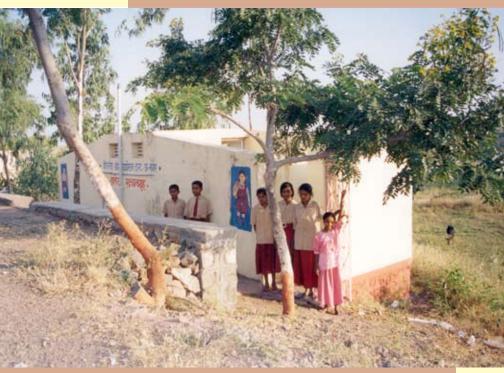
Research Report

The Water & Sanitation Sector



Making Sanitation A 'Clean' Habit Lessons from a School Sanitation Project

Marcella D'Souza, Alpana Bose and Prashant Tambe



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5	Upscaling of Successful Experiences in the Mainstream Watershed Programme in India : Mechanisms, Instruments and Policy Considerations	English	Wotr, wassan, wdcu, Ple, manage	2005
9	Measurement And Record System for Watershed Activities	English/ Marathi	WOTR	2000
7	Operations Manual – Guidelines For Operations In The Indo-German Watershed Development Programme	English	WOTR	1999
∞	Little Drops Of Water Make A Mighty Ocean	English/ Hindi/ Marathi	WOTR	1998
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Making Sanitation A 'Clean' Habit

Lessons from A School Sanitation Project

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FOREWORD

Good habits, especially those related to hygiene and sanitation, need to be inculcated at an early age. This being an accepted theory, it is important to see how well it translates into reality. As such, this particular study was an attempt to see how a 'School Environment (Water & Sanitation) Project' implemented by WOTR in the state of Maharashtra in 2003 had performed after a period of four years. As an attempt to gauge the impact of the physical, institutional and mobilisation components of the project, the team undertook a surprise visit to 60 schools to see if the facilities installed then had been maintained as also whether habits and attitudes had changed for the better.

What the study revealed is that while the project was highly successful in some schools, it had miserably flopped in others. This brought to the fore the most critical question of why did this happen. If the resources were equally distributed and so was the guidance, why did hygiene and sanitation acquire an important status in some villages while the others chose to neglect it? It was found then that there are several factors that work in favour of or against something that seeks to change the lives of people. Here, it was not just about sanitation but also about environmental conservation through vermi-composting and activities like tree plantation. In fact, the model was holistic in nature, attempting to create a transformation through children who would then pass on this message to the adults.

If one is to go by the UNICEF report that points out how only 14 per cent of the rural population in India has access to safe and clean sanitary habits, it, but naturally, means that there is a long road ahead for organisations, the government and individuals to help bring the entire rural population within the folds of hygienic practices. A beginning has been made and it is encouraging to note that a large percentage of schools have enthusiastically made good sanitary practice a part of their regular routine. We can only hope that the percentage keeps growing at a dramatic rate.

Crispino Lobo

Managing Trustee WOTR

PREFACE

Why a certain development intervention succeeds in one village or community, but not in another is a cause of concern for development functionaries and policy makers. While many studies have come out with different theories that name various factors that can make or break a community effort, none of these have proved to be infallible in assuring success of the intervention.

Sanitation is an area that has been, and is still grappling with the problem of community acceptance and cooperation. The need for sanitation facilities is huge in the Indian rural areas, where more than 80 percent of the population has no access to safe sanitation. The demand however, is surprisingly not equally high. Top-down efforts like building toilets through government funds and mandating construction of toilets in each rural household, have failed miserably and have left behind many valuable lessons. One of them has been to involve the communities in the efforts, both in decisions and in monetary contribution. Another new approach to the problem was to be by routing the message of sanitation through children, by introducing safe and healthy sanitation practices in schools. One such project was undertaken under the CAPA (Community Action for Poverty Alleviation) project, implemented by WOTR. The project aimed to provide toilet and drinking water facilities to 100 rural schools in Maharashtra together with motivational inputs so as to primarily cultivate clean habits among the children and also

to spread awareness regarding sanitation throughout the village.

The current study revisits the project schools, four years after the completion of the project to witness the state of the intervention and also to learn from the successful and the not-so-successful projects. The study has, to some extent, succeeded in identifying factors that need to be taken care of during and after implementation of such projects, to make them successful and to enhance their impact.

Marcella D'Souza

Executive Director WOTR

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The ZP School administrations of Ahmednagar, Sangamner, Srigonda, Nevasa, Akole and Pathardi talukas of Ahmednagar district, Ashti taluka of Beed district, Katol and Hingna talukas of Nagpur district and Arvi and Karanja talukas of Wardha district. Also the NGOs Samata Homeo Society, Village Uplift Society, and the WOTR team that have implemented the project in the Nagpur, Wardha and Ahmednagar Districts. I would also like to thank Shri Kakade, who was not only our driver, but also gave us important inputs on the performance of various schools.

ABBREVIATIONS

CAPA : Community Action for Poverty Alleviation

CBO : Community Based Organisation
CRSP : Central Rural Sanitation Program

GTZ : German Agency for Technical Cooperation

PTA : Parents Teachers Association

SHG : Self Help Group

WOTR : Watershed Organisation Trust

ZP : Zilla Parishad

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EXECUTIVE SUMMARY

The 'School Environment (Water & Sanitation) Project' implemented by WOTR in the state of Maharashtra in 2003 was evaluated for performance in 2007, four years after its completion. The project provided sanitation and drinking water facilities in 100 schools, most of them being managed by the Zilla Parishad. It also promoted tree plantation and organic composting where possible. The study was an attempt to gauge the impacts of the physical, institutional and mobilisation components of the project. In a surprise visit to 60 schools, the overall performance was found to be good.

The study revealed excellently sustained efforts in some village schools and sheer neglect and collapse of local institutions in others. In order to surface the 'why' behind the schools that still perform well and those that have slipped to the previous state, 15 schools (9 successful and 6 unsuccessful) were studied closely. The active and constructive participation of the villagers was one of the major reasons for the successes, while its absence brought about failures. Factors such as presence of enthusiastic and interested teachers, keen on improving the performance of the school, were seen as contributing to the success. In these schools, children imbibe the new hygienic practices and naturally continue these. When enthusiastic teachers are either from the village itself or reside in the village, and when they continue in the same school for long, positive impacts are observed.

Introduction

The water and sanitation sector of India is grappling with the Herculean task of motivating its rural inhabitants to use sanitary facilities and make these and safe drinking water accessible. Estimates suggest that nearly 61 per cent of India's population defecate in the open even as the monitory allocation for water and sanitation has increased in both, the central and state plans over the years (1). Figure 1 shows the plan outlays over the past five decades.

Sanitation coverage is usually defined in terms of the percentage of households having access to a sanitary latrine. The Census of 2001 showed that 21.9 per cent of the rural homes owned a household toilet, while UNICEF data (http://www.unicef.org/statis) maintain that approximately 14 per cent of the rural population has access to safe sanitation. The latter is after considering the fact that a large proportion of existing toilets remain unused due to lack of awareness, scarcity of water, poor construction standards, emphasis on standardised designs and a general absence of involvement on the part of beneficiaries (Planning Commission, GoI 2002). The 54th round of the National Sample Survey Organisation (NSSO) report claims that the usage behavior is restricted

School Sanitation and Hygiene Education in India: Investing in building children's future, 2004. (This paper was presented in the conference, SSHE Global Symposium "Construction is Not Enough" Delft, The Netherlands, 8-10th June 2004)

to only 17.5 per cent in the rural population. While fund availability is an important issue, motivation of the people was found to be crucial to change.

The initial attempts of the government to bring about sanitation coverage in rural areas were completely supply driven. While many toilets were constructed during this time, it failed to catch the pulse of rural India. The failure to change the sanitation behaviour of the communities was due to various reasons - poor awareness regarding the potential health benefits (and therefore, economic benefits) of good hygiene practices; perception of toilets as 'dirty' when attached to the home; the high cost of construction and therefore unaffordable in most cases; the sheer convenience of open defecation; and inadequate promotion (Planning Commission, GoI 2002).

This and other such studies made it inevitable on the part of the government to rethink its policy of rural sanitation and introduce changes. The need was to alter the approach to make it more decentralised, people-centric and demand responsive. This revelation led to a major shift in policy that reflects in the new revamped Accelerated Rural Water Supply Program, the Swajaldhara Program and other rural programs, either linked to or detached from sanitation. The changes in the policy were mainly to incorporate the three following principles:

- 1. Adoption of demand responsive approaches based on empowerment, to ensure full participation in decision making, control, and management by communities
- 2. Shifting the role of governments from direct service delivery to that of planning, policy formulation,

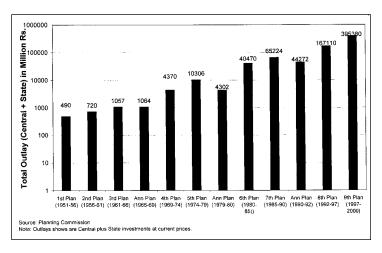


Fig. 1: Increasing Plan Investments in Water Supply and Sanitation

monitoring and evaluation, and partial financial support to facilitate community action and planning

3. Partial capital cost sharing, in either cash or kind or both, and total responsibility of O & M by users.

The potential of civil society organisations has also been recognized in (a) reaching out to the rural poor and remote areas (b) promoting local participation (c) operating at low costs, and (d) adapting and being innovative when required.

It was in the Tenth Plan that a specific development occurred. High priority to school sanitation was given since childhood is considered a critical period for the formation of proper habits for hygiene, sanitation and safe water use. Schools were being seen as channels of communicating hygiene messages to homes and communities. Children were seen as powerful agents of change. A study of 2003 showed that about 46 per cent of the total rural schools in India were without any toilet

facility and 17 per cent were without drinking water supply (MoHRD, 2003).

This article is the outcome of an evaluation of an effort carried out by the Watershed Organisation Trust (WOTR), Ahmednagar, supported by the German Agency for Technical Cooperation (GTZ), and the BMZ Germany, through the project 'Community Action for Poverty Alleviation' (CAPA) implemented in 2002-2003.

Section 1

The School Environment (Water & Sanitation) Project

Convinced that the route to community sanitation lies through its children, WOTR launched the School Environment (Water & Sanitation) Project, a part of a bigger project on rural poverty alleviation. The objective of this component was to inculcate in children the importance of sanitation and personal hygiene through various measures that included accessibility to urinals and toilets in school. The philosophy behind the project was similar to the one stated in the Tenth Plan, i.e. "the small children can be effective sanitation and hygiene messengers. If exposed to proper sanitary habits and hygienic conditions at a young age, they will not only grow up into hygiene conscious individuals, but would also take the message home, triggering a series of positive changes, at home and in the community".

Project Outline: The School Environment (Water & Sanitation) Project was implemented in 100 rural schools in the Ahmednagar, Beed, Nagpur and Wardha districts of the state of Maharashtra, India. It included a combination of physical structures and soft measures that complemented each other. Attention was given to the community involvement and to its maintenance once the project was completed.

The physical works included: (a) provision of separate toilet blocks for girls and boys with water facility (b) provision of a drinking water system (c) organic / vermi-compost units and (d) tree plantation. Structures addressed the need and possibility and were not duplicated.

The mobilisation component included: (a) involvement of the community in implementation and for maintaining the structures and hygienic practices initiated under the project. (b) Provision of charts and booklets to the schools for motivating the children for hygienic behavior. The booklet contained educative material on the judicious use and saving of water, personal hygiene, and prevention of intestinal infections and village sanitation by promoting the composting of garbage and the plantation of trees.

For each school that was provided with all the facilities – a block of separate toilets and urinals for boys and girls, a drinking water system, organic / vermi-compost pits, saplings, educational material and input sessions for eight months of the year – a maximum of Rs 1,50,000 was incurred, inclusive of all management costs.

Villages were selected that met the following criteria:

- (a) existing or the willingness to set up an active CBO (Village Watershed Committee/Village Development Committee/Samyukt Mahila Samiti (apex body of women's SHGs)/Gram Panchayat) to implement this activity together with the local primary school
- (b) the willingness of the school management to support this project by accommodating the activities within or outside the school schedule and acceptance of the terms and conditions

- (c) village to contribute 10 percent of the construction cost
- (d) availability of a perennial source of water
- (e) preference was given to primary schools, but willing high schools and ashram schools were also included.

What the project expected from the schools is that they were required to abide by conditions that ensured ownership of the assets and maintenance of the structures once the project was completed.

This included:

- (a) ten per cent of the total cost of construction was to be contributed as 'shramdaan'
- (b) children of the higher classes would maintain the cleanliness of the toilet blocks
- (c) the school authority would collect Re 1 per month per child towards maintenance.

Section 2

The Assessment Study and Findings

This study undertaken during August – September 2007 was an attempt to assess the status of the activities implemented and completed four years earlier (2003) and to gauge the level of maintenance of the physical, institutional and mobilisation components since the project was completed. Findings from the successful and unsuccessful villages were expected to provide lessons pertaining to project design and implementation for obtaining positive impacts.

Methodology: As the first step of the study, out of the total of 100 sixty randomly selected schools were paid a surprise visit. A total of 42 out of 73 schools were selected in Beed and Ahmednagar districts, and 18 of 27 schools were selected from Wardha and Nagpur districts. During this short surprise visit, information was collected about the following:

- Physical condition of the project structures.
- Status of the institutional arrangements initiated at the time of implementation.
- Awareness level of the children regarding sanitation and personal hygiene.
- Replication effect in terms of more toilets built and used in the village.

The analysis of the data collected during the preliminary study gave a picture of the performance of the schools on different parameters. Schools were categorised as successful, moderately successful and unsuccessful, after evaluating the schools on various indicators of structure maintenance, institutional arrangements, awareness among children etc. This primary data also helped in the formation of certain hypotheses regarding the factors that make a village school succeed.

Of the initial sample of 60 villages, 15 villages were selected for a more detailed study, based on the above-mentioned categorisation. Nine of these villages were successful as of August 2007 and six were found unsuccessful. Additionally, the hypotheses drawn out of the preliminary study results were also tested in the study.

Results of the Preliminary Survey: The preliminary survey conducted in 60 schools gave an overall picture of the outcome of the project. Of the sample of 60 schools, all of them did not receive every component of the project. While every school did receive urinals and toilets and the educational, motivational and mobilisation inputs, schools had received only these and nothing else. Thirty two received an additional drinking water facility, 28 received simple / vermi-compost units, and trees were planted in 24 schools. The decision regarding the component that each school received was based on (a) existence of the particular component (b) plan for realising the same through other government projects (c) the requirements of the particular school (d) availability of water within a reasonable distance. During 2002-2003 Maharashtra was in the second year of severe drought.

The performance of the schools based on various indicators is presented below. While every school has been separately appraised on the structures provided to it, we herewith discuss the macro level findings (of the 60 schools visited) of the study that reflects the overall condition of the toilets, the drinking water facilities, the vermi-compost units and the trees planted.

Activity 1: The Toilet Block

All 60 schools received this component. The study examined the condition of the toilet structures using specific indicators selected to cover the various aspects of the facility. Each indicator gave a glimpse of the sincerity and interest of the schools to maintain the toilets. One indicator partially reflects the performance of the implementing agency in erecting the structures. The status presented below shows the condition of 60 school toilets.

Cleanliness: It was one of the most important and deciding indicators of the performance of the school as well as the project. An unclean toilet defeats the very purpose of the project. During the surprise visit, it was reassuring to find that of the 60 schools, 30 schools (50 per cent) had maintained their toilets sparklingly clean (cleaned daily or twice a day with or without a cleansing agent). In 19 schools, the toilets were moderately clean (where cleaning is regular, but not too frequent i.e. once in three days), with or without the use of a cleansing agent. These toilets are usable. In 11 (19 per cent) schools, the toilets were found to be too dirty, not cleaned since a long time and hence unusable (ref: Figure 2).

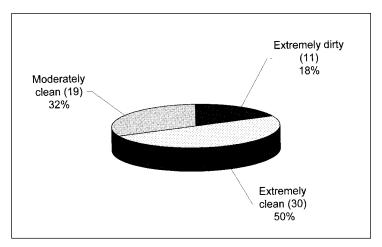


Fig. 2: Cleanliness of Toilets

Construction Quality: While maintaining cleanliness is the duty of the school authority, the quality of construction reflects the performance of the implementing agency. The study of the 60 villages gives a favorable picture of the construction quality. For those that did face problems, they were of a less serious nature, such as broken/rotting doors,

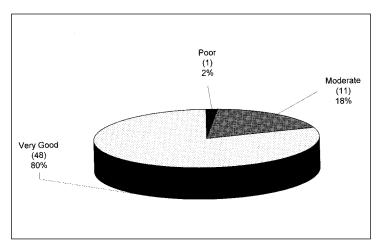


Fig. 3: Status of the Physical Construction

broken pipes, minute cracks in the walls etc that can be repaired with a little effort by the school authority. These are mainly maintenance issues. Figure 3 gives a picture of the situation. While 48 (81 per cent) of the structures were in excellent condition, 11 (17 per cent) had minor problems and only 1 (2 per cent) showed a major crack in the wall.

Availability of Water: While the implementing agency provided the toilets with small water tanks, only some of them have been put to use. In 63 per cent (38) schools children fetch water from the drinking water tank some distance away. On the other hand, 37 per cent (22) schools have gone a step further by providing piped water to the toilets (ref: box 2). The overall picture of the current location of the water source is represented in Figure 4. 'Very far' (100 meters or more), 'a little far' (between 10 meters and 100 meters) and 'close or inside' mentioned in the figure refer to availability of water at the time of use of the toilet.

Twenty two (37 per cent) schools have water available very close or inside the toilets, 28 schools (46 per cent) were found to have

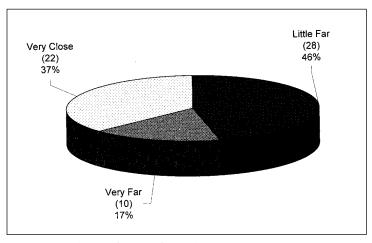


Fig. 4: Availability of Water for Toilet Line

Box No 1: The Importance of Motivation

A good example of how lack of community motivation can affect a project was found in Khadakwadi village of Ashti Taluka of Beed district. The village school being located on top of a small hill does not have any water source nearby. The closest source of water is a small tank located down hill about a kilometre away. At the time of the project the villagers constructed the pipeline from the tank up to the school. This water was stored in a tank in the school premises and was used for drinking as also for the toilets. Soon after the toilets were constructed, the water system started working and the school received water within reach. The system however did not function for long due to technical faults in the water pump. No one in the village or school took the initiative to have the pump repaired. After remaining in this state for long, the villagers, instead of repairing the pump, unanimously decided that the pipes of the system be dismantled and be used for the construction of the temple in the village. This decision was immediately acted upon and the school remains without water supply today.

it within 100 meters distance from the toilets, while 10 (17 per cent) had it very far - a kilometre in a couple of cases (ref: box 1).

Cleaning Responsibility: A pre-condition of the project was that the children of the higher classes should clean their own toilets. The purpose was to teach children clean habits and also in a subtle way address dignity of labour. This was not complied with in 21 (36 per cent) schools. Out of these, in 13 (22 per cent) schools a person is employed to do the job and only 8 (14 per cent) schools do nothing about cleanliness

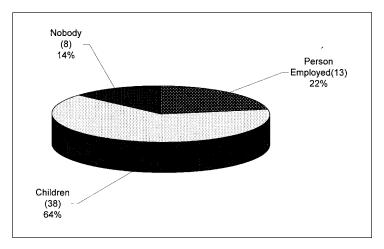


Fig. 5: Who Cleans the Toilets

and the toilets lie unclean. Figure 5 gives an insight into the proportion of schools falling into each of the categories. However, it is encouraging to note that 39 (64 per cent) schools still follow the norms four years later. Here children maintain the cleanliness of the toilets.

The main reason why 36 per cent (21) of the schools did not follow the norm was that the school being large, it has a peon who does this work in addition to his other chores added to which there have been factors like objection from parents, scarcity of water and disinterest on the part of the teachers.

Presence of Cleansing Material: This was considered an important indicator of performance of the schools, as it manifests the attitude of the teachers and the value they give to maintaining cleanliness. It also indicates a small monetary investment is being made towards maintenance. It was found that 28 (47 per cent) schools have this in place. See Figure 6 for details (ref: box 2).

Box No 2:

Spontaneous Interventions by Motivated Teachers

Schools where the teachers are enthusiastic have added and improved on the facilities with the small budget at their disposal.

- Piped water with taps inside the toilets.
- A wash basin outside the toilet.
- A bar of soap, clean towels and mirror.
- Stainless steel drinking water tumblers chained to the tap.
- Enclosing the drinking water facility with a wall to protect it.

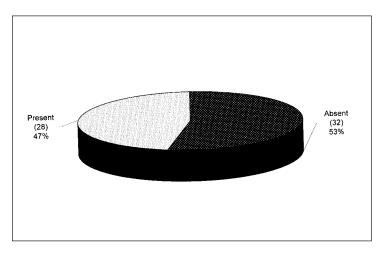


Fig. 6: Presence of Cleaning Materials

Activity 2: Drinking Water Facility

This component was provided to the project schools that did not have the drinking water tanks with tap facility. Of the 60 schools covered in the preliminary survey, 32 had received this facility. In some schools bore wells were provided, while in others existing sources of water were used to supply water to the school tank. These 32 schools were provided with drinking water tanks and taps. The condition of this amenity was assessed on the basis of three indicators, namely functioning of the system, condition of the taps and cleanliness of the tank. Below are the macro level (of the 32 schools that received this amenity) results of the study:

Functioning of the Water System: The key information is regarding the availability of water in the tank. It was found that in 17 (53 per cent) of 32 schools the drinking water tanks provided were not functioning for varied reasons (ref. Figure 7). Eight tanks were found to be non-functional

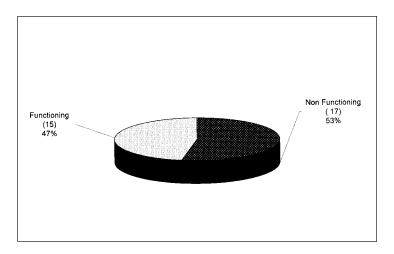


Fig. 7: Functioning of the Water System

due to water scarcity, four had electricity problems, two schools complained of poor construction quality and water leakage, while one blamed the location of the tank that was too high for the water to be lifted. It was found that one or more of these reasons were responsible for the failure. These problems are regular and genuine. Although the water source was confirmed before and after implementation, more stringent inquiries may have been required of the implementing agency. The problem of erratic electricity is beyond the control of the school or implementing agency.

Cleanliness of the Water Tank: Of the 15 tanks (43 per cent of the total tanks) that were found to be functioning, 25 per cent (8) tanks were very clean, while 22 per cent (7) were moderately clean. This is a very important indicator of the proper functioning of the system (ref: Figure 8).

Condition of the Taps: This was the last indicator to assess the condition of the water systems. An overall 22 (79 per cent) of schools had moderate to well functioning and

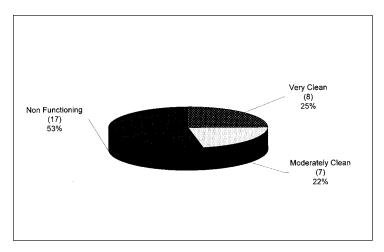


Fig. 8: Cleanliness of the Water Tank (32 Drinking Water Tanks)

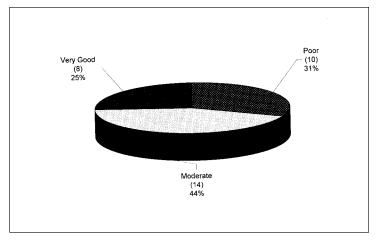


Fig. 9: Condition of the Taps (32 Schools)

maintained tap systems. And in 10 (31 per cent) schools the maintenance was poor (ref: Figure 9).

Activity 3: Vermi-Composting/Simple Compost Unit

This activity has had poor success. Of the 28 schools that received the unit, it is functioning only in five villages (about 18 per cent) where simple compost pits were provided. None of the vermi-compost pits are functioning. Four of the five villages are located in Nagpur district. The most important reason why all vermi-compost pits have failed was the excessive summer heat. Both regions where the program was implemented suffer from extreme dry heat during the months of April and May, during which period the schools are also closed. Extreme heat coupled with lack of initial care destroyed the earthworms and the units collapsed. Yet, in two schools it was found that even though the unit closes in summer, the school starts it again later in the year and it functions for some months.

Activity 4: Tree Plantation

This activity was carried out in 24 of the 60 schools. Its objective was to bring the children closer to nature and inculcate an environmental consciousness in them. Under this activity approximately 1,529 trees were planted in 24 schools. The findings of the preliminary study suggest that about 688 trees, i.e. about 45 per cent of the trees have survived. While two schools were able to ensure a 100 per cent survival rate of the trees planted on the premises, overall 14 (59 per cent) schools have managed to keep alive at least 40 per cent of the trees. The reasons why approximately 55 per cent of the trees failed to survive varied from school to school. Construction of the school building, boundary wall, no one to take care of the plants during summer vacation are some of the reasons (ref: Figure 10).

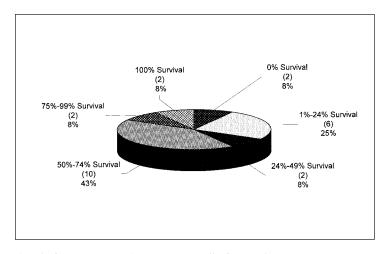


Fig. 10: Survival rates of trees planted (24 Schools)

Activity 5: Mobilization of the Community

An important element of the project was the mobilisation and motivation of the community. Mobilisation included institutionalisation of the processes for maintenance of the structures created under the project. The success of the communities at this was assessed with the help of indicators as mentioned below:

Existence of a Students' Cleanliness Committee.

Collection of Re 1 per child per month.

Featuring the sanitation issue in Parents-Teachers Association meetings.

Replication of the school toilet initiative in other village schools or houses.

Sanitation and personal hygiene related awareness in the students.

Table 1 below expresses the overall performance of the villages on the above indicators.

Table 1: Manifestation of the Mobilisation Inputs in the 60 villages (2007)

	Present in (villages)	Absent in (villages)
Student's Cleanliness Committee	30	30
Collection of Re 1 per child per month	0	60
Featuring of the issue of sanitation in Parent-Teacher Association meeting	20	40
Replication of the school toilet initiative	21	39
Awareness level in the students	48	12

Students' Cleanliness Committees were found in 50 per cent of the surveyed schools. New committees for the new school year had not been formed till the time of this assessment. While the presence of the Parent Teacher Association (PTA) is not necessarily an indicator of proper or active functioning of this institutional set-up, in 1/3rd (20) of the schools, sanitation still featured in the PTA meetings. Moreover, in 49 schools the sanitation scenario is good and hence these do not need any attention of the PTA.

The purpose of collecting Re 1 per child per month was to ensure the maintenance of the sanitation and water systems. It was observed that government funds are available for the same; hence all 60 schools surveyed had discontinued the practice. Despite not collecting this small fee, 49 schools (81 per cent) maintained clean toilets.

This study found that in 21 out of the 60 villages there has been some replication of the initiative, as people have constructed household toilets. Though a large number of toilets have been constructed in the recent past, it cannot wholly be attributed to the school sanitation project, as many government schemes and incentives are used to promote the use of household toilets. The contribution of the project however cannot be denied, as this project was implemented way back in 2003. This is no mean achievement, as in rural India, making people use toilets is yet a challenge.

The awareness level of the children regarding health and sanitation was judged by quizzing them on basic sanitation habits. It was found to be high to medium in 48 (80 per cent) of the 60 schools. In the remaining schools it was very low. As can be expected, most of the successful schools exhibited a high level of knowledge and information on the part of the children.

Categorization of Schools: Based on the above indicators of performance, the 60 schools were divided into groups of very successful, moderately successful and unsuccessful schools. Only 15 (25 per cent) of the 60 schools qualified to be called really successful and 28 (47 per cent) were moderately successful, while 17 schools were altogether unsuccessful (ref: Figure 11).

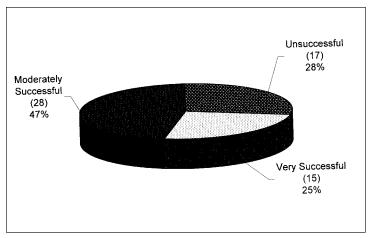


Fig. 11: Categorization of Schools based on their overall performance

Reasons for Failure: The schools cited various reasons for their failure. The 17 unsuccessful schools gave a total of 20 reasons for failure, the single largest reason being the scarcity of water. It was found that 75 per cent of the reasons given were external factors and they considered only 25 per cent of the reasons related to their role (ref: Figure 12).

Reasons for Success: The successful schools gave different reasons for their achievement. 85 per cent of the responses were related to their role and that of the teachers. Support and participation of the village community is the most

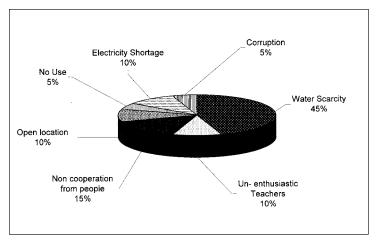


Fig. 12: Reasons for Failure

important reason (32 per cent). Presence of local teachers is as important as that of dedicated teachers (21 per cent each). The presence of a support NGO has also had some bearing on the success as 11 percent of the responses stated (ref: Figure 13).

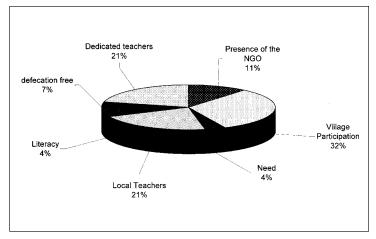


Fig. 13: Factors responsible for success

From the preliminary study a set of hypotheses were considered regarding the factors responsible for the success or failure of an intervention. Some of these are:

- Participation of the village in the intervention.
- Presence of teachers belonging to / living within the same village and presence of those who were in the school from the time of project implementation.
- Location of the toilets and the availability of water.
- Overall academic performance of the school.

Section 3

Case Studies of a Successful and an Unsuccessful Village

Below we present case studies of two schools, both located in the Ahmednagar district: Mudholwadi, a success story, and Alhanwadi, that has a long way to go. At the time of implementation, back in 2003, the schools were provided with project components based on the need, existing non-availability of the same and sustainability factors. Besides providing the units, all schools were given similar inputs for mobilization, motivation, and education.

Mudholwadi – A Successful Project: Mudholwadi village located in the Sangamner taluka of Ahmednagar district is a moderately large village with a population of 1,100 individuals. The village has a Zilla Parishad middle school that has 141 students and 7 teachers. The school has received all the facilities provided under the project, which included urinals and a toilet block; a drinking water tank with a pipeline; a vermi-compost unit; and saplings were planted in the school premises.

Alhanwadi – A Poorly Performing School: Alhanwadi has a population of approximately 2,000 and is located in the Pathardi Taluka of Ahmednagar District. The project was implemented in the Zilla Parishad Primary school of Alhanwadi. Despite the large population, the strength of the

school is 86, and has 3 teachers. The school was provided with four urinals and a toilet. Drinking water facility existed at the time of the project (and still exists), hence was not duplicated. The vermi-compost unit and tree plantation were also not implemented (Ref. Table 2).

3.1 Status of the Toilets

3.1.1 *Mudholwadi*: The toilets of the school were found to be in excellent condition. They were used properly and were found to be very clean with no bad odour, but just a faint smell of phenyl. Enthusiastically the children clean the toilets daily. The schedule for cleaning is prepared transparently and is undertaken equally in turn by all students of the higher classes, assisted by the younger children

The school has taken the initiative to provide water inside the toilets through a pipeline to make cleaning more convenient for the children. It also ensures that the children wash their hands each time they use the toilets. Additional facilities provided by the school include a mirror, a clean towel and soap (ref: Table 2)

Table 2: Toilet Maintenance Indicators

INDICATOR	SCORES (Out of 10)	
	Mudholwadi	Ahlanwadi
Cleanliness of the toilets	10	0
Use of the toilets	10	0
Cleaning of toilets by children	10	0
Proper rotation of turns in cleaning	10	0
Facility of water in toilets	10	0
Facilities added by the school	6	0

3.1.2 Alhanwadi: The toilet block is located a distance behind the school, outside the compound wall, which was constructed later. A stream runs behind the toilet block and the toilets have a water tank attached. The toilets were found to be in extremely dirty and appear to have never been cleaned ever since their construction. Vegetation growth is visible inside the structure, cracking the floor. Foul smell surrounds it. Children admitted that they use the adjoining open grounds, while girls go home. The location makes the toilets accessible to all villagers who initially used the toilets. As the condition deteriorated, the villagers too stopped using them. The school however has never taken any initiative, either to exclude outsiders from using them, or to maintain its cleanliness. The toilets today stand unused and unusable with a significant monetary and institutional investment wasted.

3.2 Status of the Drinking Water Facilities Provided

Drinking Water Tank (Mudholwadi): The school has maintained the drinking water tank well. No child is required to bring water from home as the water quality of the school tank is satisfactory according to the children and the villagers. The children under the supervision of the teachers reportedly clean the tank every week. The inside of the tank looks considerably clean, with no moss on the inside walls and a clean floor. The taps though not in the very best of conditions, are functioning properly. All these features add up to show a good performance on the part of the school (ref: Table 3).

Drinking water facilities in Ahlanwadi were not provided as this already existed at the time of project implementation. The water tank and tap are still functioning, though there is much to improve on the maintenance.

Table 3: Drinking Water Tank Maintenance Indicators

INDICATOR	SCORES (Out Of 10) Mudholwadi Ahlanwa	
Functional	10	-
Potability of water	10	-
Condition of the taps	6	-
Cleanliness of the tank	8	-
Facilities added by school	0	-
Cleaned by children	10	-

3.3 Vermi-Compost Unit and Tree Plantation

Mudholwadi: The vermi-composting unit provided to the school was run well till two years after the project. The school produced good quality compost from this unit so that it earned approximately Rs 7,000 through its sale. The earnings were re-invested in improving the school. One of the classrooms was floored with the money earned. The unit also had replication impact and many villagers initiated their own vermi-composting units. However, the school unit closed down during one extraordinarily hot summer and all the earthworms died. The school has recently revived the plant and has purchased fresh earthworms for it. The tree plantation endeavor has been moderately successful in the school with 25 out of 50 saplings surviving.

Alhanwadi was not provided with saplings nor the vermicompost unit, as the school did not have a compound wall at the time of the project.

3.4 Impact of Motivational Inputs

Mudholwadi: The positive impacts of education and motivational inputs provided in 2003 are still visible in Mudholwadi. The awareness level of the children is found to be considerably high. The children are smart and clean. They responded accurately to all personal hygiene related questions. They consider the work of cleaning the toilets normal for everyone. Thus the purpose of this project was achieved as it was designed to inculcate clean sanitation habits including teaching the children to clean their own toilets.

Institutionalization of the procedure is manifest in the establishment of the Student's Cleanliness Committee that maintains the cleanliness of the school premises, including the toilets. The PTA is also active. The villagers (parents and others) are so concerned about the school. A few years ago, benches and tables worth Rs 26,000 were purchased for the school through community contribution. However there is a small replication of the toilet initiative in just about 20 per cent of the village households and these have been implemented through government schemes (ref: Table 4).

Table 4: Motivation Indicators

INDICATOR	SCORES (O Mudholwadi	
Awareness in children	8	0
Students' Cleanliness Committee (existence)	10	0
Parent Teacher Association (activeness on the issue)	10	0
Money collected for maintenance	2	0
Replication in village or other schools	s 0	0

Alhanwadi: Despite the same motivation and educational inputs given to all participant schools during the project period, there are no results visible in Alhanwadi. The school has not collected any money from the students for the maintenance of the toilets, nor has it used the government funds available. The children do not have any clear understanding regarding personal hygiene and related practices. The school has not taken any initiative in making children responsible for the cleanliness of the premises, and the Students' Cleanliness Committee does not exist. In fact, when the compound wall was later constructed, the toilet block was kept outside

While absence of toilet facility in the school is a major problem, the issue has not featured in any of the meetings of the Parents Teachers Association or the Village Education Committee, nor do the teachers see this as a need. Just 10 per cent of the households have toilets constructed under various government schemes. This reflects the poor awareness and motivation for sanitation and personal hygiene and maybe also for any development activity.

3.5 Characteristics and Placement of the Teachers

In *Mudholwadi*, of the seven teachers currently present, three were present at the time of the implementation of the project. It appears that since then new teachers inducted into the school are from the same village. As of today five of the seven teachers are from the village itself. This appears to have played a very positive role both in ownership and pride in the performance of the school, as well as in the continuity of the good initiatives begun.

With regard to the composition of teachers, *Athanwadi* does not have the same fortune as *Mudholwadi*. The three teachers

Table 5: Characteristics and Composition of Teachers

Village	% or Teachers belonging to the same village	% of Teachers present at the time of the project (2003)
Mudholwadi	71.43	42.86
Ahlanwadi	0	0

currently present were not associated with the school at the time of project implementation. Hence motivation for sanitation and hygiene is not visible. Besides, all the three teachers are from outside the village. This together with a general indifference on their part and an overall lack of motivation is observed in the lack of ownership of the school. It may also be an important reason why the villagers and school did not work together.

3.6 Success and Limiting Factors

3.6.1 What Made Mudholwadi Successful: The Mudholwadi School came out as one of the most outstanding successes. Many factors have contributed towards this achievement. Some of them are:

The participation of the Mudholwadi villagers is overwhelmingly positive. They deserve major credit for this success. Most of the works carried out in the school are through public contribution. The villagers, irrespective of whether they have their children currently in the school or not, contribute liberally for the cause of quality education for the village children. The school has a computer that the children use. From public contribution, the school has recently purchased a set of amplifiers to be installed in all the classrooms and plans to provide educational information for the children to listen to.

The teachers are equally dedicated which in a way is the factor that motivates the parents to contribute towards improving the school. The receipt books of voluntary contribution show that the teachers have also made monetary contributions towards the school. This may also be owing to the fact that five out of the seven teachers belong to Mudholwadi village and three of them were present since the time of the project. This plays an important role, as these three teachers are aware of the objectives and ideals with which the structures were constructed.

- **3.6.2** What Alhanwadi Missed Out On: It is a long and old debate as to why one village achieves positive results, while others are unsuccessful when given 'similar' opportunities. Some of the factors that were glaring in Ahlanwadi are as follows:
- 1. Lack of villagers' cooperation: The indifference of the villagers is visible in the fact that they don't even remember which agency that constructed the toilets for the school. Like all other initiatives, they have assumed that 'the government' constructed the toilets too. And here, they resorted to blaming the government. They complained about many things including misappropriation of funds, bad construction quality, wrong location of toilets, low walls etc. None of their complaints however were found to hold water as, the construction even now is of very good quality (the original paint has not been washed off over the years due to apathy), the walls are about eight feet high and the site was selected by the villagers themselves. Most importantly, the plan of the project was such that the principal of the school received and

signed for each of the construction material arriving for the structures, which makes misappropriation by the implementing agency impossible.

The little importance that the villagers attach to toilets and the issue of sanitation might be one of the most significant reasons for their attitude. The level of health and sanitation consciousness of the villagers is remarkably low, which is apparent from the fact that, very few households have toilets. Though when asked about the need for a school toilet, they respond affirmatively, their attitude to sanitation, as a community, suggests that they are not yet ready to prioritize this issue.

2. All the three teachers are from outside the village and were not present when the project was implemented. This was manifest by their lack of initiative and blame game. There appears to be a lack of ownership regarding the expected outputs of the school activities, which is worsened by the indifference of the villagers. If the teachers present during project implementation in 2003 did any follow up of this sanitation project, it is not obvious, as there is no transfer of information and know-how to the new teachers.

The toilet block was constructed close to a water source, but was located behind the school. Later when the compound wall was constructed, the toilets were kept outside the school compound, they being a little distance away from the school building. It would have been preferable to have it within sight and within the school compound, where a closer control would have been possible. But the location was selected by the villagers and the school authorities and not by the implementing agency. Yet, despite the distance the structure still stands good, the walls are intact and so are the fittings.

Section 4

Observations, Lessons Learnt and Suggestions

The stories of villages that are successful and progressing and those that lag behind have hidden lessons in them. A question one often asks is, "When applying a similar approach and inputs, what makes village X succeed and village Y perform poorly?" From the study of 60 of the 100 village schools that were part of this 'School Water And Sanitation Project' implemented by WOTR way back in 2003, the following observations give us suggestions that contributes to making future interventions more successful and sustainable.

Observation 1: Community Involvement

Community participation is the most important factor for the success or failure of a project. While external agencies may play an important role, change is real and lasting when implemented from an inner conviction, hence the importance of beginning any sustainable effort with community motivation and participation. This was proved in all villages where the structures are functioning very well to those functioning reasonably well, and the initiative continues four years after project completion. In these villagers, the people report that they visit the school often and cooperate in all school activities. It was found that their interest exists beyond the PTA meetings.

On the one hand, there are villages where a large number of parents migrate seasonally. These have little or no interest in school activities. There are also other villages where for various reasons people are yet to see the benefits of education for their children. On the other hand, there are schools where teachers just do not think it necessary to motivate and involve the villagers. Though all schools have similar facilities provided, yet these fail to give the expected outcomes and maintain the infrastructure because of absence of people's cooperation.

Suggestions for Attracting Community Involvement

The village school is a member institution of the village community, and is at the service of the people. While in many villages the people may not be interested because of their own lack of education, it is essential to develop ownership and involve the parents and villagers in general in the future of their wards and their village. Hence, when outside agencies and even the ZP implement activities in the school, the following suggestions would help obtain the participation of the village:

(a) Involving Community based Organisations (CBOs): The Parent-Teacher Association (PTA) is a good forum for integrating activities at school level. Since teachers get transferred, and parents may probably lose interest in the school as their wards pass out, this forum can be the link beyond individual commitment. People's involvement should be sought right from need determination, to designing the project; its implementation and monitoring. The Education Committee of the Gram Panchayat or the Village Development Committee (VDC), where these exist, may be given the important role of bringing the institutions and people together, and of monitoring school activities.

Box No 3: Local Initiatives in the Post Project Period

In Hingangaon village where the open location of the toilet structure was creating a problem, the villagers together with the school employed a watchman with the additional responsibility to take care of the toilet block. In Nepti village (Ahmednagar district), a gate was put up and is kept locked after school hours. In Bhushannagar, Hingangaon and Devgaon villages the school authorities have with the help of the villagers laid pipelines from a distant water source to the toilets and have thus addressed the water issue.

Therefore it should be called upon during implementation and through continuous monitoring of the project.

- (b) Simultaneously, involving the respected village elders in the promotion and mobilization of the village for the same. Gaining the interest of the Women's SHGs (now commonly found in every village) will give the SHGs something meaningful to engage in that will bring them into active development of the village. Once motivated and given a role, women prove effective change makers. This will also motivate them for individual household toilets. Placing responsibility on the local community jointly with the school authorities from the start of project selection and through all stages plays an important role in winning community involvement.
- (c) In villages where distress migration is prevalent, the situation is challenging, as people's priorities are centered on survival needs. Education of children takes a back seat. Even the children leave school during the months

of seasonal migration and join the school again once the family returns. In such a situation it is difficult to expect the villagers to participate in the maintenance of the structures created, an example being toilets. Hence, in villages where regular migration to sugarcane cutting and/or distress migration is prevalent, the school should assume total responsibility for the structures in their charge.

(d) Sustainable solutions are found when internal ownership is strong, rather than dependency on external factors for one's success. One can count on oneself and one's community/village (although affected by external factors). Hence, giving importance to the community taking charge in planning, implementation and finding solutions (however limited) is the best starting point. Therefore, motivation of the local community plays a key role. There is no replacement for motivation, personal pride and dignity that urges the stakeholders to respond from within. This holds good for both villagers as well as teachers, who then pass this on to the children. It is there to stay.

Observation 2: Placement of Teachers

(a) The information of the 15 study villages show that the greater the presence of local school teachers, the more positive the impact on the school's progress and development. In seven villages considered successful, an average of 48 per cent of the teachers were from the same village. While only in two successful schools the teachers were not from the same village, however, these teachers reside within. While in the six unsuccessful schools, only one school had teachers who belong to the same village.

Table 6: Composition of Teachers (Successful Schools)

Name of the village	% of Teachers belonging to the same village	% of Teachers present since the time of the of the project initiation
Gunjalwadi	0	14.28
Hiwre Bazar	71.43	71.43
Mudholwadi	71.43	42.86
Devgaon	14.28	28.57
Jeur	31.25	62.50
Narayandoh	42.86	14.28
Dhurkheda	0	100
Gothangaon	100	100
Sindivihiri	100	20
Average	47.92	50.44

Table 7: Composition of Teachers (Unsuccessful Schools)

Name of the village	% of Teachers belonging to the same village	% of teachers present at the time of the project
Alhanwadi	0	0
Chitalwadi	0	0
Pangra	0	0
Khadakwadi	0	0
Rahati	25	50
Bhatodi	0	50
Average	4.16	16.67

(b) Additionally, in the successful schools, an average of 50 per cent of the teachers were present since the time of the project implementation. While in the unsuccessful schools, two schools had teachers present since the time of the project (Table 6 & Table 7).

It appears that the two factors – teachers belonging to or residing within the village and their presence since project implementation – contribute to a positive impact on commitment and maintenance of the initiative. It is a factor that enhances ownership by the teachers and accountability to one's village.

Recommendations

The fact is that the appointment and transfer of teachers rests with the district authorities. Hence the project design should consider sustainability of the initiative that does not depend on this external factor. The following suggestions to overcome this are:

Going back to the Community: While teachers are transferred and children pass out, the only stable factor is the village community. Therefore a solution lies within the village. Hence the suggestions made in Observation 1 above are important. Villagers who have been given the responsibility of monitoring can help the fresh staff carry on the good practices initiated, while teachers can update and enhance this information. The importance of having at least one local teacher in the school cannot be sufficiently emphasized. She/he can mobilize the community more effectively than an outsider, as pride, ownership and accountability to the village is greater. Therefore emphasis should be placed on involving/motivating the local teacher for such initiatives.

Annual Monitoring of Projects and Orientation of Teachers by the Implementing Agency: When finances are invested in structures, a plan for adequate and regularly spaced monitoring (once in 6 months or once a year) should be considered even for the post project period, until the initiative is rooted. In the case of the school sanitation project, this would help in achieving two goals: (i) the project will be inspected annually giving the schools an incentive to maintain the structures. (ii) More importantly, the new teachers will be made aware of the project, its goals and norms. This would revive the interest each time there arises a possibility of its losing momentum.

Policy Suggestion: Since these two factors – presence of teachers since the beginning of any initiative, and presence of local/resident teachers – contributes significantly to quality interventions as also to continuity of good practices, [as is shown in this study], the policy related to placements of teachers should be such that at least some teachers of the village itself be appointed to the local school and that all teachers should reside in the village itself.

Observation 3: Sanitation Consciousness of the Village

The percentage of households having individual toilets was taken as the indicator of the village consciousness regarding sanitation. These toilets may have been built before, during or after the school sanitation project. But there exists a strong link between the existence of personal toilets and proper maintenance of the school toilets. Table 6 shows that of the successful villages, two are 100 per cent free of open defecation, while five villages have between 20 per cent to 60 per cent homes with household toilets. An overall average 45.22 per cent of households of the successful villages have

toilets. Of the unsuccessful villages, just 5.33 per cent have them. In the six unsuccessful villages, three villages and two villages have 4 per cent and 10 per cent toilet coverage respectively (refer to Table 8 below).

Since currently government programs are being implemented simultaneously, it is difficult to say whether this project had any role in the promotion of home toilets. But it is observed that in villages where the school toilets are managed well, there are more homes that have availed the government schemes and now have household toilets. One may begin either by motivating for household toilets or the school sanitation, the impact would be seen in the other. Beginning by motivating the women's SHGs proves a useful entry; as women are the most affected, hence feel the need the greatest.

Table 8: Households With Personal Toilets (Successful Villages)

Name of the village	% of households having personal toilets
Gunjalwadi	30
Hiwre Bazar	100
Mudholwadi	20
Devgaon	40
Jeur	60
Narayandoh	52
Dhurkheda	100
Gothangaon	0
Sindivihiri	5
Average	45.22

Observation 4: Physical attributes of the Structures

Physical features are found to have an impact on the success level of the project. Some of them are mentioned below:

Location of the toilets turns out to be an important factor that influences the success or failure of the school in maintaining them. Of the nine successful schools studied, only two were without compound walls, but here toilets were located within a short distance and in sight of the school. The rest were inside the school compound walls. On the other hand only one of the six unsuccessful schools had its toilet inside the school compound. There was either no compound wall or the toilet was constructed outside it, which clearly indicates that a protective boundary is important for proper maintenance of toilets and protects it from misuse. This is a genuine issue, as it becomes difficult for the school to protect the structure after school hours and during holidays.

The recommendation when implementing such a project is that schools should be selected where a boundary wall exists or a compound should be constructed, with lockable doors. In case the school does not have sufficient space within its compound, the toilets should be built at least at a location close by and visible from the school. Mechanisms for protection should be put in place. To maintain clean toilets, it is essential that besides constructing a strong structure, the design and color should also look appealing, especially the interiors of the toilet block. This encourages the children to maintain its clean and good look. It is preferable that metal doors be used as these have a longer life as compared to wooden doors.

Table 9: Households With Personal Toilets (Unsuccessful Villages)

Name of the village	% of households having personal toilets
Alhanwadi	10
Chitalwadi	4
Pangra	0
Khadakwadi	4
Rahati	10
Bhatodi	4
Average	5.33

Observation 5: Water availability

As is well known, a sanitation project cannot succeed in the absence of a reliable supply of water. Although during implementation the water supply system was included, of the 60 villages chosen for the preliminary assessment in 2007, in 10 villages the water had to be fetched from a distance of over 250 meters, for use in the toilets, and of these ten, 8 have been classified as unsuccessful. Furthermore, of the six schools identified for detailed study, three are in disuse due to water scarcity.

One of the parameters for selection of schools for the project was that they should either have a perennial source of water, or else a water source would be made accessible. Though this directive has been complied with in all cases at the time of selection of the schools, in some villages unforeseen developments post project completion, have brought the situation back to square one (ref: box 1). Where required,

the implementing agency provided bore-wells and installed pumps for the schools that did not have water facility. But later in the post project period, in five villages, these systems collapsed; the pumps were stolen, or the electricity was disconnected. All this led to the school reverting to its earlier position.

Recommendation

The observation mentioned above suggests that merely providing facilities does not solve the problem. We again revert to importance of motivation of the local CBOs for their involvement in taking responsibility for maintenance of all aspects of the unit as also to address new problems with appropriate solutions.

Observation 6: The Distance from the Administrative Center

While it was hypothesized that the villages closer to the taluka or the district center would perform better than those that were further away, no significant proof was found in favor of this hypothesis. Of the 15 villages studied in detail, the average distance of the successful villages was found to be 56 kms from the district center and 24 kms from the taluka headquarters. The corresponding distance of the unsuccessful villages did not differ much and were 58 and 29 kms respectively. The conclusion therefore is that such initiatives can be taken up in remotest of villages and they will have an equal possibility of succeeding as the villages located nearby.

Do inspections by the district education officials influence the success of a school sanitation project? It was found in the course of this study, that a ZP official subjects every school to

Box No 4: The Effect of Duplication of Activity

In four schools it was found that although the toilet blocks put up by WOTR was still standing and are in good use, Zilla Parishad put up another set of toilet blocks later. While Jatdevala has put the toilets to a constructive use, it is not so in the other villages. Rui Chaatissi has the left the toilets idle and the school uses the ZP toilets. The project toilets are used only when there is overcrowding which happens once in a while when children from other schools visit this village for competitions. The toilets of the Borkhedi village school are being used by teachers. The children use the half constructed ZP toilets as urinals. The Nimbvi village school has locked the toilets altogether against the use and the urinals are used by the teachers. Children use the ZP urinals.

regular inspections, at least once a week. This applies even to the remotest schools. The Devgaon School in Newasa taluka was the only one to report that inspections were irregular here. Sometimes a full month passes by without any visit. The reason cited by the head master was that the ZP officials know that this school is being run well and so they do not consider it necessary to visit frequently. Instead they focus on the poorly performing schools. The Devgaon School indeed is well functioning from all aspects. All the schools that were categorized as unsuccessful reported very regular and frequent visits, as did the successful schools with the exception of Devgaon.

The questions that surface are: (i) Do the ZP officials check if the sanitation facilities are well maintained and in use?

(ii) Would they also review initiatives introduced into the ZP schools when implemented by other agencies? It is obvious from the findings that, generally, the Education Department officials do not review these aspects although sanitation, health and hygiene are essential aspects for good education.

Recommendations

Although WOTR had implemented this project with the knowledge and goodwill of the respective district Education Department; this was looked upon as an external intervention, hence district officials paid no attention to this. In fact in four village schools (ref: box 4), the ZP constructed another set of toilets, although the structures put up by WOTR are still standing and functioning. Therefore, in order to ensure its continuity, the implementing agency should work out a plan to actively seek partnership and obtain the explicit support of the local officials during implementation and in it's monitoring. A sanitation project certainly requires special attention. Support from this department would go a long way in obtaining the desired results of making sanitary habits a way of life.

Coordination between the development agency / NGO and the respective department is of utmost importance as better outcomes can be obtained at reduced costs as duplication of efforts would be minimized. Openness for partnerships at the district and local level would greatly benefit the overall outcome especially in remote villages.

Observation 7

Are good grades a reliable indicator of the success of a sanitation project? The academic performance of schools

was found to be unrelated to the school's performance in maintaining sanitation structures. All the 15 schools studied in detail, had registered a good performance academically (as stated by the school authorities) irrespective of whether they failed or succeeded in maintaining the project structures. In almost all schools, more than 90 per cent of the children passed their promotion exams and about a similar percentage passed the scholarship exams also. Therefore the academic performance of a school does not appear to be related to the outcomes. It would therefore be wrong to select or reject a school for such projects on the basis of academic performance of the school.

Observation 8: Regarding other Environmental Activities such as Tree Plantation and Promotion of Organic Composting

Tree plantation and organic composting were looked upon as additional activities by the local school officials, and were not understood as part of environmental education. On the other hand, in the few schools where these have been successful, the children loved these initiatives as it engaged them actively. These were unsuccessful, as the various aspects (protection of the saplings planted, care during holidays and summer months, water availability especially during severe summers) required for its realization were not sufficiently considered at the local school level. In the schools that found monitory benefits from the vermi-compost, they initiated the activity each year. Motivated by the school that provided the earthworms, the children in their own homes also replicated this. Capturing the interest and motivation of the local school functionaries holds the key to success, as innovative and practical ways of continuity at the local level have to be applied.

Recommendations

Environmental education needs to go beyond textbook to practical application during school hours and should be part of the syllabus. Teachers need to understand and be motivated for such projects so as to prepare practical outcome oriented plans applicable in the context of their village. Teachers that belong to the same village will help see through such initiatives.

Observation 9: The Role of Children

The implementing agency had visualized an important role for the children in the project. The children were not only supposed to use, clean and maintain the toilets, but were also seen as the messengers of sanitation to their respective homes. In schools where all children are involved in maintaining the cleanliness of the toilets, they have broken the age-old taboos and culture. They, by merely using the facility, develop hygienic habits, which are then transferred to their homes. Also, inculcating hygienic habits at an impressionable age ensures that they will grow up to become hygiene conscious adults. The role of the children is therefore central to the success of the basic idea and objective of the project. In this project one could not measure the impact made by children in promoting sanitation as simultaneously government schemes are also being promoted. But in one village, children were effective in spreading the vermi-compost units to their homes.

^{2.} MDG 7, Target 10: Halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation.

Recommendations

Children can be effective change-makers as they easily absorb new habits. They carry these homes and take habits on into their generation. The fact is that children eagerly imbibe anything taught them. And so, the onus of change rests in the hands of their teachers. If the teachers are well motivated, and creative, their children will energetically take the message ahead into their homes and the next generation. It is therefore advisable to have school projects (of both government and other agencies) that creatively engage children and optimize on this resource to make the positive changes desired.

Conclusion

Promotion of sanitation and accessibility to safe drinking water is high on the government agenda as India races towards meeting MDG 7 (Target 29²; Indicator 31), and we have just 7 years (by 2015) to achieve this. The study has gone into details of the performance of the school sanitation effort. It has been able to identify the plus points and the drawbacks of the project. In the light of the findings of the study, the ownership and active involvement of the community surfaces as most crucial for the success of any intervention, even though this intervention is limited to the school. While physical factors are essential to address, (water availability, location of the toilets, availability of electricity) and can make or destroy the project after its completion, it is the people's participation that is key to success. The ownership, active engagement and creativity of the schoolteachers are of equal importance. They are responsible for passing it on to the next generation.

People's participation however does not evolve on its own. While some villages show a lack of collective participation for one activity, the members willingly come together to celebrate festivals or take up other livelihood related initiatives. It is the issue of importance that one gives to a particular issue. Unless the intervention features high on their priority list, and the community and teachers are sufficiently motivated for the same, its continuity and maintenance will remain the responsibility of the implementing agency or of the

government department. Toilets in schools and homes will be 'show-pieces' unless the village community and the individuals perceive their absence as problematic and harmful to health.

It is a well understood fact that nobody destroys something that s/he values. When good health, personal and community benefits, pride and dignity are the motivating factors, one can expect that any project will progress way beyond the initial inputs. Hence the implementation of any project place strong emphasis to the motivation, mobilization and planning. When this is realized together with the primary stakeholders (the villagers and teachers in a school project), success is visible on the horizon. Such an action that follows will continue from one generation to the next through motivated and eager children.

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About WOTR

Established in 1993 to undertake holistic and integrated development activities for poverty reduction in resource-fragile and rain-fed areas in India, Watershed Organization Trust (WOTR) is an NGO based in Ahmednagar, Maharashtra, that actually helps make the water flow where there is none. This is done by trapping the rain to regenerate the forests and enrich the ecosystem, for the people and by the people who live there.

The main focus areas of WOTR are capacity building of village groups and NGOs for participatory watershed development, integrated farming systems (agriculture, horticulture, livestock, organic farming, etc.), self help promotion, direct implementation of watershed projects, micro enterprise promotion, training and extension support for organisations and practitioners, development of concepts, pedagogies, training manuals, awareness generation tools and media aids, policy advocacy, documentation, knowledge capitalization, action research and publications.



Watershed Organisation Trust (WOTR)

'Paryavaran', Behind Market Yard,

Ahmednagar 414 001, Maharashtra, India

Phone: (91) 241 2450188, 2451460

Fax: (91) 241 2451134

Email: info@wotr.org • Website: www.wotr.org

Supported by:

