

Tour report of K Mazumdar, Deputy Adviser, Department of Drinking Water Supply regarding visit to Hamirpur village, Datia District

Background

Secretary (DWS) in her note desired to get a first hand report on the newspaper article on rainwater harvesting in Hindustan Times dated June 30, 2008. In this regard, the undersigned visited Hamirpur village in Datia District (Madhya Pradesh) on 9 July 2008. The following report is, based on field visit, interaction and feed back received from VWSC members, Panchayat Pradhan of Hamirpur, local NGO and other social leaders.

The Village Hamirpur falls under block Datia of Datia district and is located 5 Km away from district head quarter. Population of the village is 641, has 75 households, in which 44.5% are schedule cast, 11.2% schedule tribes and rest belongs to other backward classes. The area falls under Bundelkhand region and faces acute shortage of water due to erratic rainfall pattern. Overall rainfall has gone down, from 100 days (740 mm average) two decades ago to an average rainfall (340 mm) of 40 days today. The erratic rainfall has led to drought like situation in the area. Ancient redundant palace of Raja Hamir Singh, the village have known by their name; before the construction of IHHL, was used as a safe open defecation place by villagers especially women and old men, while youth and adolescents were going to nearby nalha.

Local Initiative

Parhit Samaj Sevi Sanstha (henceforth referred as Parhit) a local NGO started the water and sanitation project work in Hamirpur village during January 2004, motivated by the slogan of Mahatma Gandhi, "sanitation is more important than independence". Parhit got the support from Water Aid India for their intervention of provision of safe drinking water and sanitation in Bundelkhand Region. In the beginning of the project the village had only one Individual Household Toilet (was not in use) and drinking water supply system was based on hand pumps located outside the village, which yields very little water during the summer. Therefore, women had to walk two to three kilometers wasting considerable time to fetch their daily water requirement.

Process adopted

The initial objective of Parhit was to provide toilets in every household along with hygiene promotion at the household level. In their first endeavor, Parhit started to form community organization and building up their capacity in the area of sanitation intervention and in which 'Youth Group' and previously formed VWSC were, given major emphasis. The VWSC, previously known as Pay Jal

Samiti was, constituted for taking up water supply scheme for the village under Swajaldhara (GoI programme). VWSC had collected Rs. 40,000 in their bank account as part of their 10% community contribution. The Swajaldhara scheme never saw its day light pending approval by the State Government (not forwarded to Government of India for approval).

After, completion of the capacity building and orientation activities by Parhit, action plan for sanitation was prepared adopting participatory approach. In spite, of the best effort made by VWSC and Parhit volunteers, the initial took off time was considerable, and only 13 IHHL were, constructed in the whole village at the end of first two years i.e. 2004-2006, against the target of 75 IHHL for making the village Hamirpur open defecation free.

The original VWSC members nominated by the Panchayat Pradhan were, found not very effective, and had low credibility among the villagers. Parhit organized an open meeting involving all households, Youth Group, PRI members, and social leaders. This resulted in reconstitution of the VWSC by incorporating active members from women groups and youth groups.



Village level meeting

After a detailed deliberation it was, found that non- availability of water for drinking was the biggest barrier in the way of progress of sanitation coverage. Demand for water supply scheme was on top of their priority list and IHHL was the least priority item.

It was, realized that unless there is an organized water supply system in the village, attaining full sanitation coverage might not be attainable.

Action initiated.

Two existing hand pumps (low yield) installed by the PHED were located about 500-700 meter away from habitation, and villagers had to stand in a queue to collect water. VWSC collected Rs 5000 from the community and with the financial support of Water Aid through Parhit a new hand pump was, installed, which not only reduced the time of collection of water but also developed ownership of the hand pump by the community. Women took lead roll and influenced the decision of VWSC and Gram Saba especially for site selection of hand pumps and for collection of household contribution for the repair. They also assist in minor repair of the system for, which they have been trained.



VWSC constructed new hand pump Display Board of work under taken IHHT with offset pit

Consequently, the credibility of newly elected VWSC members and volunteers of Parhit increased and people were keener to listen to the advice of VWSC members. This was, followed by a second meeting, which started at 7 pm and lasted until midnight. The major decision that followed from the meeting was to revive the Swajaldhara project with the financial support from Water Aid and start constructing IHHL with financial support of Rs 500 per household from Water Aid. All the endeavor of the villages in terms of deputation, protest march and rally to the District Collector and PHED to revive the Swajaldhara project and construction of IHHL under TSC through the Government Departments hardly resulted any benefit to the community. Under TSC programme out off 17 BPL families in the village, only six numbers of IHHL were constructed.

New concept

The most unique features of the project was that the villagers after series of meeting and their effort to improve the water availability realized that, they need to adopt Integrated Water Resource Management for improving the water level of the village and for successful implementation of water supply scheme in near future. For recharging and conservation of rainwater, a plan was, made to construct rainwater-harvesting structures in all houses; well deepening and recharging trench on abandoned community open well and tube well and construction of checks dams.



Recharging of defunct hand pump

Recharging of defunct dug well

The other unique feature of the decisions taken by VWSC was that, they had identified a particular place outside the village from where soil for construction of houses and roads are to be dugout and taken away. The objective was to create a huge pond for recharging the existing hand pumps as well as recharge the ground water aquifer. VWSC members regularly monitored the excavation of soil to ensure proper deepening of the pond.

The initiative of the VWSC inspired the Executive Engineer, Public Health Engineering Department, and the Department constructed a dyke cum boulder dam in the village for the same purpose. The PHE Department has also constructed check dams across the nalas in other villages' viz., Sinawal that has resulted in recharging of the large numbers of hands pumps installed in the upstream of the check dam. As a matter of policy the Engineer-In -Chief, PHED, Government of Madhya Pradesh has issued circular to all the Division to take up water recharging structures wherever it is feasible and to shift from ground water based schemes to surface based schemes.

The VWSC of Hamirpur also initiated construction of roof top rainwater-harvesting structure comprising plastic drain -pipes from roof inserted into pit comprising sand and gravels in all the 75 households, school and anganwadi in the village. Parhit gave Rs 500 to each household and the balance amount of Rs 1000 to 1200 was, provided by the beneficiaries. Picture of the same is, shown below.



Check-dam constructed by PHED

IHH water recharging structures

VWSC constructed new bolder dyke

Revival of Swajaldhara project

Yield test of the existing bore well in the school campus showed availability of sufficient water required for construction of a mini water supply scheme for the village of Hamirpur. With the existing fund of Rs 40,000, which VWSC collected under Swajaldhara project in the year 2004, Rs 2.00 lakh contribution from the local MLA and additional fund support from Water Aid the VWSC has constructed a mini piped water supply scheme to ensure the water supply is available at the doorstep on a continuous basis.



VWSC initiated construction of a new Mini Water Supply Scheme

Total Sanitation Coverage

By the end of September 2007, the Hamirpur village was, fully covered in terms of sanitation and was, nominated under Clean Village Prize scheme, declared by Government of Madhya Pradesh for the year of 2007. Hamirpur village got Clean Village Prize worth Rs. 50000 at stadium ground, on Republic day 2007, and Hon'ble Minister of GoMP Mr. Narottam Mishra gave the prize to Bhagwan Das Pal, the president of Village Water and Sanitation Committee. For the village of Hamirpur the journey began with an endeavor to cover all the households with individual toilets, which led to provision of adequate drinking water supply followed by adoption of Integrated Water Resource Management and large-scale construction of water recharging structures and ultimately achieved total sanitation coverage. It is a unique experience of its own kind.



Hamirpur got Clean Village Prize

Women meeting for future village plan

Effective hygiene promotion

As, a part of the hygiene promotion major emphasis was, given particularly to the women group regarding hand-washing practices at critical time. Emphasis was, also given to in- house handling of drinking water and food hygiene. As per the base line survey report (March 2008) prepared by Parhit within six month the percentage of

diarrhea related diseases has reduced from 17% to 12.38 %. The other areas of impact due to sustained hygiene promotion for last three years among the community are as follows:

- ❖ 49% of the community were aware about ORS, which is now increased to 86% & 52% used ORS which is now increased to 82.14%
- ❖ 35% of the community disposed their animal , solid and liquid waste, which is now increased to 86.90%
- ❖ Hand washing after defecation has increased from 74% to 96.55% and the same taking food before has increased from 66% to 90.55%
- ❖ 98.45% keeps their food covered at present as compared to 78% before the project.

Conclusion

1. The area is, mainly covered with crystalline granite acting as ground water barrier beyond 60feet. The success of all the water-recharging structures initiated by VWSC members and the Local NGO was because of this factor as the recharged ground water was directly leading to recharging of the hand pumps and dug wells. This was, not known to the local NGO and the VWSC members. It is important that before taking up such initiatives consultation with hydrologist is pre-requisite. Since the community have contributed considerable amount of resource in terms of fund, labour and most important their valuable time and energy, not so successful attempt of their endeavor in this regard would have negative impact.
2. Intervention in term of water supply facilities and basic sanitation facilities need to be integrated with effective hygiene promotion strategy to have a greater health impact. It also increases the sanitation coverage.
3. The PHE Department has also constructed check dams across the nalas in other villages' viz., Sinawal that has resulted in recharging of the large numbers of hands pumps installed in the upstream of the check dam. As a matter of policy the Engineer-In -Chief, PHED, Government of Madhya Pradesh has issued circular to all the Division to take up water recharging structures wherever it is feasible and to shift from ground water based schemes to surface based schemes.
4. Putting people in the center, particularly women for all social development activities including water, sanitation and domestic hygiene intervention may be the only approach for attaining overall sustainable development.

5. It is clear though, that community participation will not happen on its own accord. Donor assisted and non-government organisations projects show the need for concerted software support to inject a participative element into this process. In terms of costs, though long-term and intensive organisational inputs have been, and in general are required, project experience is that this support is not necessarily expensive. In the World Bank projects in Maharashtra direct community mobilization and organization support activities cost around 3% of total investment per village, while in Kerala the cost of the Socio Economic Units established under Dutch- Danida schemes has been calculated at only 2.5% of total water supply expenses. In contrast, the advantage of investing in community participation activities has been tremendous and well documented. However, though socio-economic units or cells comprising field level community workers have been established as part of a number of donor-assisted projects, none of them have been institutionalized within the government system. Thus, the major challenge is to develop the capacity and capability within the government agencies to plan for, manage and co-ordinate and to some degree executive mobilization of and support both the Gram Panchayats and the communities. WASMO in Gujarat is a unique institutional set up in this context.

