



Philanthropy Connections

BNSCLC: Water Supply System to Support Agriculture & Self-Sufficiency

Project Overview

Philanthropy Connections Foundation (PCF) is a non-profit organisation formed to support people in vulnerable situations. PCF collaborates with local community organisations that know the issues and needs within their communities but lack resources of various kinds.

The Ban Nai Soi Community Learning Centre (BNSCLC) students are Burmese migrants and youths from diverse ethnic groups living near the Thai-Burma border in Thailand's Mae Hong Son Province. Most of these youths do not have the legal documents that would allow them to go to Thai public schools, limiting their educational opportunities. In addition, there are no educational facilities or schools near their hometowns.

Founded in 2005, BNSCLC provides secondary education and vocational and community development training to underprivileged migrant and ethnic secondary school-aged youth. These students are selected based not only on their academic skills but also on their motivation to help their own communities. An essential feature of the programme is to foster better relationships and understanding with the surrounding Thai community by organising and hosting cultural and sporting events.

PCF supports this project by providing food and medicine for the most underprivileged students who otherwise would not be able to participate in this programme.



Project Background

Bike Tour Asia began to visit BNSCLC in February of 2021 as a newly scheduled stop for their motorcycle tours. During their first visit, they donated many needed items e.g., office supplies, kitchen supplies & fans.

While there, they learned about a severe lack of water supply both for household and irrigation. If the school had enough water, they could grow their own vegetables and fruits.

BNSCLC has enough usable land for agriculture, but the village's water supply is not always consistent during the day, and sometimes there is no water at all for one to two or even up to three days.

Inspired by what they had seen, Bike Tour Asia and one of their participating riders, Michael, asked PCF if they could work with BNSCLC to develop a solution. PCF's project team was thorough in exploring options and ensuring that the proposal was based on fact-finding and would provide a long-term solution.



Project Plan Details

BNSCLC can successfully carry out their vision of sustainable on-site agriculture by pumping water from the nearby river.



The water supply system will start with a submersible pump in the river. The submersible pump will be powered with electricity from solar panels. This model was selected due to its features for lifting water from low to higher areas, high-quality components for longevity, low maintenance requirements and noiseless operation. The installation technician will be setting the pump into the riverbank, surrounded by concrete rings.

The submerged pump will send water through pipes for 150 metres and then fill four tanks with a capacity of 2.000 litres each. The water tanks are rated for food-grade water storage and feature algae prevention and anti-bacteria materials. The tanks will be located on higher ground than the garden areas so that gravity will provide the water pressure. Estimated consumption is around 2.000-3.000 litres /day to sufficiently water the planned areas of 1.5 rai.

A maintenance schedule will be implemented to ensure that the pump is in good condition and nothing is blocking the inlet. The solar panels will be cleaned monthly.

As well, a watering schedule will be implemented. Students and teachers will take turns to do required watering, weeding, clearing dry leaves, fertilising, etc. The hours of this schedule are: Monday to Friday, 06:00 – 07:00 hrs and 16:00 – 16:45 hrs; and on Saturday, 08:00 – 10:00 hrs.



The Forest Department in Mae Hong Son will give seeds to grow herbs, vegetables, fruits and shade trees. They will be working with them to share their knowledge with the students about organic and aquaponic farming to strengthen their education programme that encourages self-sufficiency and a sustainable agriculture philosophy.

As a part of this project, BNSCLC will join the "Build Forest Get Income" programme under HRH Princess Sirindhorn. This programme supports the integration of forest restoration and profitable agriculture.

The school anticipates that growing their own food will reduce their reliance on PCF's current food support for vegetables beginning in 2022.

Budget

Facts & Figures

- **Partner:** Ban Nai Soi Community Learning Centre (BNSCLC)
- **Project:** Water Project for Agriculture
- **Location:** Ban Nai Soi Village, Mae Hong Son Province Northern Thailand
- **Beneficiaries:** 52 individuals (45 students, 5 staff, 2 volunteer teachers)

Goals

To provide the school with a sufficient reliable water supply to grow their own fruits and vegetables and be more self-sustaining.

Budget

Item	THB
Piping and Components	16.800
8 300-Watt Solar Panels	24.800
Pump & Components	25.550
4 Water Tanks	20.200
Installation	9.500
Sub total	96.850
Contingency costs (3%)	2.905,50
Administration costs PCF (7,5%)	7.263,75
Total	107.019,25