Journal of Information Systems Engineering and Management

2025, 10(9s) e-ISSN: 2468-4376

https://www.jisem-journal.com/

Research Article

Using Corporate Social Responsibility as A Tool to Reduce the Menace of Open Defecation and Improve Standards of Sanitation in the Villages of Mehsana, Gujarat

Dr Bijal Shah¹, Ayalasomayajula Srinivasa Rao²

¹Assistant Professor, Faculty of Management Studies, Parul University
Email- shahbijal1609@gmail.com

²Research Scholar, Faculty of Management Studies, Parul University
Email- asrao1966@gmail.com

ARTICLE INFO

ABSTRACT

Received: 22 Oct 2024 Revised: 18 Dec 2024 Accepted: 30 Dec 2024 All Corporates as per under Section 135 of the Companies Act 2013 and Companies (Corporate Social Responsibility Policy) Rules 2014 have to spend a part of their profits in the areas designated by the Act. Eradicating hunger, poverty & malnutrition, promoting preventive health care & sanitation & making available safe drinking water is one such important focus area. ONGC Mehsana took up project for construction of individual household toilets in fifteen villages thereby leading to improvement insanitation and living conditions of these villages.

The main aim of this paper is to study in detail the impact caused on the improvement in the sanitation index of these villages and the reduction in the waste generation thereby leading to open defecation free villages in the state of Gujarat. ONGC took up this project into consideration under CSR and after conducting a need identification study and necessary infrastructure was brought into place. The major issues discussed in the paper are the improvement in the sanitation index techniques and changes brought about due to the conJISEM struction of the household toilets. Multiple-choice questionnaire was circulated among the beneficiaries to document the process and record the changes. Relevant information was referred from primary sources published by ONGC Limited. It has been found that the construction of these household individual toilets has led to improvement in the sanitation of the villages leading to improved living conditions in the villages.

Keywords: Corporate Social Responsibility, Sanitation Index, Household toilets, ONGC, Quantitative Research techniques

Introduction to Corporate Social Responsibility

Corporate Social Responsibility may be considered is the required investment to be made in social causes a portion of the profits earned by a company.

Under the recent Companies Act, 2013, and subsequent amendments to the Act in 2020, any company having a net worth of rupees 500+ crore, a turnover of rupees 1,000+ crore, or a net profit of rupees 5+ crore should mandatorily spend at least 2% of last 3 years average net profits on CSR activities.

The Act entails expenditure in the following areas:

- Promoting public health
- · Ending hunger and poverty
- Education
- Gender inequality and women empowerment
- Protecting the environment and developing sustainability

Copyright © 2024 by Author/s and Licensed by JISEM. This is an open access article distributed under the Creative Commons Attribution License which permitsunrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

• Promotion of indigenous cultural initiatives and the arts

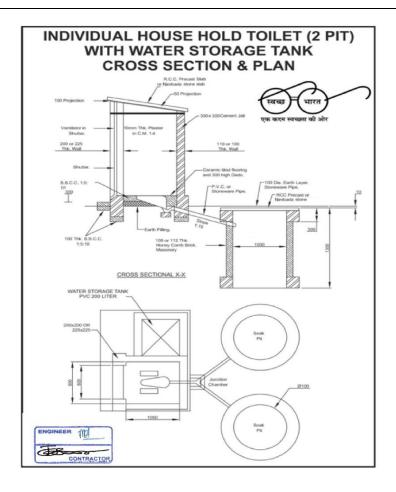
Construction of IHHL (Individual Household Latrines) in 15 villages around Mehsana District:

One of the above important area is that of protecting the environment and sustainability. As part of this, the Swach Bharat Abhiyan was introduced by the Government of India to make the villages ODF (Open Defecation Free) and make our environment neat and clean. The ONGC Mehsana under its Corporate Responsibility initiative helped in the construction of 1279 IHHLs with the help of NGO Milan Foundation. The details of the number of individual units village wise is given below:

Sl No.	Village	Numbers		
1	Bhatariya	295		
2	Chotabomodera	64		
3	Dhanali	24		
4	Dholasan	14		
5	Mandali	12		
6	Gorad	30		
7	Jotana	209		
8	Laxmipura	19		
9	Mahudi	71		
10	Naginpura	31		
11	Pasiya	61		
12	Sandhosi	77		
13	Santhal	55		
14	Suraj	317		
15	Chalasan	174		
	G-Total	1453		

The project consisted of various features:

- 1. Identification of villages and the villagers where this project would be carried out. This was done jointly by the CSR Team members of ONGC Mehsana along with the members from the Milan Foundation. The total families which were involved is 1279 in 15 villages in and around Mehsana as mentioned above.
- 2. The second part consisted of obtaining information with regards to legal issues. It is to be noted that the Government of Gujarat had implemented a scheme wherein the individuals were paid a lump sum to construct a toilet in their backyard in order to reduce the menace of open defecation. An undertaking was obtained from the villagers duly certified by the village Sarpanch stating that similar such benefit was not been taken from any other agency by the individual.
- 3. The third part consisted of explaining the design of the latrine and its proper maintenance. The design of the IHHL is given below:



Methodology:

Research design: research design is descriptive in nature

Research Objectives:

- a) To study the problems faced by the villagers due to the prevent practice of open defecation.
- b) To study the advantages of having Individual House Hold Latrines in the villages
- c) To analyze the improvement in the sanitization in the villages.
- d) To study if the project has led to any improvement in the quality of life in the villages.

Methods of data collection: The methodology followed is by distribution of a questionnaire among the villagers to obtain the data. The questionnaire has been designed to reflect the overall impact of household toilets in the villages. (Sample questionnaire given below)

Questionnaire with regard to effects of IHHL Project:

Background information	Personal details		
Village	o Name		
Water Access	o Age		
Toilet Proximity/ Working Status	 Gender 		
Cleanliness Level	 No. of Household Members 		
Sources of News	 No. of employed Members 		
5 Sources of News	 Domain & Monthly Income 		
	o Education Level		

- 1. According to you, what are the effects of Waste pile up near your residential areas:
 - 1. They are just bad for environment
 - 2. They just look Bad
 - 3. Its Unhygienic
 - 4. Others:
- How is the current usage of IHHL (Low/Medium/High) and why so?
- 3. Disease level before & after construction of your IHHL:
- 4. Diseases you or your family members have had during the last 6 months:
 - 1. Diarrhoea
 - 2. Dysentery
 - 3. Typhoid
 - 4. Ringworms
 - 5. Cholera
 - 6. Skin Diseases/Problems
 - 7. Cough

Sampling frame:

Implementation of the Project in Mehsana:

As part of the Corporate Social Responsibility, the organic farming project was taken up with selected farmers of Mehsana by Milan Foundation in collaboration with CSR department of ONGC, Ltd at Mehsana. The selection of beneficiaries was carried out after analysis of family income, number of members in the family, availability of sufficient land with them for carrying out the construction of the household latrine, educational status etc.

The NGO identified the farmers based on a Baseline Survey.Identified villages in Mehsana include Bhatariya, Chotabomodera, Dhanali, Dholasan, Mandali, Gorad, Jotana, Laxmipura, Mahudi, Naginpura, Pasiya, Sandhosi, Santhal and Suraj. The questions asked in the baseline survey include:

- 1. Name as per Aadhar Card
- 2. Aadhar Card Number
- 3. No.of Total Family Members
- 4. Family Income
- 5. Contact No
- 6. Education level of family members
- 7. Educational Status

Questionnaire was distributed before the commencement of the IHHL construction and again after one year of implementation to the same group of individuals.

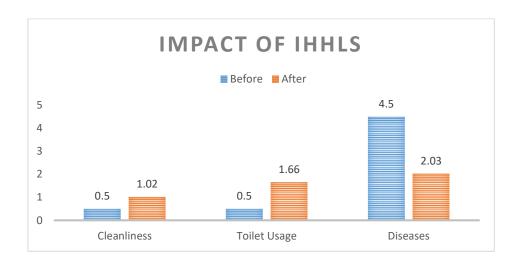
The qualitative parameters were converted to quantitative parameters for evaluation of the responses. Each parameter was given equal weightage on varied scale as per table given below:

Analysis:

It was decided to carry out the survey in those villages where the most number of IHHLs were installed, the villages of Chalasan, Suraj and Bhatariya. A total of 116 responses out of 786 villagers for whom the toilets were installed, in the 3 villages mentioned above, which is 15% of the sample size, were received from the above villages in Mehsana. The data was captured in Excel and quantified for impact assessment.

The data from the survey form was converted into quantitative figures in the scales mentioned in the table below. From comparison of the values obtained after conversion to quantitative form for before and after construction of IHHL in respective categories is clearly evident, hence additional quantitative methods were not employed for further analysis.

Factors	Before construction of IHHL	Absolute Percentage (in %)	After construction of IHHL	Scale	Absolute Percentage (in %)
Cleanliness	0.5	25	1.02	0 to 2	51
Toilet Usage	0.5	16.66	1.66	o to 3	55.34
Diseases	4.5	64.28	2.03	1 to 7	29



Findings:

- 1. There is marked increase in cleanliness (sanitation and hygiene) factor after the construction and usage of IHHLs among the villagers by 103.45%
- 2. There is an increase in the usage of toilets by 231.03%
- 3. There is a decrease in the spread of communicable diseases linked to hygiene by $98.97\,\%$

Suggestions:

- 1) To spread the awareness of the ill effects of open defecation and importance of sanitation and hygiene among the villagers of Gujarat state.
- 2) The analysis was carried out for 3 villages only. The long term impact of the project can further be analyzed after we study the impact in all the 15 villages.
- 3) In the post Covid-19 scenario, the implementation of IHHLs becomes even more imperative if the residents of all the villages in Gujarat are to have a hygienic and safe environment.

Conclusion:

The analysis of the above study results shows the following:

- a) There is a significant improvement in the sanitation index and hygiene after the construction of the IHHL in the villages.
- b) The sanitation index has improved after the usage of individual household toilets.
- c) The general health and well-being of all the villagers has improved.
- d) The surroundings and villages have become free from all pest and insects which were resulting due to open defecation.
- e) The villagers' self-esteem and prestige among their own peers and neighbors has increased, especially in case of ladies and girls since they no longer had to go out in the fields at unearthly hours.

f) Finally it has helped the ONGC to garner good will and positive mileage from this project and helped in the implementation of Swachta project of the Government of India.

References

- [1] Handbook on Corporate Social Responsibility in India- Confederation of Indian Industry published by PWC.
- [2] Leveraging Corporate Social Responsibility for the Advancement of Development Goals in India: Sanitation and Cleanliness Movement in India Beena D. Lawania Amity University, India. Shikha Kapoor Amity University, India.
- [3] Swachh Bharat Abhiyan (clean India mission): SWOT analysis Babita Jangra1, JP Majra, Mahavir Singh