

## SILO OF CASE STUDIES

### 1. Youth and Sustainable Water Management – Bal Panchayat

Women & girls traditionally being responsible for domestic work are the worst affected of the lot in wake of water scarcity and drought. They have to walk for miles and toil for drawing water from the drying hand pumps and wells in addition to all the household chores and the economically productive work like livestock rearing and working in the fields. Young children, primarily girls also assist their mothers in water collection and other household chores. This has proved to be a



major hurdle in the growth and development of children from the perspective of not only play time but also education. There are instances where children have been dismissed for being irregular, as a result of long hours spent in fetching water. This leads to high dropout rate from schools.

Bal Panchayat has evolved as an innovative concept to empower these children and facilitate decision making in the villages. This group of empowered children can be a real change maker to fulfil the mission of Eco-Development of our villages. This programme incorporates an integrated approach for overall improvement of the village through community mobilization, and brings children (the future citizens) who serve as the catalysts for change. Starting from individual households to communities, villages and towns, they make their anxieties and concerns translate into action.

A successful example of this initiative has been in village Hastinapur, a village in UP part of Bundelkhand has led the way by becoming a first village in forming a Bal



Panchayat. The aim of this bal panchayat is to make a group of children who are informed and empower enough to take actions for betterment of the village. *"Mein apne gaun ko nirmal gram banana chahta hun"* says Mithun, vice president of this Bal panchayat. As part of those first few activities, these young panchayat members started assessing water quality of their village and started communicating the villagers about the importance of quality water. But now they have got number activities to do, they go to people talk to them about sanitation, hygiene, health and teach them about small day to day sanitation practices.

Arti is a student of class VI and a also a member of Bal Panchayat of her school. Her duties include making people understand the importance of safe drinking water and basic hygiene practices. She tells her fellow students about the water borne diseases. She also instructs students to use Jal TARA water quality testing kit of DA.

“I got training at my school to use the water testing kit and our teachers told us why we should drink only clean and safe water,” said Arti.

Arti philosophises, “People should respect water resources. *Jal hi Jivan hain*. No one can survive without water.”

## 2. Water Supply Scheme belongs to everyone!

She is fondly called by her fellow villagers Amma in Hastinapur village. Amma is around 60 years old. She said, “I still feel the pain of carrying 3 to 4 liters of water everyday. I belong to backward caste. We were not allowed to fetch water from the sources used by the upper caste people.” The upper caste people conveniently gave the lower caste villagers a well that was located in an agricultural field far away from the village. She used to walk 1.5 kilometers everyday in one trip. Because of the heavy water pot she used to carry, she got the terrible back pain that she mentioned in the interview.



***Relieved Amma, Who can now rest her back***

When the water supply programme came to the village, she was relieved of the pain a little bit. It meant that she no longer had to traverse huge distances to fetch water. “Now upper caste people cannot look down upon us because we also pay the same charges for the water. As we pay the same charges, we also have the right to fetch water from these stand posts,” said Amma.

Now, building a toilet in her house tops her priority list. Amma has a daughter in law now, and she needs a toilet. She says, “Our time has gone. It is now my prestige issue.”

## 3. Collective Efforts by Enterprising Women



*Sharda Devi, President Samagra Jal Vikash Samiti*

**“Change is not something that happens automatically. Our collective effort is what acts as a catalyst in the process of change”** said Sharda Devi, President of Samagra Jal Vikash Samiti of Pipra Village. Earlier, women of this village had to walk 2 to 3 kilometers to collect water. Women spent most of their time in collecting water. Young girls and children were also affected. They could not attend school because their family would have had to go without water had the children not fetched it. People used to fight over who would fetch water first from the wells.

Now the village has two hand pumps and 19 stand posts because of DA-Arghayam intervention. We are very happy that now they do not have to walk miles after miles to fetch water. For the location of the water sources, choices and preferences of villagers were taken into consideration. But still women in the villages spent most of their time in collecting water. “I make 4 to 5 trips a day to the hand pump and to the stand post. Since last two months there is no electricity so we could not avail the advantage of pipe water supply”, says Ms. Devi. Villagers do not have enough money to pay their dues. Operation and maintenance cost of the water supply scheme is provided by the Gram Panchayat.

She said, “In our Samagra Jal Vikash Samiti we have 9 women members. Now all the women of this village want to tackle the problem of water logging and waste water disposal. We know so many water borne diseases are because of the water accumulation and also vector borne diseases.”

They do not have any one who is trained to repair the hand pumps. If there is some technical fault, the villagers have to wait for the mechanic at least for 2 to 3 days.

DA and Arghayam have briefed about safe drinking water practices in the village. It was a great help for women of Pipra. “Now I want every household of the village to have toilets. I can understand how difficult it is for women to go out for defecation. I have two daughters, they motivate me to build toilet at our home. Now we do not have to go out for defecation,” says Ms. Devi.

Sharda is a woman of substance who has encouraged leadership among women in her village. She has been able to give space and voice to other women.

#### **4. Ensuring the Commitment of Women**

Prema Ahirwar is the secretary of Ravi Das Shayam Sahayata Samuh of Pipra village. She and her group members fought for their water rights in their village. Earlier, they had to walk at least a kilometer to collect water and per day they used to make 4 to 5 trips. It was a tough time. “Men do not understand our problems, water collections and providing water to the families is completely our job. They never understand how difficult it is to carry 5-6 liters of water on our shoulders and heads. We still feel the pain of it,” said Ms. Ahirwar.



When Arghyam and DA came to help them, many people of the village opposed it. Convincing them took a lot of efforts. Women came together for their own rights. Women understand the problems associated with the scarcity of water. Availability of water cannot solve the problem alone. After getting the facility of water sources now different kind of problem started. Now the village is facing power shortage. Without power they cannot solve the problem of water supply. "Our next target is to get proper and regular electricity supply," Ms. Ahirwar said.

"Today is the 15<sup>th</sup> day the hand pump nearest to my house is not working. We made complaints about the problem but gram panchayat is not taking any action. There is no mechanic in our village who can solve this kind of a problem. We have to wait for mechanic to come. We need training programmes for minor repairing works, so that we do not have to wait for mechanics," said Ms. Prema..

Women have to come forward other wise this problem will never solve. The water problem in the village could be solved only after the women came forward. Hence, it is time the women again take up the cudgels and commit themselves in right earnest to the solution of the problem.

## **5. Water Enterprise- a service delivery approach**

In Bundelkhand region 80 per cent of the drinking water needs of the households (including livestock) are met by ground water sources. These sources are often found to be contaminated with bacteria, turbidity, nitrates and iron leading to adverse impact on health with frequent recurrence of diarrhea and dysentery among children and adults. Water quality surveys conducted by Development Alternatives in the rural areas of the region had indicated that 65-70% of the samples collected were contaminated with pathogenic bacteria and nitrate that makes it unsafe and hence unfit for drinking water purposes.

The responsibility of ensuring safe drinking water to the people lies with the government. However, due to improper maintenance and lack of ownership by the community over the water resources most drinking water facilities become non functional especially during periods of water stress.

Water Enterprise is a micro enterprise that has the capacity to deliver clean drinking water at an affordable price to the households. The enterprise can be owned and managed either by an individual entrepreneur or by a group that is willing to conduct it as a livelihood generation activity. The aim is thus to develop a self supporting water delivery mechanisms that have the capacity to provide quality water, managed as commercially viable units, using reliable technology, and have the scale to be sustainable as a livelihood option.

The Enterprise Package involves a package comprising of purification technology; undertaking investments in creation of infrastructure, namely, the water source and installation of purification technology; development of a revenue generation model and management of enterprise; and ensuring profitability as a business unit.

Jairam, a young farmer from village Kachipura came forward to supply safe water in an enterprise mode. Kachipura village is located in Binwara Gram Panchayat of Niwari block in Tikamgarh district which has around 53 households with a total population of 298 persons.

The village is dependent on dug wells as the common source of drinking water. During drought, and periods of water stress, most of these sources were dried and households have to walk long distances to their fields for collecting water for domestic purposes. However these sources were contaminated with villagers reporting blackening of teeth and frequent occurrence of diarrhea in the village.

Jairam decided to install a water purification system at his dug well and provide safe drinking water to all the households at a small cost. Jairam also expressed that he is willing to invest money for sinking a bore well and a motor for pumping water. An understanding was reached between Jairam and DA on following terms:

- (a) Development Alternative would provide purification technology worth Rs 30,000. This technology would include Jal Tara Water a Purification System based on Bio-Sand Filtration Technology.
- (b) Land, power connection, civic construction worth Rs 25,000 will be borne by the entrepreneur, that is, Jairam
- (c) Installation of a bore well worth Rs 15,000 and motor worth Rs 33,000 will be borne by Jairam,
- (d) Jairam will sell and generate revenue from providing safe drinking water to the villagers. The business unit will be wholly managed by the entrepreneur.
- (e) Development Alternative will undertake regular testing of water and provide report to the entrepreneur.

Jal TARA Filter was installed at Jairam's house in October 2007. the pricing of water was decided to be Rs 20 per household per month. In terms of pricing each of the user households will be able to get safe drinking water at the rate of 0.66 paisa per liter.



The enterprise has proved to be lucrative for Jairam, with villagers from nearby villages like Asathi and Binwapara also buying water from him. People come with their Jerry Can from the neighbouring village and take filtered water that is primarily used for drinking water purposes only.

#### **Challenges:**

Though the income projections of providing safe drinking water at the rate of Rs 0.66 liter were lucrative for the entrepreneurs, but the ability of the entrepreneur to carry on revenue generation on a sustained basis was the major challenge.

There was fall in income for the entrepreneur when some of the households from the village migrated. However, this fall was more than complemented by the increase in area of his business (from near by villages). However, given the fact that the household was able to earn sufficient levels of income from agriculture its dependence on income from water enterprise was to a much lesser degree hence he did not give enough priority to make income from selling water a regular revenue generation activity.

This pilot was a vivid example to prove that there is demand for safe and clean drinking water from the community. The community is willing and has the ability to pay for safe drinking water. There is immense potential to develop a revenue generating model based on provision of safe and clean drinking water to the households.



## 6. SAMAGRA JAL VIKAS SAMITI, RAJPURA

Samagra Jal Vikas Samiti (SJVS) has been conceived as a community based organization to develop institutional mechanisms for:

- implementing works identified during the Micro Planning exercise at the village level;
- develop management systems including methods of water distribution, revenues collection and conflict resolution;
- undertake operations and maintenance of community works installed by the project;
- provide institutional and financial sustainability to the investments made by the project so that benefits are available to all the households in the village;
- emerge as a representative body of the community on issues related to water and sanitation at the village level as well as to connect and coordinate with Gram Panchayat and Government Agencies at the village level.



The process of formation of SJVS started towards the end of the PRA exercise for data collection and as it moved towards identification of core issues and problems and exploring alternatives for improving the access and availability of water for all and always in the project villages.

Rajpura is situated at a distance of 50 kms from the Niwari block headquarter in Tikamgarh district of MP. This village has evolved as a landmark in establishing institutional systems for effective project implementation.

The village has a population of 1162 persons primarily belonging to households from OBC and scheduled castes. The main occupation of households is agriculture and rest work as wage labourers or in trade business.

About 35% of the households meet their water requirement from 2 hand pumps and 25% households from the community open well. There were 39% families that were their irrigations wells for drinking and domestic purpose. The PRA exercise revealed



that 90% of the water needs are met by women in the village. It was also estimated that one woman carries 30-40 liter of water in 2-3 pots at a time.

With the commencement of the project, various rounds of discussion were held to identify core problem areas and possible solutions. The community agreed on providing piped water supply with household connections as the main supply network to ensure for water for all in the village. The discussions also looked at setting up institutional mechanisms for operation and maintenance of drinking water supply system. The first formal meeting for the formation of SJVS in the village was held on 23 January 2007. This meeting discussed the need for SJVS and its area of operation and responsibility under the project. The meeting also identified the type and characteristics of members of SJVS that will be nominated and selected in such a way that all caste groups are represented in the committee. At present the SJVS has 11 members of which 3 are women and 8 men. The Secretary of the Samiti is a person nominated by the project Team.

Since its formation SJVS at Rajpura has undertaken the following activities:

**(a) Conducting Meetings:**

SJVS regularly meets to discuss the work undertaken, resolve conflicts and future planning. Till date 41 meetings have been conducted, indicating the intensity of consultation among members as well as faith of the project in involving the community and its representative groups during different phases of implementation. The Samiti maintains a bank account with Canara Bank which is operated jointly by its President, Treasurer and the Secretary.

**(b) Leadership in Provisioning of Water:** SJVS at Rajpura has emerged as the community organization that has taken leadership in establishing coordination for securing water for all the households in the village. This has been best exemplified in the digging of bore wells under the project in the village. After two failed attempts, the SJVS was able to develop a water source that was able to supply water for the village. This source was on a private land, however, SJVS was successful in getting an agreement with owner for installing a bore on their private land and did not bow down to pressure tactics of previous private land owner of giving them money/appointment. It has been a complete sense of ownership that led the SJVS to explore alternatives and seek success in installing bore well with sufficient water for all the households in the village.

**(c) Ensuring Community Contribution:** There have been three instances where community contribution was ensured for continued water supply to the households in the village: *one*, for installation of the water bore; *second*, for laying down the pipeline in the village; and *third*, collection of water charges per month. The former two are in the nature of one time payments where as the third is in the nature of regular monthly payment.

The cost of installation of water bore and laying of pipeline was equally allocated amongst all households of the village. The households were however given the option of contributing either by way of cash or labour. The monthly payments were decided to be Rs 20 per household per month to take care of the honorarium of the operator, minor repair of the tap stand/pipe line, and to pay for the electricity charges. These payments are collected by one point person for each of the tap stands in the village. In case of defaulters the matter is brought to the notice of the office bearers of the Committee who visit the defaulting household and pressurize them to make payments regularly.

In addition to the above mentioned contributions, the SJVS has also ensured beneficiary contributions in case of construction of toilets and other expenses for construction of soak pit and roof water harvesting in the village.

**(d) Revenue Collection:** A system for collection of water charges from each household in the village has been developed by SJVS. A separate receipt Book has been printed for each tap stand. One person has been nominated by the SJVS to collect water charges by the 10<sup>th</sup> of every month and deposit the amount to the SJVS Treasurer. The amount so collected is deposited in the bank account of the Samiti.

**(e) Leveraging Resources:** SJVS has been instrumental leveraging funds for village development under various government schemes from Gram Panchayat and other line departments.

The SJVS at Rajpura has generated funds upto Rs 16.32 lakhs from the Gram Panchayat for the benefit of the community. These funds are majorly directed for water harvesting (wells, ponds, and farm pond) structures and sanitation (drainage, and toilets) activities.

**(f) Conflict Resolution:** In the initial period of water supply through the piped water supply, instances of conflict at the tap stand were reported to the SJVS at Rajpura. These conflicts were mostly related to who will take water first from the tap stand. Once the families at the tap stand were not able to resolve the conflicts on their own SJVS resolved that one family will take water in two utensils at a time and then will allow the person next in line to take water. Once all the families at the tap stand have taken water then the family that was first in line can take water again but in no case in not more than two utensils at a time.

Another conflict is related to non payment of water charges. In such cases the SJVS as a group approaches the defaulter and pressurizes him to make the payment. According to SJVS this tactics has ensured payment from all the households in the village.

**(g) Water Testing:** Gajraj has been nominated by the SJVS in the village to collect water samples from all the taps and in all seasons and test the samples according to the training provided to him. The test report is sent to Taragram and also discussed during the SJVS meetings.

**(g) O & M:** SJVS Rajpura has been provided with a tool kit for undertaking repair and maintenance of the piped network and the tap stand. Training has also been provided to the members in undertaking repairs. Cost of repair in terms of replacement of equipment or part thereof is borne by the Samiti from the monthly revenue collection from users.

**(f) Water Metering:** Community level water meters have been installed at the main supply as well as the individual tap stands at Rajpura. The reading at each of these meters is taken once a month so as to assess the total supply at the water source, that is, at the pump house and also at the tap stand.

As an institution SJVS has been able to establish its identity in the community as a Community Based institution to work on issues related to water and sanitation. This institution shows way forward for other community institutions for operation and management of physical assets, in a participatory mode.