

**BRINGING  
DIGNITY TO LIFE**



**A STEP TOWARDS SANITATION FOR ALL**



Bringing water and dignity  
to the poorest people of rural Rajasthan



## Jal Bhagirathi Foundation

Since the year 2002, JBF has worked with a focus to address the issue of water distress in the Marwar region located in the Thar Desert. With region specific strategies, JBF is driven by a vision of water security, sustained by responsive governance and inclusive growth leading to sustainable development.

The Foundation is involved in creating an enabling environment for revival of traditional water harvesting systems through community institutions, positioning its work and learning at the national level for further replication. The focus is on developing adaptive strategies to climate change through capacity building of rural communities for the development and proper management of ecological resources especially water. The Foundation has also started focussing on sanitation and hygiene as it plays a major role in availability of safe water.

## Wells for India

Wells for India is a UK registered Development Organization founded by Dr. Nicholas Grey and his wife Dr. Mary Grey in 1987 with an aim to help the poor and disadvantaged groups in the rural areas of Rajasthan. Since then the organization has supported over 700 villages spread over 11 districts of Rajasthan through 22 local Non Government Organizations. It has also played a critical role in responding to the regional emergencies, especially the drought of 1988 and 2003.

Wells for India believes that water provision is an essential foundation for all other forms of development, and therefore focuses its work on rainwater harvesting methodologies to achieve and bring about widespread social and economic benefits to the poor communities. Their efforts in Rajasthan for the last 22 years illustrated how safe potable water availability not only improves health and releases time and energy of women, but also improves poor people's income generation capability, education, social and cultural well-being. The increased water availability through small scale water harvesting structures results in improved productivity of crops, fodder and milk production. Over a period of time communities become self reliant and responsible for their own development.

Cover page: Collecting water through a hand pump connected to a tanka (underground rain water harvesting tank). Waste water is used for maintaining plants and greenery.





## Water and sanitation as a development priority

A vital component for poverty alleviation, improved health and life quality in developing nations is the access to clean water and sanitation. Safe water and proper sanitation increases life expectancy, decreasing illness and health related expenditure. In turn, this allows families to invest their time, energy and financial resources in productive and income generating activities including education for their children, thus contributing to better life. Due to the important role of water and sanitation in development, both national and international agencies are giving a major focus for its improvement.

Lack of access to safe water and adequate sanitation is perhaps the world's greatest developmental challenge. Global failure to effectively manage water seriously hampers efforts to alleviate poverty and threatens progress towards sustainable development. The crisis is enormous in scale and brutal in consequence, especially for the poorest of the poor. One may argue, without doubt, that among all developmental challenges, the water crisis has the greatest impact on human survival. Water access and sanitation are determined by the complex and dynamic interactions between many different social, technological and environmental processes operating at multiple levels within a variety of time frames, and their precise consequences can be uncertain (Mehta et al 2007). Access to safe drinking water and sanitation lies at the heart of human well-being and is rightly labelled as a "moral and ethical imperative" by Lenton and Wright (2004).

Sanitation is considered to be one of the most difficult to achieve of the Millennium Development Goals (MDGs), with about 2.4 billion people worldwide lacking access (Ban Ki-moon 2008). However, sanitation is now receiving increased policy attention and the amount of resources being channelled into sanitation projects is on the rise. Still, key challenges include tackling cultural and social issues of behaviour change in order to ensure sanitary infrastructure like toilets are not just built, but also used and maintained. Thus, there is an urgent need to go beyond top-down notions of toilet construction and toilet coverage (Movik and Mehta 2009, 2). Human Development Report (HDR (2006)) clearly argues that water and sanitation are among the most powerful "preventive medicines" available to governments to reduce infectious diseases (HDR 2006 6-7).

In India, the national government has initiated various programs with the aim of increasing access to safe water and proper sanitation such as 'The Minimum Needs Program', the 'Rajiv Gandhi National Drinking Water

Mission', the 'Integrated Rural Water Supply', and the 'Environmental Sanitation Project'. Yet, progress in this area has been slow. National Sample Survey data shows that in the period between 1998-2004, households without toilets declined from 82.5% to 75.5% in rural areas and 25.5% to 20.3% in urban areas. These statistics show that in both rural and urban areas there is an alarmingly high density of population without toilets despite government efforts.

Failure to achieve significant gains in sanitation coverage in India can be attributed to many factors. Sanitation and safe water have historically been of low social and political priority which is reflected in its small allocation of Rs. 8500 crore of the annual budget of Rs.7.47 trillion crores, computing to a mere of 1.14% of the government's expenditure (Union Budget 2008-09). In addition, most of the programs have a top-down approach that have failed to take into account the cultural needs and preferences of the beneficiary population, particularly in rural areas, which has led to investments yielding sub-optimal results. Consequently, the government decided to re-evaluate the effectiveness of its rural sanitation program, the Central Rural Sanitation Program (CRSP). In 1999, the CRSP was restructured into the Total Sanitation Program (TSP) that focused on community involvement and ownership in Sanitation through the distribution of responsibility to Gram Panchayats, relying on household involvement and affordable toilet options as opposed to high subsidies. TSP programme is a comprehensive programme to ensure sanitation facilities in rural areas with the broader goal to eradicate the practice of open defecation. The programme though has an innovative approach, however its impact has not been substantial due to lack of awareness and motivation among the people. (Singh 2007).





## Marwar region

The Marwar region is a part of the Indian Thar Desert which is the most densely populated arid zone in the world. Geographically, the region has a fragile ecosystem with sandy soils, high temperatures, low and scanty rainfall. Ground water though available is extremely saline making it unfit for drinking or agriculture.

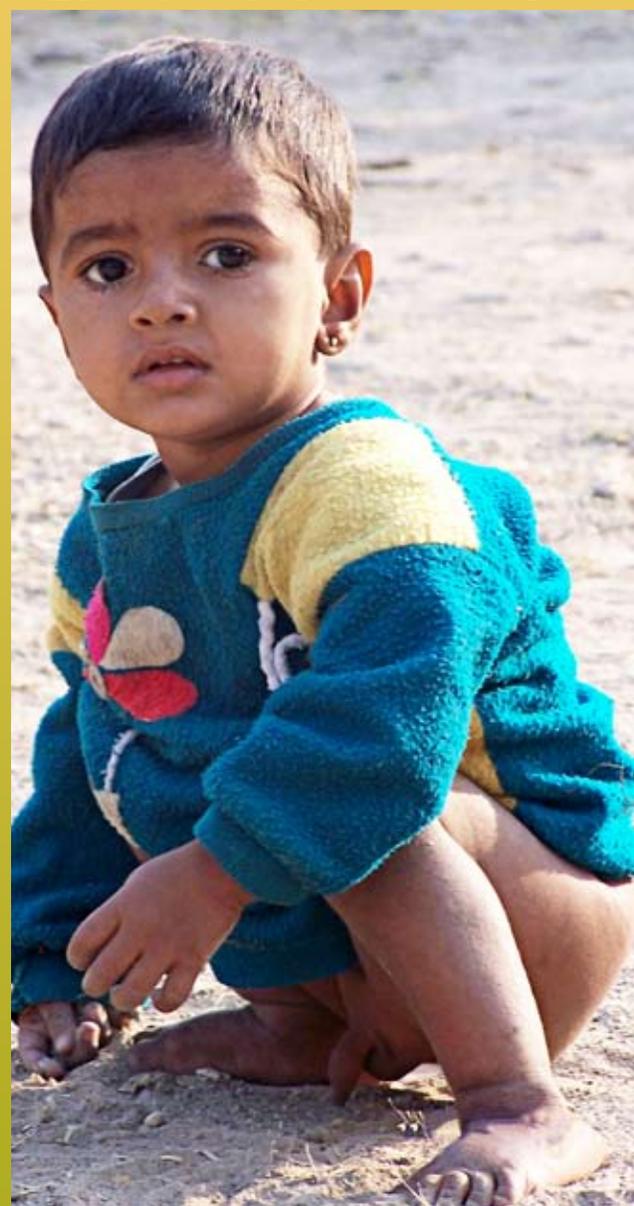
Marwar is an agrarian rain dependent region with about 80% of the work force deriving its sustenance from agriculture and livestock. Due to its low water endowment and frequent failures of monsoon, agrarian livelihood is perilous, leading to economic hardships. Traditional gender biases and caste discrimination has led to social exclusion of women and marginalised communities from decision making forums. Lower literacy rates further hinders their ability to participate in the development processes.

## Sanitation in the Marwar Region

A major obstacle to implement a nationwide safe water and sanitation strategy in India is the nation's diverse culture and geography. Factors such as prevalence of distinct caste and religious communities, social practices, traditional customs, education levels, climate and topography need to be taken into account before formulation of a policy or strategy.

Rajasthan especially the Marwar region is plagued by poor and inadequate sanitation practices. According to a National Sample Survey, 84.8% of the rural population in Rajasthan did not have a toilet in their household, much above the national rural average of 75.5% (NSS 2004).

Poor hygiene practices, open defecation and minimal environmental sanitation also take a major toll on public health in this region. Such practices, entrenched over time, have led to deep-seated behaviour which is hard to change. With increasing population, these practices have become a major cause of health hazards. Rajasthan has only 34% sanitation coverage and is ranked 24th among the 28 Indian states (CCDU Dept 2005).





PRA exercise being carried out in the village

## The WASH Project

### Concept

Jal Bhagirathi Foundation had been working in more than 200 villages of the Marwar region mobilising communities to revive their traditional water harvesting systems. During interaction with community groups it became increasingly apparent that sanitation and hygiene have a major impact on provision of safe drinking water. After successfully creating access of water for the desert communities the Foundation, expanded its scope of work to include cleanliness, hygiene awareness along with sanitation improvement.

JBF has been successful in creating a dynamic and vibrant social capital in the region resulting in cohesive community institutions that are responsible for the development initiatives in their village. The sanitation program has been designed to further strengthen the community institutions and expand their scope of work to include sanitation and safe water.

With this aim, the pilot project of Water Access Sanitation and Hygiene (WASH) was launched in village Janadesar located in Jodhpur district. The village is not compact but is spread into dhanis (hamlets), making it a more challenging task to bring a dispersed population together.

Principally, the project stood on the pillars of community mobilization and capacity building of the village level institutions to adopt and extend their scope of work to include sanitation and hygiene promotion.

The major thrust of the project activities was on water management and building sanitation facilities through a multi-pronged strategy:

- ▶ Creating supportive arrangements for households to make decisions.
- ▶ Creating a demand for sanitation.
- ▶ Initiating behaviour change.

To achieve the project outcomes three inter-related activities were carried out:

- ▶ Reviving traditional rainwater harvesting systems to ensure water availability.
- ▶ Construction of sanitary facilities.
- ▶ Awareness generation on improved hygiene practices.





Dr. Nicholas Grey, Dr. Mary Grey and O. P. Sharma during a village visit

## The starting point

The process for implementation of the WASH campaign began with the identification of the village. Meetings, focus group discussions and interactions were organised with community groups in the village. These meetings highlighted the need and importance of people's participation and involvement in sanitation promotion and behaviour change.

Consequent to the meetings with community members, their lack of understanding about the link between sanitation practices and diseases became evident. No household in the village had a toilet. Education levels were very low and raising awareness of hygiene, cleanliness and its contribution to wellbeing and better health was to be a long term process.

Being a spread out village, open defecation around the village meant the challenge of walking long distances to find land and privacy. Travelling to desolate locations compromised the safety of villagers, particularly women and children for whom there was always a fear of physical or sexual assault at night and at odd hours.

Women, especially the landless and those belonging to "lower castes" had to walk to distant places in search of privacy. They also experienced re-occurring bladder infections due to long waiting periods. In addition, during menstruation and pregnancy, they faced further inconvenience from lack of access to safe and hygienic disposal methods.



Women attending a training programme



**Collaborative decision making:  
A meeting of the Jal Sabha**

## Building the WASH campaign

To begin with Participatory Rural Appraisal (PRA) exercises were carried out, focussing mainly on social and resource mapping which gave an assessment of the people and their households. This was followed by a Household Baseline survey to assess the sanitation status and health related problems faced by them. These two research methods presented a comprehensive image of the village and its inhabitants. It also helped the community workers to closely understand the physical characteristics of the village.

This process contributed to the successful facilitation of the formation of community institutions called Jal Sabhas (water user associations) for implementation of project activities in Janadesar village. 7 Jal Sabhas were constituted in the village and each Jal Sabha consisted of members from different castes alongwith active women participation. The members then selected their office bearers. Members of the gram panchayat were mobilised and they became active members and participants in the Jal Sabhas.

The Jal Sabhas played a central role in the implementation of the WASH project. They held meetings to inform the community about sanitation and hygiene practices and encouraged their members to build toilets in their homes. With support from Wells for India, a 50% grant was given for the construction of each toilet and the Jal Sabha administered and managed the implementation process. The beneficiary contribution of 50% ensured a sense of ownership of the toilet.





In addition, effective promotion of sanitation also required village populace to adopt proper hygiene and cleanliness practices. With constant interaction with the villagers, JBF identified residents with leadership potential to further disseminate information in the community. These residents, referred to as “change agents”, were a medium to bring about behavioural change in the sanitation habits of community members and thus contributed in spreading awareness.

The biggest hurdle in the whole process of the campaign was the people’s attitude and their resistance to construction of toilets. There was a stark difference in attitude of “upper castes” vis-a-vis “lower castes” towards constructing a toilet. Members from the upper caste owned “sufficient” land for open defecation and therefore the concept of ‘building’ a toilet was unappealing. They were also averse to having a waste disposal system in or near their household. Furthermore, for men, open defecation was a part of the daily routine.

For women, there were many obvious benefits, yet they were hesitant to express these concerns to their men folk. The Marwar is traditionally male dominated and therefore decision making, particularly with financial matters, is left solely to men. Initially, men did not understand the impact a toilet could have on their household.

However for members belonging to the “lower castes” and the landless, especially the women, building a toilet was an urgent felt

need. They were more forthcoming in construction of toilets. Jal Sabhas with a high percentage of members belonging to the “lower castes” led the sanitation and hygiene campaign. A Jal Sabha exclusively of women members and office bearers was formed in Meghwalon ki Dhani; all households in this dhani, belonging to the Meghwal community have made household toilets.

**Model toilet constructed in the Gram Panchayat premises in Janadesar as a training and awareness tool**





Training programme for change agents

## Overcoming Challenges

### Community oriented awareness campaign

The awareness campaign consisted of various activities designed to be visible, community oriented, entertaining and informative. This combination was necessary to achieve maximum impact in the village where many residents were illiterate and consumed with household responsibilities. Training programs for the village were organized in collaboration with the Communication and Capacity Development Unit (CCDU) of the State Water and Sanitation Mission.

The awareness campaign utilized village schools in Janadesar by incorporating sanitation and hygiene awareness activities and education. Water and sanitation related slogans were written in various public areas by children.

Further, public announcements were used as a tool to keep the WASH awareness campaign message circulating throughout the village. Through the awareness program, it was ensured that the message of the sanitation campaign reached the entire population. These announcements focused on generating demand for toilet construction and to encourage proper use and maintenance of the constructed toilets. It also gave messages about the importance of safe hygiene practices.

Nukkad Nataks (street plays) were used as a medium to address village issues and concerns around sanitation. JBF's Community Video Unit team enacted plays that highlighted the importance of village sanitation, health and hygiene. Following the performances, active discussions were held on the importance of sanitation, health and hygiene practices. Overall, the efforts contributed to inculcate an extensive learning process and improved the general awareness among the villagers.



Hand washing practice at household level

To scale up the awareness of seven components of sanitation among communities, video shows were organized. These video shows showcased the importance of sanitary toilets and safe drinking water, problems of open defecation, importance of hand washing, water related diseases, proper handling of safe water, cost and affordability of sanitary toilets. Each show was facilitated by the JBF staff and discussions were encouraged among the viewers after the screening, ending in a "call to action" asking people to take positive steps in the direction of better sanitation.

### Mobilizing women through change agents

A key challenge to ensure better sanitation was raising awareness amongst women and empowering them to advocate for their sanitation needs. To overcome this obstacle, women "change agents" were trained from the community. Having familiar women as public faces of the sanitation campaign created a non-threatening atmosphere for other women to attend trainings and openly discuss their concerns around sanitation. Furthermore, developing leadership in change agents initiated a process of women's empowerment by expanding women's role in community activities, increasing knowledge, education and creating female role models.

By attending change agent led meetings, women in Janadesar were able to return home and communicate the need for a toilet to their husbands along with teaching and practicing proper hygiene practices in household activities such as cooking, cleaning and bathing.



Training of masons on construction of low cost toilet

## Impact of the WASH pilot project

### ► Water security

Adopting proper hygiene and sanitation practices emphasized the need for water security. As a part of the WASH pilot project, the village Jal Sabha developed a micro-project for deepening the village nadi (pond) and mobilized the community to raise 30% of the capital required for the project. The original capacity of "Saiya Nadi" was only 1800 m<sup>3</sup>, and after the completion of the project an additional storage capacity of 6660 m<sup>3</sup> has been created for harvesting more rainwater.

### ► Building Sanitation Infrastructure

Construction of toilets is one of the most challenging aspects of a sanitation program because in addition to a financial expenditure it requires a change in deep seated behaviour. Through community mobilization, on-going awareness generation activities, the WASH pilot project was able to facilitate 80% sanitation coverage in the village within a period of one year (January 09- December 09). The project has been promoting construction of "off the pit toilets" with

provision of two leach pits. Community members are making one pit and leaving a provision for construction of the second pit in future.

Further an innovation has been made to the toilet design by community members. They are now constructing bathing rooms adjacent to the toilets for better personal hygiene. These are being done by them as a result of the awareness activities with no financial support. Households are now also adopting liquid and solid waste management.



Toilet pit under construction



**O. P. Sharma, Director, WFI,  
during a monitoring visit**

## Lessons Learnt

Decentralised community led institutions help in facilitating a bottom up approach to sanitation and can be successful in enabling a behavioural and attitudinal change. Individual contribution and participation help to inculcate a sense of ownership and value, ensuring the maintenance of the facility, thereby enhancing the project's sustainability.

Some of the important lessons gathered are during implementation are being summarised -

### ► Utilizing a group strategy for implementation

When the pilot project was started in Janadesar, the Jal Sabhas took applications of individuals for construction of toilets in their household. Once the application was ratified by the Jal Sabha and the Jal Parishad, the individual started the construction of the toilet. However over a period of time it was realised that building peer pressure in construction of toilets was essential. Further greater responsibility on the Jal Sabha had to be put to ensure that implementation was smooth and wider sanitation coverage was achieved.

To address this issue, the process of implementation for sanitation projects was further refined. The Jal Sabhas were encouraged to develop group micro-projects where a fixed number of households generally ten, together applied for grant approval to the Jal Sabha and finally the Jal Parishad.

### Locally made toilet brushes (cloth wrapped around a stick) have become popular for cleaning toilets



**O. P. Sharma, Director, WFI,  
interacting with a change agent**



**One tree, One family: each household in Janadesar has adopted trees**

This was also done with the idea of putting the onus on the community to make it a collective effort. The idea behind the process is to provide an enabling environment for people to work together for their well being.

Peer pressure has proved to be an effective tool in toilet construction. Financial reimbursements are approved by the Jal Sabha only when all the toilets in a group micro-project are complete. It has also been observed that since toilets are constructed in a group, there acceptance for regular use is also greater.

These strategies have also brought forth the idea of the collective and have increased people's participation. In villages other than Janadesar, it has helped in generating a demand for sanitation and has put forward the idea of cleanliness and hygiene with a much greater force.

► **Community led awareness campaign**

The experience in Janadesar village has revealed that financial constraints were a minor impediment in construction of toilets. A survey of village residents showed that lack of knowledge of sanitation practices and toilet use was the foremost reason for poor sanitation conditions. Therefore, the foundation for a sanitation campaign is built through an effective education and awareness program. For effective communication with the village, leadership and ownership from within is important. Identifying and developing leaders in the community as change agents expedited the process of raising awareness. Change agents had credibility in the community due to their pre-existing relationships and their constant presence was successful in mobilising people.

► **Socio-economic and caste specific issues around toilet construction**

The implementation of the WASH project in Janadesar has helped in

**Protecting trees with worn out tyres**





Rain gauge station at Janadesar

gaining insight on the link between toilet construction and socio-economic and caste specific issues. A survey of village revealed that often it was a non-health and sanitation reason that was the most compelling factor for a household to construct a toilet.

Lower caste, landless villagers who walked longer distances to find open and “safe” land for defecation had the most urgent need for a toilet. Walking long distances for open defecation was inconvenient for the sick, elderly, menstruating and pregnant women. In addition, this also compromised personal safety, particularly for women and children. The landless and the so called “lower castes” were people who came to the forefront in construction of toilets. For them, constructing a toilet resulted in an immediate comfort, security and improvement in quality of life.

With the so called “lower castes” leading the way, the upper castes gradually felt left out of a progressive initiative. They slowly joined the sanitation drive following by example.

## Step towards achieving complete sanitation

JBF designed the WASH pilot project in Janadesar village with the objective of sanitation awareness and construction of toilets in each household. The experience of the pilot project revealed that 100% household sanitation coverage is a long term goal which can be achieved by setting short term targets.

For any village to achieve full sanitation coverage it is important that the village attains a “critical mass” in toilet construction in the village. The Janadesar project revealed that the goal of 100% toilet construction is not a realistic short-term goal. Surveys of the community showed that certain households built toilets only after they witnessed others in the village constructing toilets. Furthermore, as presence of toilets in the village increased, having a toilet began to be viewed as a status symbol



House hold soak pit for liquid waste management





in the village. Following community behaviour was the motivating factor for certain people who built a toilet only because their neighbour had one. The prevalence of community pressure playing a factor in people choosing to adopt sanitation practices emphasizes the importance of developing community leadership and governance institutions.

Toilet construction is a quantifiable indicator to measure the success of any sanitation project; however 100% coverage is a long term goal. It is important to set a target between 75-80% which should be reached by the end of the active awareness campaign period. After this “critical mass” has been achieved, community leaders such as Jal Sabha members and change agents will have the ability to exert community pressure on the remaining residents to adopt sanitation practices.

## Replicating the wash project

This practice that has emerged in Janadesar is worth replicating and is being up scaled to other villages. This practice formulates a unique partnership between people and the village community and invites investment from both for their own benefit. Human development is more closely linked to access to safe water and sanitation than any other development indicator. Hence, its achievement is important for the well being of the people and improved health practices. This practice puts forward an example of a holistic approach to enable access to sanitation facilities, promote hygiene practices and enhancing water security; such an approach can be scaled up for wider replication.





## Glossary

- Gram Panchayats are local government bodies at the village level. Members of the Gram Panchayat are elected directly by the village people on the basis of adult franchise, for a term of five years.
- Jal Sabhas are Village Water Users Association which is a decision making body for water resource development at the village level. Its functioning is based on the principles of democratic governance and participatory management.
- Jal Parishad: A voluntary forum at the organizational level of JBF, consisting of representatives of communities as well as experts in water, sanitation and environment. Jal Parishad meets in every month to monitor and assess projects.
- Meghwal: A community in the region classified as 'Scheduled Caste'.
- Seven Components of Sanitation are:
  1. Handing of drinking water
  2. Disposal of waste water
  3. Disposal of human excreta
  4. Disposal of garbage and animal excreta
  5. Home sanitation and food hygiene
  6. Personal hygiene
  7. Community sanitation

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