stakeholders within the government will strengthen the program by ensuring that the program is in line with government plans.

**Explanation:** Sattva surveyed beneficiaries during the data collection stage of the project. During these surveys, it was noted that a few beneficiaries in Urban Ludhiana did not have toilets. The reason for this was that the Railway Authorities removed them.

**Recommendation:** Work in collaboration with key stakeholders within the government and the private sector to ensure the protection and longevity of program intervention outputs and outcomes. This will also help to make sure all stakeholders are aware of the program activities and plans, and any concerns and feedback can be voiced in advance. This will avoid miscommunication and problems in the future. Eg. If Railway Authorities inform the program in advance that they do not agree with the location of the toilets, the toilets can be constructed in an alternate and suitable location by the program team.

Stakeholders to collaborate with:

- Railways: Divisional Railway Manager Office, Ministry of Railways, Railway Land Development Authority, Zonal Railway Department.
- Region: Municipal Corporations, Panchayats.
- Planning: Punjab Urban Planning and Development Authority, Greater Ludhiana Area Development Authority, Amritsar Development Authority.
- Health and Sanitation: Asha workers, Department of Water Supply and Sanitation.
- Private Sector players focused on the same goal: Foundations, Corporate Social Responsibility teams within Companies, NGOs (Eg. Dabur, GAIL, Sulabh International).

**Potential Practices:** Contribute to the Master Plan and Zonal Plan creation process to ensure that program activities do not affect functioning of other infrastructure and to stay aligned with future government plans which could affect program activities.

# 2. Using geo tagging technology to monitor location of toilets after construction will solve challenges caused by regular change in ward boundaries and location of the beneficiaries required to monitor and evaluate the progress of the program.

**Explanation:** During the data collection stage of the project, it was noted that addresses of beneficiaries had changed because of changes in ward boundaries due to elections. This could lead to loss of contact with beneficiaries and loss of data related to location of toilets constructed.

**Recommendation:** Use geo tagging technology to save the location of toilets and overcome the problem caused by change in beneficiary addresses due to changes in ward boundaries during elections.

**Potential Practices:** Geo tagging of toilet locations through photos taken of toilets will provide information needed to follow up on progress of the program. GPS coordinates, along with other technical details about the image, are stored in the Exchangeable Image File Format (EXIF) data that accompanies a JPEG photo file. Edit the picture's EXIF data to add location information.

# 3. Enabling the creation of Self Help Groups at location of intervention will ensure and improve maintenance of toilets and positive behaviour change outcomes.

**Explanation:** Bharti Foundation, Implementation Partners and Sattva noted that beneficiaries were taking effort to maintain and upgrade the toilets which were provided by Bharti Foundation.

**Recommendation:** To encourage and sustain these positive behaviours and actions, we recommend that Bharti Foundation can enable the creation of Self Help Groups to serve as a support system for beneficiaries.

**Potential Practices:** Strengthen sustainability of the program by setting up a committee formed out of the household members. These committee members will help to continue the impact created by the program. For example, they can identify a contractor for maintenance of toilets who can be called for repairs and other purposes.

# 4. Supporting all citizens to avail of sanitation and allied government schemes by creating awareness and sharing information about the same will increase the sustainability of the program and improve outcomes.

**Explanation:** Bharti Foundation's Satya Bharti Abhiyan Program provides a toilet to every household without a toilet. During the data collection stage of the project, it was noted that citizens who did not qualify for the program also demanded toilets through the program and from the stakeholders.

**Recommendation:** Support citizens who do not qualify for the program to get access to toilets through other relevant government or private sector schemes. Support citizens who have qualified for the program to avail of more government schemes for sanitation related or allied programs.

**Potential Practices:** Inform citizens of the following programs through their Panchayats and Municipal Corporations:

List of schemes in Punjab:

- Swachh Bharat Mission (Urban)<sup>51</sup>
- i. Individual Household Toilets
- ii. Community Toilets Scheme
- iii. Public Toilets and Urinals Scheme

5. Increasing frequency and type of behaviour change activities with focus on 'benefits of using a toilet', and including information about different types of sanitation related diseases, symptoms and cures will increase the effectiveness of the behaviour change programs conducted.

<sup>&</sup>lt;sup>51</sup> <u>"Handbook for Beneficiary Oriented Schemes and Programmes"</u>, Department of Local Government, Punjab

**Explanation:** During the data collection stage of the project, it was noted that beneficiaries did not have full working knowledge of the types of diseases caused by incorrect sanitation practices. It was also noted that beneficiaries could not recall topics within IEC activities such as 'benefits of using Individual Household Latrine (IHHL)'. Topics like this are crucial for increasing motivation to use toilets, and sustaining positive behaviour change.

**Recommendation:** Conduct innovative activities to change perception, beliefs and attitude of citizens towards usage of toilets, having a toilet in the house, and following good hygiene. Increase frequency and type of behaviour change activities with focus on 'benefits of using a toilet', and include information about different types of sanitation related diseases, symptoms and cures to increase the effectiveness of the behaviour change programs conducted. Standardisation of behaviour change activities, content and guidelines will help to maximise the positive impact created.

#### **Potential Practices:**

- Encourage local government bodies and schools to conduct at least one activity (eg. a rally, a march, or an educational session as a part of the gram sabha meetings) a month in every village to reinforce behaviour change information shared.
- Add detailed information about the types of diseases caused by bad sanitation practices, their symptoms and their cures.

# 6. Building the capacity of public and private organisations who are working on sanitation related issues will exponentially increase the success of the Satya Bharti Abhiyan program and the efforts taken within the ecosystem towards shared goals.

**Explanation:** Through their work, Bharti Foundation found that they were able to support the Government and other entities with different types of resources and capacity building activities. For example, Bharti Foundation and its partners helped the Panchayat, Schools and other stakeholders within villages to conduct IEC activities and complete toilet construction activities. Bharti Foundation and its partners also helped the Government to liaise with beneficiaries and other stakeholders.

**Recommendation:** Since Bharti Foundation's Satya Bharti Abhiyan is already working to build 'transformative scale'<sup>52</sup>, it can exponentially increase the impact created by all players in the ecosystem, by sharing its knowledge resources, by training government officials on project management techniques and by providing systems and management tools to government offices, to increase and improve their efficiency.

#### **Potential Practices:**

- Share project management resources like MIS Dashboards, Financial Reports and Plans, Project Management plans and tools, Behaviour Change material, and other resources with government stakeholders so that they can learn from it, incorporate the same into their systems and improve their efficiency.
- Share in public the list of private sector or other organisations, experts, contractors etc. the program worked with for each program activity (eg. construction of toilet, design and implementation of behaviour change programs, etc.). This will help the government and private sector to learn from program activities and build on progress towards shared goals.
- Engage and participate in public consultations and provide feedback on related parliamentary bills, public projects and government policies.

<sup>&</sup>lt;sup>52</sup> <u>"Transformative Scale: The Future of Growing What Works", Stanford Social Innovation Review</u>

### Ethical considerations of the study

The assessment followed the ethical protocols in all aspects and at all stages of the engagement based on the discussion with team:

- Informed consent and voluntary participation: All respondents and participants have been given appropriate and accessible information about the purpose, methods and intended uses of the evaluation, what their participation in the project entails, and what risks and benefits, if any, are involved. The assessment has been undertaken only after consent free from coercion or undue pressure is received from the respondents. They have been made aware of their right to refuse participation whenever and for whatever reason they wish, without fear of penalisation or victimisation. Participants have also been made aware of where and for how long their data will be stored and how the data will be treated. Consent has been taken with regard to recording and usage of all information acquired written, verbal, photographic. It has been kept in mind that the primary research is conducted in a place where the participants feel comfortable and safe in sharing their responses. At no point has any information been sought, either through explicit pressure or false promises, from the respondents.
- **Anonymity and confidentiality:** The identity of participants has been protected at all times through anonymity or confidentiality, unless the participants explicitly agree to, or request the publication of their personal information.

Sr. No.	Reason for not having a toilet	Village	Implementation Partner
1	Water Leaks	Chehlan	Turnstone
2		Rupalon	Turnstone
3	Incorrect location	Rajgarh (Raikot)	Sulabh
4		Indra Colony (Mullanpur)	PMIDC
5	Railway authorities broke it down	Ward no. 6 (Sahnewal)	Sulabh
6		Ward no. 6 (Sahnewal)	Sulabh
7		Ward no. 6 (Sahnewal)	Sulabh
8		Ward no. 6 (Sahnewal)	Sulabh
9		Ward no. 6 (Sahnewal)	Sulabh

### Details of HHs that did not have a toilet (2%)

10	It was damaged <sup>53</sup>	Ward No.7 (Payal)	PMIDC
11		Ward No.5,Ravidas Mohalla (Samrala)	PMIDC
12		Ward No.5,Ravidas Mohalla (Samrala)	PMIDC
13		Bazigar Basti, Doraha	PMIDC
14	Removed toilet to use as a room or for storage	Paddi Colony	AFHTAC
15	Others	Rajgarh (Raikot)	Sulabh
		Sant Gurbachan Singh Nagar	DWSS
17		Mahadipur	DWSS
18		Dalla rajputtan	DWSS

<sup>&</sup>lt;sup>53</sup> Beneficiaries reported toilet 'kharab ho gayi' in Hindi and Punjabi. Damage could be due to natural causes, external factors caused by additional construction around the house, not taking care of the available infrastructure, etc.