

A hamlet named after a hand pump

By Bhawna Mangla

Jagan Singh was in his teens when his family moved to a small hamlet, two kilometers from the main village, Gudachandra Ji in Karauli district of Rajasthan to live closer to their farm land. Jagan Singh's grandfather and his two sons, Dulhe Ram and Ram Sahay, had lived there since the 1950s. Dug wells were the only source of water for inhabitants in the main village and in the hamlet, which met the daily water needs for drinking, household, livestock, and agriculture. Rainfall was regular and farming yielded bumper harvests.

However, all that changed after Jagan Singh and his brother Gulab Singh decided to pursue further education. They went to Delhi in search of employment and were recruited by Delhi Electrical and Supply Undertaking, where they acquired knowledge about hand pumps (*barma* in Hindi). During their visits back home with family in the hamlet, they learned that women had to walk for miles to fetch water from dug wells.

In 1962, the two brothers put their learning to use in their hometown. They manually dug a thirty-foot hole and installed the first hand pump, which was sufficient to meet the daily water needs of a small family. It was easier for women to collect water with a hand pump than to fetch water from long distances. The family members who lived nearby shared the water. The pump was a welcome intervention that saved a lot of time and effort. Jagan and Gulab became heroes in the community for using their knowledge for the larger good.

But the hand pump story doesn't end here. The pump soon became a well-known landmark for local people and eventually became the location of a small bus stand. The hamlet became known as "*Barma ka Pura*" (hamlet possessing the hand pump).

Today, two generations of almost twenty-five families live near each other in this hamlet in close harmony. The small community is an example of people living in separate houses but connected by the same soul.

Acute water shortage in current times

As long as the hand pump was functional, it provided great help to the residents of the hamlet. However, with the growing population and increasing pressure on natural resources, water scarcity loomed.

Today, the original much-celebrated hand pump is no longer in existence. Fifteen of the old dug wells dried up in the last two decades. Ram Singh, a second generation family member, says that the groundwater level has gone from 100 feet to 170 feet in the last five years (almost 70 percent depletion).

Households in Gudachandra Ji village are connected to the government water supply, but residents receive water in their homes for only one hour per day, and they have access to a few functional public hand pumps. However, the government water supply has not reached the Barma ka Pura hamlet, nor do the villagers have access to public hand pumps.

Inhabitants of Barma ka Pura are dependent on two bore wells that must serve the needs of the entire population. Women still have to fetch water from the bore wells multiple times in day. The drudgery of



carrying water on their heads causes physical discomfort and adversely affects their spinal cords over time. Since women must invest so much time fetching water, they have little time for leisure. Despite the difficulties, the women of Barma ka Pura smile as they talk about their daily work.

Water scarcity is impeding agriculture growth enormously. A few farmers have dug bore wells to extract groundwater for irrigation using engine or electric pumps. But they are unable to share water for irrigation with other resource-less farmers because there is not an adequate supply. Farmers without irrigation resources are forced to leave large acres of land fallow during *rabi* season or rely on existing soil moisture for cultivation. Therefore, the *rabi* season brings zero or low yields. Crops cultivated during the *kharif* season are mostly rain-fed. Cultivation of crops for a single season significantly reduces the cropping intensity, making farming less remunerative. Vegetable cultivation is a distant dream for the inhabitants of the region.

The people of Rajasthan had long practiced a culture of water conservation and rainwater harvesting, but these practices dwindled significantly over the last few decades. Inhabitants had been fulfilling their immediate water needs by extracting a maximum amount of water from underground at minimum cost, leading to an exponential depletion in groundwater resources.

A Ray of Hope

Sehgal Foundation, with funding support from Coca-Cola Foundation under a project titled Jaldhara IV, has partnered with the community to augment the underground water table with the construction of a check dam adjacent to the hamlet. The villagers now feel hope that the check dam will help revive some of the dried dug wells. Restoration of the dug wells will transform their agriculture. *Rabi* crops will be cultivated with sufficient water and in turn increase cropping intensity and returns from farming.

Villagers see the check dam construction as a ray of hope for a better economic and environmental future. They believe that soon they will be able to relive the earlier times when they had sufficient water sources to meet their needs.

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