



WATER SYSTEM FOR ORPHANAGE AND 70 HOG RAISERS

BRGY. DULANGAN, DIGOS CITY, DAVAO

Background of the project

Barangay Dulangan is an agricultural area. Most of the barangay land area is characterized by hilly terrain with gullies and small valleys. The barangay is traversed by the Digos River, and in the northern part, further Mt. Apo is located. A big portion of the agricultural land is planted with high-value commodities like cacao, coconut, abaca, mango, coffee, and other fruit trees, cash crops, or annual crops like corn and rice. It contributed enough agricultural products and livestock entrepreneurs in the City of Digos, the Province of Davao, and region XI.

Barangay Dulangan comes from the word “Dulang” which means wooden basin since the Molave tree leaves behind a huge mark of the basin-like hole the natives referred to as Dulang. Their native languages are Ilonggo and Cebuano.

The project dates back to 2018, when our Chief Executive Officer with his family met Ruth, who is based in Australia. Both Auke’s family and Ruth’s family were given special citations for their value-driven advocacies in the 8th Jollibee Family Values Awards. Jollibee is a multinational Filipino fast-food chain with thousands of stores in the Philippines and abroad.

Ruth, together with her family, runs an orphanage in Digos City, Davao. As mentioned by Ruth, one of the major problems for them was water; even though there was a river nearby, it was quite difficult to get the water that would be used for household use and opportunities for livelihood through agriculture. AIDFI then went to survey the area on September 27, 2018 and a technical study was made. Unfortunately, at the time, no funds were available to implement the project.



In June of 2021, we were given a chance to join the GlobalGiving Accelerator, a virtual training program and crowdfunding campaign where the goal was to raise \$5,000.00 total from a minimum of 40 donors and receive a permanent spot on the platform. We decided to join the project from Digos as our entry with the end goal of being able to become a permanent member of the platform and, at the same time, fund the project in Digos.

It was then also decided to include the local hog raisers, who also were dependent on the water from the river for their livestock.

After completing the Accelerator program, we were happy to find out that we were selected for a permanent position on the platform, which meant we could continue to complete the funding for the project we had selected. It was a first for AIDFI, which also tried diversifying its funding sources. The campaign lasted more than three months to complete enough funding for the initial phase of Social Preparation and Pre-fabrication works. We also received commitments for the funding of the project and small donations made through AIDFI that would finally complete the necessary funds required to start.

We were very happy to receive such positive responses from our long-time and new supporters of the AIDFI ram pump program, and donations poured in quickly. We were quite overwhelmed as well by the willingness of other water associations who have been provided with a water system to help out and donate to this project. This brings a deeper meaning to the project.

On June 14, 2022 the project was finally started with a target implementation of 30 days and a target output of at least 13,000 liters to be supplied daily from the ram pump, which shall benefit 33 families or 200 people from the orphanage and village.

Overall, the project was smooth, with high cooperation from the local government and barangay. The people from the village were also very helpful throughout the project.

Objectives of the Project

The main objective of the project was to deliver water from the Napan river, located 300 meters away and 14 meters below the orphanage, and pump it up using the AIDFI ram pump to a 20,000-liter capacity ferrocement reservoir that would supply water to the clusters of livestock pens and the farm of the orphanage.



Project Design

The project was designed to use one unit of 3" diameter AIDFI ram pump and pump up water through a 1 ½" HDPE hose (SDR-11) which is strong enough to hold the pressure and fill a 20,000 liter-capacity ferrocement reservoir. An 85-meter diversion pipeline was used from the impounding dam to the catchment tank that supplies water to the ram pump and was placed to ensure the safety of the pump during the flooding of the river. The ram pump is then enclosed in a ferrocement housing with a safety cover. A difference of 1 meter in the drop from the catchment to the ram pump was enough to pump to an elevation of 14 meters to the reservoir tank beside the orphanage.

The ram pumps are designed to be adjusted during the dry season for continuous water supply to the village. Based on the estimates from the survey, it can pump a minimum of 13,000 and up to 19,000 liters per day, depending on the river level and water supply.

Water is then distributed to clusters in the community through a 180-meter 1 ½” distribution pipeline where tap points were inserted for hog raisers to connect to their water lines to the livestock pens.



Project Period

The project was expected to be completed within 45 days, including all the preparatory works. Officially the project activities commenced on April 26 with Social Preparation activities. Installation of the project began on June 14, 2022 and because of heavy rains and frequent flooding of the river, the technical team lead by Jose Glavez completed the project on July 23, 2022. The project was officially conveyed to the Dulangan Hog Raisers and San Pedro Children’s Home on August 23, 2022.

Project Activities

Social Preparation

The social preparation activities were handled by Sheila, AIDFI’s Community Development Coordinator. The activity started with an orientation of the beneficiaries and courtesy visits to the City Mayor and Barangay Captain on April 26 to 29. She then facilitated the formation, registration, and training of the Dulangan Hog Raisers Association, officially registered with the Department of Labor and Employment (DOLE) on May 5, 2022. The association elected Zenaida as the chairperson and official representative.

During the official session of Barangay Dulangan and orientation was done to the village leaders, who at the same time approved a resolution for the construction of the water system at the river banks. On May 3 and 5, there was a signing of the Memorandum of Understanding with the Barangay, Right to Use and/or Way Agreement between the landowners and the association for the structures. A signing of the Memorandum of Agreement between AIDFI and the association was done during the meeting of the Dulangan Hog Raisers Association.

Before the arrival of the technical team, organizational strengthening and capability skills training was conducted with the association's officers. The training was focused a lot on visioning activities and enhancing the officer's capacity in handling and operating the water system. The social preparation activities were completed in ten days.



Installation

The first delivery of materials from Bacolod was transported on AIDFI's truck to the project site. And arrived onsite on June 16, 2022. The technical team, on the other hand, arrived on June 14 and immediately started clearing works at the source.

The second delivery of materials arrived on June 27, which completed all the materials needed for the project. Installation of the project went smoothly except for some days of heavy rain where flooding in the river occurred. Because of this, the expected number of days of 30 was overshoot by five days.

On June 26, a monitoring team from AIDFI visited the project for the final inspection and tuning of the system before the conveyance to the beneficiaries. This ensured that the system was built according to the design and quality standards of AIDFI.

The water system was configured to pump 14,000 liters daily to the 20,000-liter-capacity reservoir tank.





Project Conveyance



On August 23, a conveyance ceremony was held at the San Pedro Children’s Home in Digos City. This was attended by members of the Roa family, city and barangay officials, our Chief Executive Officer, and our Chief Operating Officer. Present also were Sheila and Andre, the Technical Services Coordinator of AIDFI, and other guests invited by the orphanage and the association.



The program started with a site visit to the ram pump and a ribbon cutting at the reservoir. Then guest speakers gave their messages, a testimony by Pedro, everybody was then entertained by a special dance intermission from the children of the orphanage. A message of appreciation from Ruth was read by her sister Reggie who later also gave a message thanking all the donor and people who made the project possible.

The project was then formally conveyed to the Dulangan Hog Raisers Association, which was accepted by their chairperson Zenaida. The ceremony concluded with a lunch prepared by the orphanage and the association.





Post-project Monitoring

A post-project monitoring team will visit the project again in February 2023 or six months after the project has been conveyed to the beneficiaries. A mobile phone with the monitoring application of AIDFI will then be provided to the community, allowing them to access resources relating to the project, order discounted spare parts, and free after-sales support (excludes transport and accommodation expenses).