

The Last Walk for Water

For generations, Karadapala's women faced a dangerous mountain trail for water—until the water found its way home.

Every evening as the sun dipped behind the steep, forested hills of Kankadahad, a silent, unforgiving clock started ticking for the families of Karadapala village. When darkness fell, the narrow, two-kilometer mountain trail leading to the village's only clean water source became the domain of wild boars, venomous snakes, and hidden forest predators. If a household ran out of water after dusk, there were no second chances; the family faced a mandatory twelve-hour period of absolute dehydration until the next morning's light. For generations, survival here meant a daily, treacherous climb. Two kilometers through dense forest and steep elevation might sound brief, but during the monsoon months, the trail turned into a treacherous slurry of clay. A single misstep carrying heavy water pots could result in severe injuries or compound fractures, and because the mountain was a complete cellular "dead zone," there was no way to call for help if disaster struck. The heaviest weight of this journey fell on the mothers, who balanced three or four earthenware pots at a time while trying to protect young children from slipping into ravines, often pulling young girls out of school just to help carry the daily load.

To an outsider, the obvious question was why these families endured such peril when the village had a government handpump and an open well right in its center. The answer lay hidden beneath the earth. Deep groundwater tests revealed that the local wells were heavily saturated with iron, making the water practically toxic for domestic life. It stained clothes a permanent rust color, ruined cooked food, tasted metallic, and choked crop soil. Even when villagers fetched water from the mountain stream, a dangerous illusion remained: although they carefully strained it through multiple layers of cloth to remove visible silt, microscopic pathogens remained intact, causing chronic illness and stunted growth among the





children. Surrounded by water they could not safely drink, the people of Karadapala were effectively water-refugees trapped on their own land.

The team realized that digging deeper wells was useless and that the only sustainable path forward was a daring one: if the

villagers could not safely reach the mountain stream, the mountain stream had to be brought to the village. Using a Diversion-Based Irrigation (DBI) strategy, the team trekked high into the mountain folds to study the stream's natural velocity. Lacking heavy laboratory equipment in the dense terrain, they turned to a method that combined scientific rigor with



simple field ingenuity known as the Paper Boat Methodology. They placed a handmade paper boat into the current, measured the exact time it took to travel across a marked one-meter stretch, and repeated the test five separate times to establish a reliable baseline. Cross-referencing this data with high-resolution satellite imagery allowed them to plot a digital topographic map, designing a



gravity-fed pipeline route along the natural contours of the mountain so the water would flow naturally down to the village without needing electrical pumps.

Practically speaking, finishing such a monumental task in

four days seemed impossible, but the overwhelming unity, relentless energy, and shared willpower among everyone made it achievable. On the first two days, the

team and villagers dug the trench from the high uphill source all the way down to the village edge to lay the PVC pipes. At the mountain source, they built three embankments using local stones and rocks, carefully packing the gaps between the boulders with wet earth to



create a solid seal. The work was exhausting, allowing for only a short half-hour break after lunch. Simply walking up and down the mountain twice a day without carrying heavy loads was punishing enough, making everyone reflect with deep empathy on the local women who made that same journey

every day while carrying heavy earthenware pots and watching over young children.

On the afternoon of the second day, nature tested their resolve. Heavy, dark clouds rolled over the peak, bringing sharp thunder and lightning. Staying on the exposed mountain during a thunderstorm was far too dangerous, forcing everyone to halt work early for safety.

Undeterred, the team returned very early on the third morning, only to find the villagers already assembled, waiting eagerly to start. Together, they climbed the muddy mountain path, where rain-soaked clay clung heavily to their feet. Working shoulder-to-



shoulder through the third and fourth days, they completed the final embankment and finished digging the entire pathway down to the village by afternoon.

The PVC pipes were carefully joined using heavy-duty glue. At the mountain stream, the intake was secured inside round, hollow concrete blocks and wrapped in a fine mesh net to filter out dust and floating leaves. The true test arrived when they carefully opened the water intake to test the slope. As the



current flowed smoothly, they connected the remaining pipeline sections down to the village outlet.

When the team went into the village and called everyone—especially the mothers—together to witness the arrival of the water, a profound silence fell. As crystal-clear

mountain water poured freely into the center of Karadapala, the women stood completely speechless, their eyes reflecting the overwhelming realization that they would never again have to climb that dangerous mountain for clean, iron-free water.

The true legacy of their shared labor bloomed weeks later. Returning to Karadapala a month or two after the



project's completion, the team found a transformed village. Every household had cultivated its own vibrant kitchen garden, flourishing with fresh vegetables, while farmers revitalized their long-neglected agricultural fields and also the animals also got pure and clean water directly using pure, iron-free water. It forces anyone to pause and

wonder: if we were placed in their shoes, facing those daily struggles, how deeply would we long for such a change—and how powerful is the human spirit when a community unites to bring life home?

