

## Meeting requirements through innovation

The school and Bari faliyas of Chinchojhar village of Dharampur taluka in Valsad suffered water scarcity in summer. Ever since the borewell failed, an open well in the faliya was being used by all residents. The well could fetch water until the month of March, but the situation would worsen as summer approached and water level in the well depleted. A time would come, when only the first 3-4 women who reached the well very early in the morning, could get water. The rest of the women were forced to walk 500 meters across the rocky terrain to get drinking water from a government bore or walk 1.5 km to another habitation. About 350 people from the two faliyas thus faced drinking water scarcity.

While taking their livestock to the nearby hills for grazing, the villagers observed a perennial spring at a height of 120 meters from the main village. This gave them the idea of tapping the source to meet their drinking water needs. They cleaned the area near the source and observed the path and the force of the water. Based on their observations they thought that by constructing a collection tank near the spring and a storage tank in the village, and connecting them with pipelines, a simple gravity based system could be developed to get water to the village.

The villagers got sanction for this initiative under the Swajaldhara programme and started the work. When a suitable location for the storage tank in the village was identified near Babubhai's place, he suggested that the storage tank should be constructed at a height from the village, so that the houses situated at a height could also get the water. After several discussions, it was decided to construct a water collection chamber of 4000 liters capacity near the spring and a storage tank of capacity 10,000 litres 80 meters below the collection chamber, and 40 meters above the habitation. The two tanks were connected by a pipeline and for further distribution in the village the people are considering either household connections or standposts. The village has taken the benefit of the existing natural conditions and made use of a source available at an altitude. The natural flow and pressure of the spring water were not of direct use. Hence, a simple innovation to arrest water in two stages coupled with principles of gravity and pressure, has been applied to meet the needs of scattered tribal habitations.