



Report of

Sustainable Gravity-Fed Water Project And School Sanitation Improvement

HouiPhord Village, Khoua District, Phongsaly Province



**A Project Funded and Implemented by Lao Rehabilitation Foundation
In Association with Kulczyk Foundation and Villagers of HouiPhord Village**

Surveyed, Designed and Approved by Engineers of
Khoua District and Phongsaly Provincial Health Department

LAO PDR - FEBRUARY 2015

I. BACKGROUND INFORMATION

HouiPhord village is located at 38 km North-West of Khoua District in Phongsaly province, Lao PDR. From the main road, the village is accessible by crossing a river by boat, followed by a 2 km steep high mountain walk. There are 68 houses, 78 families and the population is 493 (241 women).



View of HouiPhord village

The population of HouiPhord village is Akha, an ethnic minority with its own identity, culture, tradition, costume and language. The subsistence economy of this poor village is mainly agricultural, planting dry-land rice and raising livestock such as pigs and chickens.



Children at play



Teenage girls



Older women



Women doing traditional handicrafts

Education: There is one primitively built primary school structure with 59 children in attendance.



Dr. Luc Janssens, Ms. Sasithone and Dr. Phetsamone donated educational materials to children at primary schools of Ban HouiPhord , received by teacher of primary school

Public health: There are two volunteer health workers in the village but no health center.



A woman with severe illness, her husband and 3 children referred to Oudomxay Provincial Hospital for treatment, with the support of LRF.

Water access: For many years, water arrived at the village from a spring located at nearly two kilometers from the village through old pipes the villagers had salvaged from a previous failed water project. Water was delivered at a central location where all people used it for drinking, cooking bathing and washing clothes. Women and children worked hard to bring water from that central location to their homes. Water was very cloudy during the rainy season and limited in the dry season because there was no concrete catchment with settling tanks at the spring location and no concrete tank to store the water. Help did not reach them for a long time as organizations were unaware of their remote existence and dismal living conditions.



Spring water flow surveyed in February 2013:

Volume of water arriving at the village:	35,560 L/Day
Required water for a sustainable project:	21,880 L/Day
Required water considering future development:	30,527 L/Day

II. OBJECTIVE

- The general objective of this project is to contribute to the overall socio-economic development of Lao people in general and Akha people in particular.
- The goal is to improve the health of Akha people at HouiPhord village by giving them access to clean drinking water, better health care and sanitation at the school.

III. PARTNERS

Provincial – level:	Phongsaly Provincial Health Department (PSL PHD)
District – level:	Department of Khoua District Public Health
Construction Co., Ltd.:	CTP Construction Co., Ltd.
Village – level:	Head of Village, Head of Youth, and Volunteer Health Worker

IV. MATERIALS

- All materials used for this project were of good quality, selected from bids submitted from several companies.
- Labor, framing wood and some additional materials were provided by the villagers.

V. ACTIVITIES PERFORMED

5.1 Preparation

- First surveyed in February 2013, with subsequent surveys in 2014 by teamwork of Phongsaly Water Unit, Public Health Department and Khoua District Public Health.
- Cooperation between Lao Rehabilitation Foundation (LRF), provincial, district, and village levels started in 2014.
- MoU was signed on January 13, 2015 between Phongsaly Provincial Health Department (PSL PHD) and Lao Rehabilitation Foundation (LRF).

5.2 Construction

- Construction started on January 19, 2015 by CTP Construction Co., Ltd supervised by the engineers of Phongsaly Provincial Water Unit, Public Health Department and Khoua district. Villagers provided labor.
- The implementation of the project took 21 days and was completed on February 10, 2015.

The project involved two main activities:

5.2.1 Gravity-Fed Water System Construction

- Cut and thread pipe + cut and set steel rods
- Construction of water catchment and settling tanks at spring area (3.0m x 3.10m x 0.70m)
- Dig ditch for pipe from spring to village (40cm minimum depth)
- Construction of concrete tank to collect water (2.80m x 2.80m x 1.80m), (10,000 m³ capacity - flows rate: 16 L/minute)



- Construction of 6 taps at determined locations in village
- Construction of 1 tap at primary school



- Dig ditch for pipe from tank to taps (pipe Ø50)
- Summarize with villagers at the end of construction
- Train villagers on how to maintain the system, set up a 3 person committee responsible to oversee 10 sub-groups in charge of efficiently using and repairing the system when needed.
- Give all necessary material and tools to villagers to properly maintain the water system.

5.2.2 School Toilet Construction

- Earth work
- Concrete work
- Masonry and plastering work
- Roofing work
- Install 2 white COTTO toilets and 1 white COTTO toilet seat for handicapped



- Wall and ceiling work
- Door frames and panels
- Plumbing and drainage system
- Painting and finishing



VI. BUDGET AND EXPENDITURE

The total budget for this project was **22,296 USD** (twenty two thousand two hundred and ninety six USD).

The project was funded by Lao Rehabilitation Foundation (LRF) in association with the Kulczyk Foundation 18,815 USD (85%) and the local community 3,481 USD (15%).

VII. HAND-OVER

A hand-over opening ceremony was held on February 11, 2015 at HouiPhord village primary school. The project was handed-over by Dr. Luc Janssens, president of Lao Rehabilitation Foundation and received by Mrs. Viengkham Phanthaphit, vice-head of Khoua district and Mr. Pimair JungVongsa head of village with partners from water unit, Khoua district PoH, and Akha people in attendance.



Akha people welcome LRF team on the hand-over ceremony day



Dr. Luc Janssens hand-over to Mrs. Viengkham



Mrs. Viengkham hand-over to head of village



Akha girls performing a traditional dance

VIII. OUTCOME

- This project greatly improves the quality of life of the nearly 500 residents of HouiPhord village, particularly children, by now having easy access to clean water for drinking, cooking and washing.
- The primary school has now access to clean water and toilet.
- The task of women and children having to carry water to their homes has decreased.
- Primary healthcare, prevention of diarrhea, typhoid fever and water-related diseases will see a significant improvement.

Head of Water Unit, PSL PHD



Presented by


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