

## Assessment Report

### Rural Health and Environment Programme

Supported by  
Haritika and Methodist Relief & Development Fund, UK

October 2007



Picture: Proud owners of 24X7 water supply system in Suda Village, 2007

Picture courtesy: Anjal Prakash

Report by

Anjal Prakash  
WaterAid India  
New Delhi

**Acknowledgement**

I would like to thank the inhabitants of Suda and Sahaniya village who shared their life with us and discussed development concerns. My special gratitude to the executive director, Haritika – Mr. Avani Mohan Singh and his colleagues who are working in a very difficult terrain and are trying to do their bit to change lives. Ms. Chandra Ganapathy of WaterAid, New Delhi helped in conceptualizing the use of qualitative information system (QIS) for participatory monitoring and evaluation. She generously helped in data analysis which is reflected in most of the graphs presented in the study and gave her comments on the initial draft. A special word of thanks to Mr. Depinder S Kapur, Country Representative and Dr. Indira Khurana, Director Policy and partnership of WaterAid India, who could see the reason in taking up this assignment despite WaterAid being an active interest group in the process. Finally I am thankful to Ms. Menka Jha of MRDF for having confidence in me to assess the work of Haritika that proved to be an enriching exercise. Needless to say that the usual disclaimer applies.

Picture curtesy: All pictures are taken by Anjal Prakash

## 1.0 Introduction

Sheela, 29 gets up at five in the morning to start her day that includes attending to daily household chores such as cleaning, washing vessels and fetching water for household needs and answering nature's call. She then prepares breakfast, sends children to school and head for the agricultural field with her husband. Sheela lives in the remote hamlet of Suda in Sahaniya Panchayat of Chattarpur district in Madhya Pradesh. Apart from working in the field, Sheela's main tasks were fetching water from the nearby well for the entire family. 'It used to take us around 2-3 hours everyday to fetch water for household needs apart from going long distance to answer nature's call' says Geeta. For years, no development programme was undertaken in the village which is primarily a fisherperson's village on the bank of Jagat Sagar tank. The tank, built during chandela dynasty<sup>1</sup>, supports livelihood of many fisherperson families around the tank through fishing. The fisherperson community undertakes agricultural on the banks of the tank when the water recedes. Fisherpersons communities are one of the lowest in caste hierarchy in India that reflects in its socio-economic status. Geeta informs that she could not have imagined that she would have a household connection for water and a toilet complex in her vicinity. 'Even people in the city can not assume getting water all day round .. do you think we could have ever thought of this in such a remote village where even a concrete road is not there' says Sheela. She was flabbergasted when Haritika approached the village and talked about having a 24X7 household connection for drinking water and a bathing cum latrine in the vicinity. For months, says Sheela, Haritika's officials were coming to the village but no one attended them. 'No one ever thought that they are actually going to help us in providing water at our doorsteps and so no one wanted to come forward to help them' she laments. With persistent persuasion, Haritika officials could influence the village leaders with their idea. Slowly they could make them start thinking on a water supply scheme wherein water comes to everyone's house. The idea itself galvanized womenfolk and as a result, a household water supply, bathing and sanitation complex in each of the 35 household became reality in September 2007. This report is the participatory assessment of the outcome of water, sanitation and hygiene promotion programme of Haritika.

This assessment is of the work done by the Haritika under the Rural Health and Environment Programme (RHEP) supported primarily by Methodist Relief & Development Fund, UK. RHEP is an integrated rural development intervention programme being implemented in backward and poor villages of Madhya Pradesh state in central India. The objective of RHEP is to improve the quality of life of the rural communities through intervention in water and sanitation programme.

## 2.0 Methodology of Participatory Evaluation

The evaluation was based on the Qualitative Information Appraisal (QIA) which is developed by International Water and Sanitation Center, The Netherlands.<sup>2</sup> QIA captures people's perceptions of processes and outcomes, using participatory methods, and translates this qualitative information into numbers using different methods especially ordinal scoring through a self contained three-step methodology. The components of QIA as undertaken in this evaluation includes [1] **Quantified Participatory Assessment (QPA)**, which uses participatory methods to generate people's perceptions and techniques such as indexes of change, cardinal measurement and ordinal scoring methods to convert this qualitative information into scores and reasons for scores and [2] **Stakeholder meetings (SHM)**, that uses the findings from the QPA to probe, along with key stakeholder groups, into the factors underlying the performance reflected in the scores, and to suggest corrective and progressive action for both, project management and project communities.

The QIS tools that were used in the present evaluation included participatory mapping of ground situation related to water supply and sanitation and then having a 100 per cent base line survey of households to assess change in behavioural patterns due to their access to water supply and sanitation. A mix of qualitative and quantitative survey, the assessment is based on the belief that the presence of infrastructure is necessary but not sufficient condition for people to use them unless hygiene behaviour is changed to suit the present infrastructural needs. It also assesses the effectiveness of

---

<sup>1</sup> These tanks were constructed by stopping the flow of water in rivulets flowing between hills by erecting massive earthen embankments, having width of 60m or more. These tanks served to satisfy the drinking water needs of villagers and cattle apart from supporting fisheries.

<sup>2</sup> For more information on QIS methodology please visit <http://www.irc.nl/page/37607>

information, education and communication tools used in the project and its impact on gender, age and class segregated data.

### 3.0 The assessment of change

The MRDF supported project was implemented in two villages Suda and Sahaniya out of which work



Geeta says that with access to water at her doorsteps, she can now bathe her daughter daily.. that she loves to bathe in running water...

was completed in Suda and it was partly completed in Sahaniya. The QIA methodology was used to for Suda village where a complete survey was undertaken on understanding three components of the project intervention – access to water supply, use of latrines and change in hygiene behaviour. In Sahaniya, group discussions were carried out to understand the process of project implementation but the complete QIA

methodology was not used since the project was not completed and benefits had not reached fully for the evaluator to completely assess them.

### 3.1 Assessment of Water, Sanitation and Hygiene status in Suda Village

Suda will probably be the first village in Chattarpur district where a 24X7 household piped water supply system has been planned with community contribution. Along with piped water supply, household toilet and bathing complexes are also provided to 34 fisherperson community in this small village. One family still has to comply with project criteria of participation and agree to contribute towards the cost of latrine and bathing complex. In operation from last 2 months, the piped water supply system has brought joys for village women, who said that now they are able to save up to 2- 4 hours and have more water to bathe, do household chores and also keep the children under hygienic condition. The project has utilized support from three sources – WaterAid, Gram Vikas and MRDF. While WaterAid's support has gone in for building sanitation complexes along with Gram Vikas, MRDF's support has been for household piped water supply. An assessment of community of Suda characterized by economic class revealed that around half of the village (49%) is poor as perceived by the villagers themselves while 37% are of intermediate class. 14% of households are perceived rich by the villagers themselves.<sup>3</sup>

### 3.2 water access and use

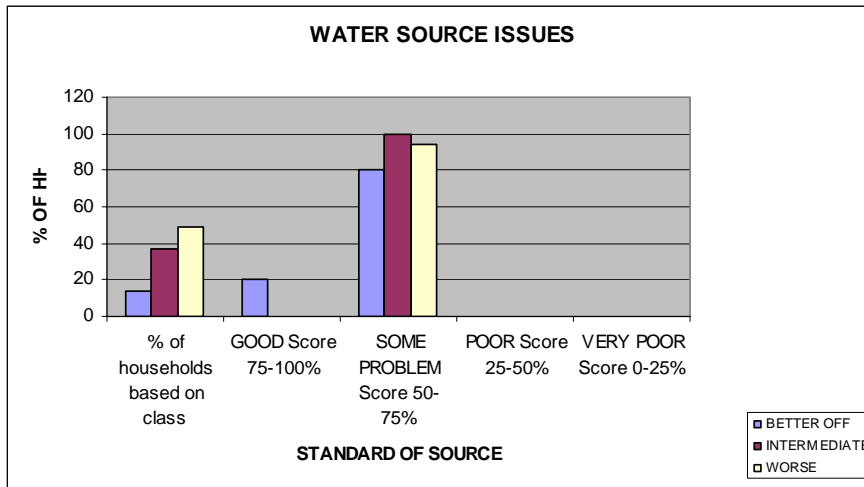
The 24X7 access to potable water and at the door step of households have brought in many changes in the lives of women and men folk of suda village. Apart from saving time for women and girl children from saving time for fetching water, it has brought in tremendous change in personal hygienic behavior which was not practiced earlier due to water scarcity. Says Geeta 'earlier, we were very shy in taking bath in public place and so personal hygiene was a problem. We also had problem during

<sup>3</sup> The economic class divisions are based on the perception of the community and the criteria identified in the gender segregated group discussions for classifying families. For criteria, see annexure 1.

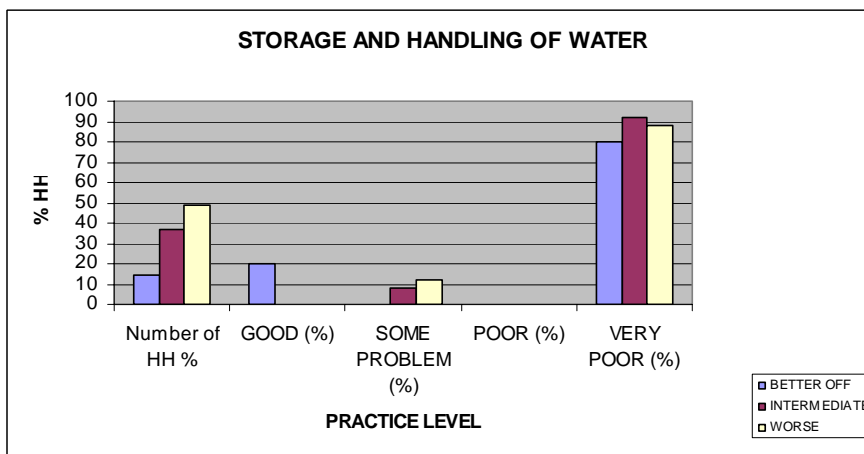
menstruation period when we needed more privacy’. ‘Our problem has been solved with water supply and access to bathroom which is now used extensively’ adds Bhumati Bai.

However, access to water supply is also determined safe practice around handling and usage of drinking water. The criteria of assessment for water access and use as used for evaluation were three - [1] water treatment and knowledge of safe source of water [2] collection and transportation and [3] safe storage and handling of water. For the **criteria one**, the majority of household fall in the scoring range of 50-75% while only some families who are from better off economic class falls in the scoring range of 75-100%. Here, the assumption is that the knowledge of treated water is the first step towards having the quality test done. The majority of families did not know whether the water quality testing was done for the source and if the source is safe (see chart 1). This means that Haritika should focus on getting the quality testing done and also let the community know about the quality of water. However, this is also understood that the project has just started and hence Haritika should take this up in the second phase of the project. **For criteria two**, of collection and transportation of water, all the families scored the maximum as the water supply is house to house and so there is no problem in collection and transportation of water. **For criteria three**, it was found that the households though water storage is taken cared by the womenfolk, the hygiene education did not focus on having an elevated platform for storage and use of ladle, minimal criteria for ensuring safe storage being adhered to (see chart 2 and picture 1).

**Chart 1: Scoring on knowledge of water source and quality characterized by economic class**



**Chart 2: Safe storage and handling of water**



**Picture 1: Water stored on ground: a comparatively ‘unsafe’ water storage practice**



One important aspect of having a community based water supply system is its cost effectiveness and the increase in water access both in qualitative and quantitative terms. The total water supply project cost came up to Rs. 3,29, 000 out of which the community contribution was 16,000 which is around 5% of the total project cost. The project is providing around 70 liters per capita per day (LPCD) water supply which is almost double than the minimum norms of 40 LPCD of the government of India for rural water supply.<sup>4</sup>

### 3.3 Challenges of sustaining 24X7 water supplies

The challenge as I could see in the village in sustaining 24X7 piped water supply schemes would be two – first to sustain the source of water (200 feet deep tubewell) as the area has been under drought for four consequent year and second – to see if the O&M cost is affordable and that the community is able to pay for the electricity charges. For conquering the first, water point assessment was done by Haritika prior to the installation. The system is located in the vicinity of a large tank and so water source is ensured (this may not be the case for other villages in the area). My interaction with the village community showed willingness to pay for a better service. As one of the fisherwomen puts it – “if we are used to having water any time we want, we can not shy away when we have to pay. If we do not pay, there would be no water and hence our situation would be the same what we had 2 months before”. So there is an incentive to pay if there is superior system of service delivery. In fact, the community has been charged Rs 1000 towards connection charges and the VWSC has deposited the money in the bank which would be used for maintenance. Apart from this, they are starting a monthly payment of Rs 50 per household to pay for the electricity charges.

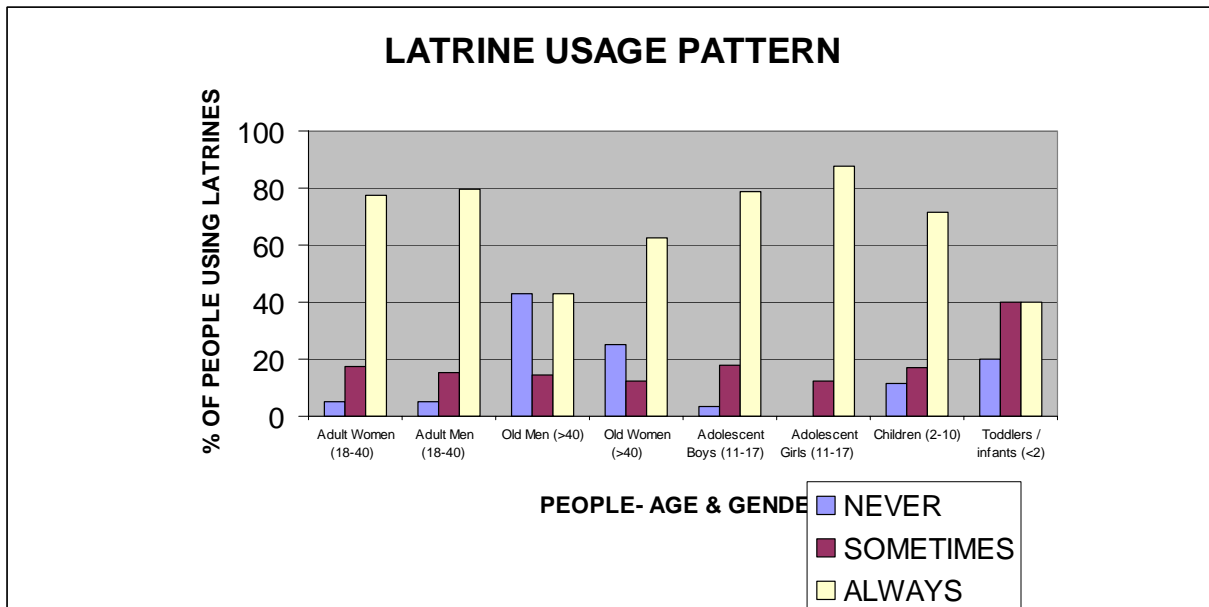
### 3.4 Access to household latrine and its use

Due to the efforts of Haritika, each household in Suda has got a latrine of its own. The quality of construction is technically sound and it looks that Haritika has used good quality materials. The latrine cost per household comes up to Rs 6000 out of which around 50% subsidy has been provided by Haritika in terms of materials and hardware support while the rest has been borne by the community.<sup>5</sup> The assessment of household latrine uses shows that it has been very high for adult men and women and also among adolescent girls. The critical groups are older men who need sensitization for use of latrines (see chart 3).

<sup>4</sup> The calculation of per capita access was done by dividing 15000 liters of water that is being supplied in Suda per day to all the 212 village population in 35 households. The population figures were arrived from 100% base line survey done as a part of this assessment.

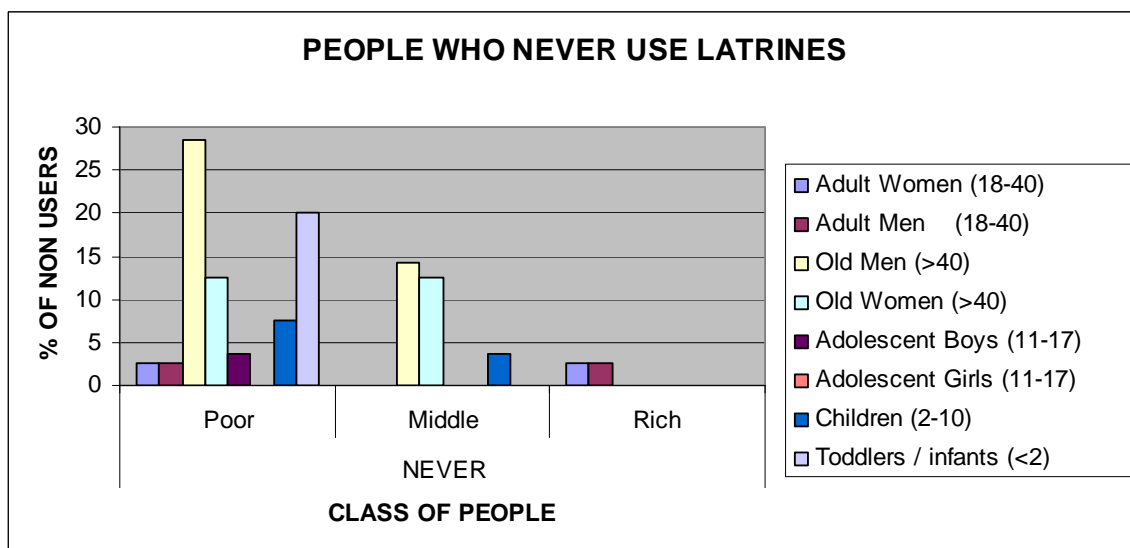
<sup>5</sup> The fund mobilization from three sources - MRDF, Gram Vikas and WaterAid has been Rs 885, 2500 and Rs 500 respectively for the each household.

Chart 3: Pattern of latrine use in Suda classified by age and gender, Suda, 2007



An overall analysis shows that 75% of the population always uses latrines which is a significant achievement of the project while around 8% people never use latrines. Class based categorization shows that 11% of poor, 5% of middle class and 7% of rich never use latrines. Infant's faeces disposal needs attention and hygiene promotion should focus on families with infants as a very high number of toddlers are defecating in open. Usage pattern among older people both men and women (above 40) is poor, and this may be due to physical disabilities in using a squat latrine. The target communities are older men and women from poor and middle class for latrine usage where Hartika's energy should focus (see chart 4). Where there is a need, western closets can be promoted, which may be convenient. 25% of the poor use the latrine only occasionally. These families work as daily labourer for which they are out in the field and hence they defecate in open instead of using the household latrine. 10% of the middle and 7% of the rich fall under similar category of occasional users. In 17 families all members use the latrine and only one family none of members use latrine (because they still have to get a latrine of their own). This family has to be targeted for having a household latrine so that Suda becomes a totally open defecation free village.

Chart 4: Identification of people who never use latrine, Suda, 2007



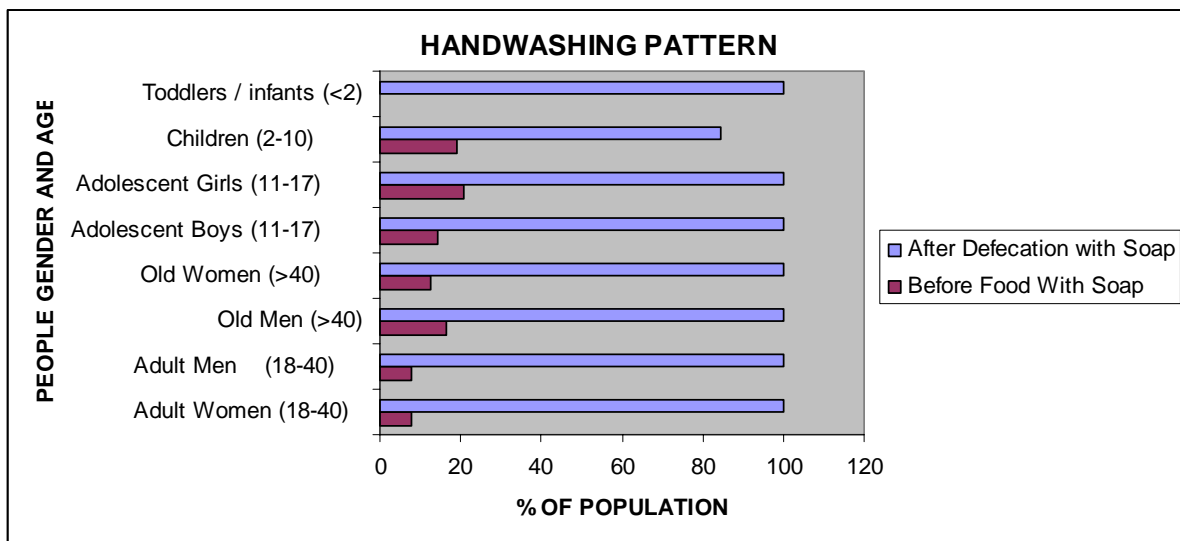
Picture 2: A woman proudly standing outside her newly constructed latrine, Suda, 2007



**3.5 Hand-washing during critical times**

Hand-washing after using a latrine is as high as 96% except for children under 10. Among other gender and age group it is 100% which is commendable. Surprisingly hand-washing before having meal is very low and borders to only 14%. The hygiene promotion activities, therefore, will have to focus on the importance of washing hands before food – and target the young children for behavioural change.

Chart 5: Hand-washing pattern classified by age and gender, Suda, 2007



**3.6 Institution building for sustainability**

Building capacity of community institutions go a long way in sustaining the public infrastructure such as water supply. The assessment of the village water and sanitation committee showed a greater commitment of the members in carrying out the activities. This was possible with the commitment of

the staff of Haritika in carrying out project activities which is more than mere project implementation. However, structured training programmes are needed on the finer aspects of O&M of the water system and pipe infrastructure. Transparency, one of the important aspects of institution building has been taken up in the village. All the expenditures of the programme have been painted on the walls of the village which is an example of transparency measures undertaken as a part of the project. These types of measures should be continued in all the villages that will be undertaken for implementation in future.

Picture 3: Expenditure of village WATSAN committee pasted on village wall

क्र.	कार्य विवरण	मात्रा	इकाई	दर	लागत
1.	सम्बरसिबल पम्प स्टार्ट एवं केबिल सहित	1	संख्या	19500	19500
2.	विजली कनेक्शन	1	संख्या	20500	20500
3.	ओवर हेड टैंक का निर्माण (30,000 लीटर)	1	संख्या	168000	168000
4.	जी.आई पाइप का निर्माण (राइजिंग मेन)	24.40	मीटर	310	7564
5.	पाइप लाइन की सुदाई हेतु	13.35	मीटर	25	33375
6.	वितरण प्रणाली	---	---	---	---
	• 63 mm पाइप CHDPE	100	मीटर	108.17	10817
	• 63 mm पाइप (PVC)	100	"	86.86	86.86
	• 50 mm dia पाइप (PVC)	635	"	38	24130
	• 15 m.m पाइप (PVC)	500	"	16.34	8170
	• एक्सेसरीज GI वाल्व सार्कट	---	---	---	28258
	• सामुदायिक योगदान	---	---	---	16000
परियोजना की कुल लागत				→	3,29,000/-

### 3.7 Source sustainability

As discussed in earlier section, one of the limitations of the 24X7 piped water schemes is its dependability on the groundwater source. Suda is a stand alone case as it is located on the bank of a large reservoir but this may not be the case elsewhere. In neighboring Sahaniya village, it may be difficult for Haritika to do a similar work in creating year round water supply. This means that the project support for drinking water should look into larger resource management issues and in integration with use of other resources. Integrated water resource management principles should be applied if drinking water sources would have to be sustained. This would also mean reviving for community water infrastructures and water harvesting methods which already exist in the surrounding areas.

Bundelkhand has a rich tradition of constructing tanks in a highly skilled way. Unfortunately, many of these have been badly depleted or damaged due to encroachment and lack of maintenance. Many dam projects in recent decades have proved to be a failure. So there is an urgent need for the proper maintenance and repair (including clearing encroachments) of all existing tanks which can still be salvaged. This should be done with the involvement of the local people as a people's movement. Similarly, new sites should be selected for the construction of new tanks wherever possible. The

maintenance of tanks used to be a part of the culture of these villages. An attempt to revive this should be made.

### 3.8 Women's Participation

One of the striking features of the programme is the participation of women. One would have believed that in feudal Bundelkhand, women's participation will be barred by male domination but to the evaluator's surprise, women's active participation is one of the milestones of this project and it is recommended that this force should be harnessed in a positive manner and for the progress of the society. The workers of Haritika have been organizing women through self help groups but the potential of women in the area is much more and hence special programme focusing women should be one of the recommendation of this evaluation.

**Picture 4: Women's group discussing economic criteria and access to water and sanitation**



### 3.9: The ripple effect: triggering change

The community organization of the village is slowly triggering change whose ripple can be seen through little changes in the villages. Suda has long been part of larger Panchayat politics wherein the Sarpanch of Sahaniya Panchayat did not get any vote from Suda. Apart issues related caste and class, the politics of voting has to be blamed for this as none of the welfare activities of the government was directed to Suda in recent past. The fishing rights of the community were also given to other fisherperson communities last year that barred people's access to livelihood. There was no school in the village and children have to walk kilometers to attend even primary school. Due to this, none of the kids in the village knew reading and writing and hence were illiterate. With the momentum triggered from organising people on water and sanitation programme, people demanded a primary school. Haritika's volunteers helped them in meeting the authority and demanding the same. The result was a village school built by people themselves and a government appointed teacher.

**Picture 5: Village primary school in Suda made of tarpaulin and by the community themselves**



The 24X7 water supply has triggered another change in terms of homestead farming. The household water is diverted for growing seasonal vegetables in homestead that has increased the protein intake of the families. At the moment, this has been practiced among few families but this can be taken up in the next phase of the support so that its institutionalized through supporting saplings of the vegetables.

**Picture 6: Homestead farming as an after effect of household water supply**



Pumpkin climbers that is grown in the homestead now. The climber is grown from the wastewater and is sustaining supply of household nutrition

### 3.10: Management capabilities of Haritika

Haritika was started in 1994 as an organization to work with people in the backward Bundelkhand region of Madhya Pradesh and Uttar Pradesh in India. Haritika focuses on pro-poor initiatives through enhancement of environmental and agri-based livelihood systems. Haritika has worked for more than 15 years and been part of number of government sponsored development initiatives for water supply, sanitation and poverty alleviation programs. With 25 full time staff (see annexure III) having professional background such as agriculture, engineering and social sciences, Haritika is equipped to achieve the project goals. However, the limitation of its staff profile is in terms of professional management team and balance in gender in staff profile. Haritika should invest in staff's capacity building programme through trainings and exposure visits more than its present level. It is understandable that getting a good quality professional to work in interior villages is not an easy task and Haritika's efforts are notable in this regard. However, change in staff policies, good pay packages etc may be able to attract young professionals to give time at the starting of their career. Haritika can also take help from other agencies who are supporting similar efforts for civil society strengthening. The second aspect of management is to create a professional second line leadership which may be there but not be eloquent. A plan of action for this would help Haritika towards professional management of a growing organization. Apart from this, the pro-poor and pro-gender approach of Haritika should be transferred from top officials to the staff down in hierarchy and the agenda and actionable points should be much clearer. What is commendable is the transparency of the management for project implementation and having tremendous rapport with the villagers which is its strength.

### Concluding Remarks

This report is based on the assessment of MRDF's support to Haritika for the project called 'Rural Health and Environmental Programme for a period of one year in 2007. The support was given for working on different components of water, sanitation and hygiene education in three villages of which work has been fully completed in one village while it is undergoing in the other two villages. The present evaluation focuses of programme strategy of Haritika in implementing RHEP programme in Suda village and discussion with stakeholders in Sahaniya village where project objectives are in its mid way of completion.

The major impact of the programmes is:

1. 24X7 household water supply, good quality sanitation complexes with facility of bathing in all the households has led to tremendous positive impact on the lives of the people
2. Active participation of women and men in the programme has been very positive and contributed to the initial success
3. Transparency mechanisms for financial allocations of the project needs to be appreciated
4. Institutional measures for sustainability have been in place but needs strengthening
5. Understanding of Haritika in providing higher quality and level of services to the poor against a substandard technology or services

Some of the challenges of the project include:

1. Source sustainability measures for protecting drinking water sources and continuous supply especially in the context of persistent drought in the region, integrated water resource management (IWRM) measures to be undertaken as water supply has to be seen in the wider context of water resource management in the area
2. Institutional strengthening for sustaining the operation and maintenance (O&M) costs. Families have shown interest in contributing towards O&M costs but the process is yet to be initiated and seen how sustainable it is in maintaining the system

3. Water quality testing of the water source, community education on quality and community monitoring of water quality including chlorination needs attention.
4. A special attention is needed for hygiene education as some of the groups have not been using latrines apart from low understanding on water storage and handling.



#### Annexure I: Criteria of economic poverty

Economic Class	Women's perception	Men's Perception
Rich	Having pucca house, land, money in the bank account, more than 2 cattle, machine to grind wheat, good cloths to wear, diversified source of income, having motor cycle, color TV and only 2 children	Who are able to save money, has insurance, having land more than 10 acres, having a motorcycle and TV and the one who has mobile
Middle class	Who has mix of kutchha\pucca house, has a two wheeler, having land more than 2 acres, have TV and who has 3 children	Having land more than 5 acres, whose income and expenditure are same (no surplus generated), who has one pair of oxen, has enough food to feed the family year round
Poor	Living in kutchha house, who doesn't have money in the bank, works as manual labour, who migrates outside village and whose cloths\house is dirty, not enough resources to have year round food security, who has more children and who can not afford to send children to school	Who has land less than 2 acres, lives in kutchha houses, income is less while expenditure is more, who does manual labour and who is irresponsible towards life

#### Annexure II: Travel Itinerary of Anjal Prakash:

October 4, 2007: Reached Khajuraho in the afternoon, had initial discussions in Suda village and visited houses. In the evening, I had a staff meeting at Haritika's office in Nowgong detailing the purpose of my visit and the methodology of evaluation.

October 5, 2007: Gender segregated PRA exercises were undertaken in Suda village followed by visit to all the households for understanding status of water, sanitation and hygiene situation. A 100 per cent baseline survey was done along with the staff of Haritika. The assessment of Suda was followed by interaction with people at Sahaniya village. Since the work in the village had not been completed, a complete survey similar to that of Suda was not done.

October 6, 2007: Consolidation of Data and departure for Delhi in the afternoon.

#### Annexure III: Staff Profile of Haritika

S.N.	Name of the Staff	Qualification	Specialization	Years of Experience
1.	Avani Mohan Singh	MSc,MDP(IRMA),TEE	NRM	13
2.	Dr.Neelam Singh	MSc,Bed,PhD	NRM	13
3.	Sandeep Chaube	BE,Civil	Civil Engineering	8
4.	Raj Bahadur Singh	MSc(Ag)	Agriculture	13
5.	Nirendra Yadav	MSc(Ag)	Agriculture	3
6.	Ravindra Singh	BSc	NRM	8
7.	Nand Kishore Singh	Dip.Civil	Civil Engineering	8
8.	Ashok singh	Dip.Civil	Civil Engineering	14
9.	Raheesh singh Yadav	MA,LLB	Community Organisation	8

10.	RamGopal	BA	Community Organisation	12
11.	Vinit Diwedi	MCom	Accounts	6
12.	Shailndra Singh	MSc,PGDCA	Computer Science	4
13.	Deep Singh	BA	Community Organiser	6
14.	Ekta Khare	MA	Community Organiser	6
15.	Sunita Khare	BA	Community Organiser	6
16.	Brijendra singh	ICWA,LLB	Finance	8
17.	Virendra Singh	BA	Community Organisation	8
18.	Anil Nigam	BA	Community Organisation	3
19.	Mahendra Singh	BSc	NRM	6
20.	Suresh Pateria	BA	Community Organisation	11
21.	HarishChand	BA	Community Organisation	6
22.	Heera Lal	12 <sup>th</sup>	Community Organisation	6
23.	Samir Singh	MA	Community Organisation	2
24.	Praveen Kumar	MSc(Ag)	Agriculture	9
25.	Nirpat Singh	BA	Community Organisation	1

