## Water is Life in Masvingo, Zimbabwe

Preparing and implementing small scale water infrastructure for improved climate resilience and livelihoods for the poor in Zimbabwe.

Johana washes her dishes outside on the parched, cracked beige earth. Nearby, the crops in her

vegetable garden are wilting, their leaves scorched yellow and white by the stark, unrelenting sun. Johana is among the women of Mawoneke village who walk up to 5 km a day to fetch water for their households. "My friends have had to eat roots!" exclaims her neighbour, Anisto, as they discuss the the devastating impact of drought that has affected their community in recent years.

Here in Zimbabwe's Masvingo Province, erratic, scarce rainfall



has led to repeated crop failure and severe food shortages across the districts of Bikita and Chivi. Despite the Save River basin being seated within the region, climate change has extended the dry seasons, reducing the river water level and leaving populations extremely vulnerable to drought. "Last year we had only two months of rain, then nothing", confirms Anisto. "There is a serious hunger problem. People are depending on social welfare". The villagers describe the new presence of people begging in the street and desperate neighbours offering labour in exchange for food.

Insecure livelihoods, poor food security and the local population's ever decreasing nutrient intake are the conditions that have led Climate Resilient Infrastructure Development Facility to embark on two water infrastructure development projects in this part of Zimbabwe. For the inhabitants set to benefit from the Kufandada and Bindagombe irrigation schemes, this could not come soon enough: in a region with 90% unemployment and a high dependence on subsistence farming, irrigating the crops has become a battle for survival.

A brief glimpse at the village's water collection methods gives an uncomfortable reminder of the fortune and luxuriance embodied in our shiny kitchen taps. One farmer has lined bamboo 'pipes' along the 900-metre route from the river to his garden, serving as a rudimentary and unreliable hose system. Meanwhile, women in the village of Mawoneke undertake a lengthy hike once or sometimes twice a day to fetch water for domestic usage. They fill buckets from muddy streams at risk of contamination, and then carry home up to 20 litres on their heads.

The two irrigation schemes, implemented by the DfID-funded Climate Resilient Infrastructure Development Facility (CRIDF), are bringing an end to these laborious efforts. By facilitating access to





water from nearby river and underground sources, the projects are not only ensuring the availability of safe, clean water for domestic usage, they are also enabling farmers to increase their incomes by surpassing subsistence production and engaging in effective, small-scale, commercial farming.

The recently completed Kufandada irrigation scheme is expected to benefit 120 households in the villages of Ndimo, Nhamo, and Mandivengera, while also providing water and energy derived from solar panels to Bikita Rural Hospital. Pump stations have been constructed on the Rozva River, and these feed a storage reservoir. From here, water can be distributed to irrigate 28 hectares of land via sprinkler systems. To ensure that the newly installed system is not affected by soil erosion and river silting, the river banks will be protected with gabion mats and planted with trees.

To improve water access for household usage, CRIDF has repaired existing hand pumps and constructed three new boreholes locally. This will herald an end to the unsafe collection of water from streams used for bathing. In addition, 5 multi compartment ventilated improved pit latrines have been built to upgrade sanitary conditions.

The Kufandada project has already been very well-received by villagers, who were consulted during the planning stages and have followed the construction with growing optimism. "It was a great relief when CRIDF came; now, our problems are vanishing", says Wenceslaus, the Chairperson of the Kufandada River Protection and Irrigation Scheme Project Committee, which represents the villages' interests. He believes that the uniqueness of the project will attract buyers from other areas, providing an instant market for their crops.

The future is also looking brighter for Bikita's youth. "School fees cost us USD75 per child per year, and we have been struggling to afford that", explains Wenceslaus. "With this project, I know we will now have money. Once you can pay school fees, you have an educated community. Our children will be able to reach their goals, and that is *real* wealth".

Meanwhile, the Bindagombe irrigation scheme is near to completion and the locals are hopeful about the improvements it will bring. A new pump will channel water from a pre-existing dam to irrigate 38 hectares of farmland, and 5 new boreholes will provide domestic access to water. By enabling farmers to diversify their crops and grow all year round, CRIDF aims to improve the food security and nutritional status of around 300 households with a total of 1,200 households estimated to benefit through associated employment opportunities.

For Nyengeterai, whose child developed Kwashiorkor due to malnutrition, this is welcome news. "With water, I can grow green beans full of nutrients", she says, smiling with confidence. Reminding us of how much water represents here, she adds, "now we are *sure* of survival because we can see water everywhere!"



