The story is of Punawli Kalan village in Uttar Pradesh where the community with the support of a women institution step forwarded to tackle the water woes through development of a community owned water supply system.

Punawli Kalan village is situated in Jhansi district of drought prone Bundelkhand region of Central India. The village is located at a distance of 17 Km from the district head quarter. The village has a total population of 2918 people distributed amidst 608 households. About 32% of the total population belongs to Scheduled Castes, 65% to other backward class and remaining 3% only to general caste. The settlement pattern of the village is divided into nine hamlets, each of which distributed across community lines.

About two decade past, people of Punawli Kalan continued suffering under the humiliation of increasing climatic vulnerability alike other parts of Bundelkhand. The intense drought spells in 2002 -2003 not only impacted the agrarian economy of the village badly but also adversely affected their lives with inadequate access to basic needs such as water and sanitation facilities. The crisis of drinking water was unprecedented while the provisions were much less. The entire population was to depend only upon 20-22 hand pumps and open wells for drinking water, most of which were seasonal. Dug wells and masonry wells became dehydrated during summer, whereas depletion in ground water table left most of the hand pumps defunct. In this pathetic situation, the Uttar Pradesh Govt. launched a programme named ‘Swaja’ under the State water & Sanitation Mission (SWSM) with the objective to provide water supply to the rural population. A pipelined water supply system was established in Punawli Kalan under the programme. Water User Groups (WUGs) were formed for the management and maintenance of the infrastructure established. The system was operational till 2010, but as operational costs continued to escalate and funds available for operation of the system dried up, the WUGs dispersed and the system rapidly slid into disrepair. The collapse of the system came down like a curse upon the community. Extreme dependence upon the pipelined system, left the alternate water resources in apathy, resulting most of them not in function. Out of total 22 hand pumps, 7 were already dried up and water from 90% of the rest was tested to have high values of iron and hardness and thus was not worth usable for domestic purpose too. The condition of the wells was also very poor – open and dumped with trash. As a result by 2015, there were only 2 hand pumps and a well remained usable and these bore the onus of quenching the thirst of all 2900 people of the village.

In summer, to ensure water availability to the family, the village women to travel about 3 km and to devote minimum 2 hours a day to fetch water. Under the scorching sun with day time temperature hovering above 40 degree, the head load with pots full of water put a detrimental effect on their spine health and an additional stress on their menstrual system. The wastage of time in collecting water resulted in unproductiveness for the adult women as well as increase in the number of girl students dropping out of school.

Lack of water also meant poor sanitation that further accentuated health problems. The monsoon amplified the crisis even more bringing fresh trouble as contaminated drinking water. In rain the community were to suffer from water borne disease endemics, mostly caused by bacterial contamination in the resources.
In this situation, adequate supply of safe drinking water had become merely a dream to the village community. The people of the village had strong desire to chase their dream of reopening the pipeline system but along with tones of despair. Part of their despair stemmed from the fact that numerous appeals over the years to the govt. requesting them to resolve the situation had yielded only empty promises. The people particularly the women, were so much under crisis, that their water woes often took the major part of discussions in their self help group (SHG) meetings. In the meanwhile, women SHGs from 25 villages (including Punawali Kalan) had been formed into a women’s federation called Sahyogini Mahila Mandal. At one its periodic meetings, when the concerns of water and sanitation were being discussed by the federation members, Mamta Bundela, the president of the federation and a resident of Punawali Kalan village proposed that the federation could take up the role of restoration of the defunct drinking water system and its subsequent management. With the agreement of the members it was decided that an open meeting would be organised in the village and the federation would present its proposal. Accordingly separate meetings were held in the village with specific target groups such as panchayat members, members of former water user group, ASHA - Anganwadi functionaries, WSHG members and other community people. During a focused group discussion in the village the proposal was shared by the federation and the community unanimously adopted a resolution that the responsibility of restoration and management of the drinking water system would be handed over to the federation. It was also decided that the users would pay the required repairing cost as well as a household level monthly fee to the federation for further maintenance. A no objection certificate (NOC) was requested and duly obtained from the panchayat for handover of the infrastructure from the previous WUG to the federation. The federation also submitted a resolution to the District Administration and local MLA for sanctioning a 25 KW electric tower in the village so that the 7.5 HP water pump that would be required to supply water in the village. As decided in the village meeting, one time installation charge of 500 rupees per connection had been contributed by the community to collect a total of Rs. 56,500 from 113 connections. The users would also to pay a service charge of 100 rupees per month per connection and a fine of 10% of the monthly charge would also be applicable for users failed to pay within the month, as jointly decided by the federation and the community. With the funds thus collected, a new pump was purchased and installed. After four months of endeavor, Independence Day 2015 saw the inauguration of the restored and upgraded system and the major part of the village being freed from the hardships faced by its people from the drinking water scarcity.

Today with the water tank of 65,000 liter storage capacity, about 1500 people of the village are accessing drinking water at their doorstep through 113 tap connections to meet the per capita drinking water requirement as 43 lpcd, which is twice as before and also meets the present norm of National water Policy for rural area of 40 lpcd (revised value is 55 lpcd). Under the leadership of the federation, nearly one lakh ten thousand rupees have been collected in seven months of operation, which are for use in maintenance of the infrastructure. One community member has been employed by the federation for running the water motor, maintaining the pipeline system and collecting the service charges from children and women collecting water from a hand pump, WSHG members discussing on WASH issues in monthly meeting, Inauguration during Independence Day in presence of DDM NABARD & DA Officials
households. Periodic water quality testing and disinfection of the main source has been undertaken by the federation to ensure safe accessibility of drinking water. An eleven membered WASH monitoring committee comprising Pradhan of the local panchayat, members of federation and frontline functionaries and representatives from each ward of the village has been formed to streamline the pipeline operation as well as for decision making on issues related to WASH.

During the gram sabha on January 26, 2016, the women SHG members of the village, led by the federation have put a proposal to the panchayat to expand the pipeline service to the rest of the households and the nearby schools so that 100% households can have doorstep water accessibility. The panchayat has primarily agreed to allocate some funds in the next financial year’s plan for the expansion of the pipeline whereas the rest amount will be contributed by the community itself. Installation of a waste water treatment tank and water meters to reduce wastage of water and improve the efficiency of the system have also been endorsed by the gram sabha.

**MILESTONES**

- **March 2015**: Decision taken in a village meeting to hand over the responsibility to federation
- **April 2015**: Women federation decided to take up role of restoration
- **May 2015**: NOC received from the panchayat, application submitted to MLA/ district administration for tower
- **June 2015**: Community invested Rs. 0.50 L for repairing of pipeline and purchasing of new water pump
- **July 2015**: Inauguration of the water supply was done in presence of NABARD official
- **August 2015**: 1500 people accessing safe drinking water at doorstep with amount of Rs. 1.10 L contributed
- **September 2015**: Milestone

**Learning:**

The one year intervention have brought in certain changes in the water and sanitation scenario in the village. Some of the insights extracted from the intervention are –

- **Collective action with participatory planning can yield better**: The collective effort made by the community of Punawli Kalan village under the leadership of an apex body i.e. federation has resulted in increased accessibility to safe water at doorstep. In addition to the improved accessibility and quality, the endeavor also have impacts as reduction in drudgery of women...
and enhanced engagement of them in economic activities as a result of saving of time and physical energy from fetching water.

- **One successful action translating into another**: With ensured water availability in the households, the community has started realizing the need of better sanitation in their village w.r.t. improved toilet facility, household waste management system and water conservation through waste water treatment facility. 100 households have already placed applications to the panchayat for construction of toilets, which will be started within a month.

- **Demand driven approach and community contribution crucial for effective and sustainable implementation**: The water supply system was a real need of the village and the community, particularly the women placed the demand for its restoration. The participatory approach with community itself being the decision makers eased the implementation with their engagement, both in terms of physical and financial. Capacity building of the users, the community and the institution is necessary to ensure the sustainability of operation in a long run.

This case depicts that the persistent problem of drinking water can be best tackled by building capacities of community institutions to take leadership role in local service delivery and with proper representation of the community. The result, as has been highlighted in the case, shows that when an intervention follows a participatory approach with proper planning and management, that can become sustainable in long run. The area that was once water scarce, is today water secure.

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