

# Report of

# Sustainable Gravity-Fed Water Project And School Sanitation Improvement

Hadset Village, Bountai District, Phongsaly Province



A Project Funded and Implemented by Lao Rehabilitation Foundation and Villagers of Hadset Village

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

**LAO PDR - JUNE 2016** 

## I. BACKGROUND INFORMATION

Hadset is a small village of Bountai district, Phongsaly province, Lao PDR. It is located in the 3rd zone of Bountai district at a distance of 24 km from the district center. The access by dirt road is difficult. There are 51 houses, 71 families, with a population of 342 people.





View of Hadset village

Akha woman with children

The population of Hadset 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.

There is one primitively built primary school structure with 47 children in attendance.

For many years, the village has no cleaning water, no toilet, and no help in sight. People washed themselves from a polluted stream that runs near the village.

Women and children worked hard to bring water from a small nearby spring to their homes. Water was limited in the dry season for lack of a concrete tank to store the water. The people practice open defecation, often near the water stream, a major risk factor for spreading diarrhea and other waterborn diseases.





#### 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 Hadset 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 Bountai 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 2014, with subsequent surveys in May 2014 by teamwork of Phongsaly Water Unit, Public Health Department and Bountai District Public Health.
- LRF visited Haset village in April 2014 to observe condition and situation of the village.
- Cooperation between Lao Rehabilitation Foundation (LRF), provincial, district, and village levels started in 2014.
- MoU was signed on May 23, 2016 between Phongsaly Provincial Health Department (PSL PHD) and Lao Rehabilitation Foundation (LRF).

#### 5.2 Construction

- Construction started on May 23, 2016 by CTP Construction Co., Ltd supervised by the engineers of Phongsaly Provincial Water Unit, Public Health Department and Bountai district. Villagers provided labor.
- The implementation of the project took 21 days and was completed on June 12, 2016.

# 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 (3.0mx3.10mx0.70m)
- Dig ditch for pipe from spring to village (40cm minimum depth)
- Construction of 2 concrete tanks (1 for village and 1 for school) to collect water (2.80m x 2.80m x 1.80m), (10,000 m3 capacity flows rate: 16 L/minute)







Water storage tank for school

Water storage tank for village

- Construction of 5 taps at determined locations in village (add 1 more for head of village's house).
- 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 Repair Existing Students' Toilet at Primary School

- Remove old material work
- Wall work
- Concrete work
- Plastering work
- Roofing work
- Door flames and panels
- Install 2 white Cotto toilets







The old toilet



The new toilet





## VI. BUDGET AND EXPENDITURE

The total budget for this project was **106,958,000** LAK (one hundred and six million nine hundred and fifty eight thousand). The project was funded by Lao Rehabilitation Foundation (LRF) **82,562,000** (77%) and the local community **24,396,000** (23%).

#### VII. HAND-OVER

A hand-over opening ceremony was held on June 21, 2016 at Hadset village. The project was handed-over by Dr. Luc Janssens, president of Lao Rehabilitation Foundation and received by Mr. Bounsoui Korpheng-Nouvong, head of administrative office of Bountai district, Mrs. Peng SoukLasy, head of Bountai department of public health and Mr. Bounpheng head of village with partners from water unit and Akha people in attendance.





Dr. Luc Janssens hand-over to Mr. Bounsoui

Mr. Bounsoui hand-over to head of village



Dr. Luc Janssens shake hands with head of village

Dr. Luc Janssens and Akha women on the way to see the water storage tanks

## VIII. OUTCOME

- This project greatly improves the quality of life of the nearly 400 residents of Hadset village, particularly children, by now having easy access to clean water for drinking, cooking and washing.
- The primary school students have now access to clean water and toilet at the school.
- 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.

Director of Phongsaly

Provincial Health Department

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ດຣ. ເພັດສະໝອນ ອິນດາລາ Phetsamone INDARA MD

Presented by

Coordinator of LRF
Tel: 020-22203708, 54117722
Email: inda\_oph@yahoo.com