



Transforming Community Health - Water & Sanitation

Min&Ral Joaillerie

Project Report - September 2019

Executive Summary

Access to water, sanitation and hygiene (WASH) is critical to maintaining individual and public health. It is also a basic human right and key to community development. However, in many marginalised Karen communities across Mae Hong Son Province, conditions remain extremely poor.

Thanks to the generous 25,000 THB donation from Min&Ral Joaillerie towards the Transforming Community Health – Water and Sanitation Project in February 2019, KHT was able to construct a gravity-fed water system and 32 latrines in Ban Huay Pla Kang in July 2019 improving WASH conditions for the village.

As part of the project, KHT instated access to safe drinking water, constructed sanitation facilities and provided vital hygiene education in the village. Over time, the project will empower the community of 607 Karen people to improve health and well-being in their village. This report covers all activities from the project.



Project Activities

i. Needs Assessment and Project Design

The village was first identified when the community contacted KHT after a nearby village received a KHT water and sanitation project. Upon becoming aware of the need in Ban Huay Pla Kang, the KHT team conducted an initial needs assessment in September 2018.

In June 2019, through a visit to the village, a detailed follow-up assessment was conducted. The assessment reconfirmed that the village of 607 people were in desperate need of improved WASH infrastructure. In the year prior to the assessment, there were two cases of typhoid and each year in the dry season, the village was forced to turn to a local river for water - including drinking water - as their primary source would run dry. Sanitation facilities were also exceptionally poor, with 105 people in 32 households lacking access to a toilet.



As KHT's projects rely on community participation, an initial community meeting was held to design the site-specific gravity-fed water system and make the necessary preparations for the project. Local knowledge of the surrounding area is important when designing a water



system, particularly, in locating potential water sources for the system. In Ban Huay Pla Kang, the community informed KHT of the two available water sources for the project. The KHT team then used their experience and technical knowledge to assess each source and select the most suitable long-term option.

In addition to community input on project design, KHT relies on a minimum of 20 community members per day to support labour. The KHT Project Manager, therefore, also used the site-visit and community meeting to organise support from the village for each day of the project.



ii. Construction

Construction of the gravity-fed water system and 32 sanitation units commenced at the beginning of July 2019. Over the subsequent three weeks, the water system and sanitation units were constructed by the KHT team and the community of Ban Huay Pla Kang, with support from a small group of international volunteers.

While the village community is most critical to any project's success, KHT offers various volunteer opportunities to students studying at university in the UK as a way of raising funds and generating awareness. One of these opportunities is the chance to work side by side with the KHT team and a marginalised Karen community on a Water and Sanitation Project. This year Ban Huay Pla Kang was selected for the volunteer opportunity and included a team of 11 young adults who joined the project in July.

The project started with the construction of the water source reservoir, which pools water and siphons it into the system. Next the sand, gravel and charcoal filtration tanks were



constructed, before 3.5km of pipes were laid from the water source to the site of the storage tanks. The two 10,000 litre tanks were then constructed above the village allowing a combination of gravity and water pressure to deliver water around the village. After completion, a network of pipes were laid and 12 standpipes with taps were installed.



Whilst the water system was being constructed, KHT's Sanitation Construction Technician constructed the 32 sanitation units at households around the village. Each sanitation unit is connected to the water system and consists of a pour-flush pit latrine, a simple shower and handwashing station.

During the project, a community member informed KHT that they would prefer the sanitation unit planned for installation at their house be constructed at the healthcare centre in the village. The healthcare centre is the primary health service for numerous surrounding communities, as well as for Ban Huay Pla Kang, making it a vital community resource. KHT had not planned to install a sanitation unit at the centre, as the one already there was in good condition, however it was encouraging to hear a community member willing to sacrifice the opportunity to have a sanitation unit at his house in favour of supporting healthcare for surrounding communities. The healthcare centre now has two sanitation units, one for males and one for females, both connected to a source of safe water. Although it was not part of the original plan, the addition of a second toilet will further aid the healthcare centre in their efforts and was a strategic addition.



iii. Sanitation and Hygiene Education

While improved WASH facilities are imperative to improved community health, facilities alone are not sufficient in guaranteeing positive change. For that reason, KHT conducts basic community hygiene education alongside project implementation. Education about why it is important to use sanitation facilities and how to maintain proper hygiene is crucial to the success of a community health project.



To maximize the benefits of newly installed WASH facilities, KHT conducted a sanitation and hygiene education event in the community. This event included interactive demonstrations that encouraged active involvement from community members to enhance their understanding of the importance of good practices, as well as the negative consequences of poor sanitation and hygiene. The demonstration was led by the KHT Data Collection Specialist and focused on the vectors of contamination, in particular from open defecation or poorly maintained latrines, and the reason why it is important to use soap when washing hands.



iv. Water Committee

In Ban Huay Pla Kang, as with all project locations, KHT employed two important strategies to promote community ownership and sustained project outcomes. Throughout the course of project construction, the KHT team worked closely with the community to build their capacity to maintain and repair the system post project. Additionally, at the end of the project 10 individuals who demonstrated the ability to effectively manage the system were selected to form a water committee.

The water committee is a key component of the sustainability of the project, as if the system fails post project, the water committee are already equipped with the skills to make the necessary repair or maintenance, ensuring the system continues to provide water without external support long in to the future.

If damage to a system is beyond the capacity of the community, it would also be a member of the water committee that would notify KHT in order to assess damages and organize a response to ensure the water system remained functional.



v. Monitoring, Learning and Evaluation

KHT has made demonstrating the impact of its projects a top priority and has established a monitoring and evaluation framework that facilitates effective evaluation of project impact. As part of this, KHT conducts data collection before and after project completion. During the construction process, the KHT Data Collection Specialist conducted baseline household surveys with direct project beneficiaries. The survey asks households to provide



details about their current household, education, health, water and sanitation situations. After a period of 10 months, KHT will conduct the survey with the same households to evaluate the change experienced since project completion and as a result of improved WASH facilities and hygiene practices.

What's coming up?

In May 2020, KHT will conduct a site visit and post project evaluations, including household surveys mentioned above, an assessment of the physical condition of the system, and a review of how well the water committee is maintaining the system. Information from those assessments will then be analysed, including the possible need for further community education events.

KHT will also stay in close communication with the community over the next 12 months to ensure that the system continues to work effectively and that there are no faults or unexpected complications.

In total, KHT has now installed 199 gravity-fed water systems and built 2,941 sanitation units, helping 54,502 Karen people across Northern Thailand. All of this would not be possible without the continued support of our dedicated donors. However, KHT is aware of another 80 communities in need of a Water and Sanitation Project and will continue working to support further communities.

Thank You



KHT anticipates health and well-being will improve in the village as result of access to clean water and adequate sanitation facilities including, a decrease in the number of days adults and children are ill and unable to attend work or school. With the construction of sanitation facilities community members are provided a safe, private space for personal hygiene, especially important for women and girls. In addition to improvements in health and well-being, KHT also anticipates the project to have a positive impact on the amount of time households have available as a result of decreased time required to collect and process water.

KHT believes that in the longer-term, improvements to health and well-being can lead to subsequent benefits to access to education and household livelihoods.

Thanks to the support of Min&Ral Joaillerie, 607 Karen people from the community of Ban Huay Pla Kang now have access to safe water for drinking and domestic use, access to adequate sanitation facilities in the village, and improved knowledge of good hygiene.

Thank you for your support of the Transforming Community Health – Water and Sanitation Project!





Contact Us

The Karen Hilltribes Trust

Tower House, Fishergate, York, YO10 4UA

Tel: +44 (0) 1904 373 001

Director: Kelle Rivers | director@karenhilltribes.org.uk