

## Objective

To provide clean drinking water to all Government Schools on the islands of Koh Samui and Koh Phangan.

### Brief

The project will use the Vestergaard Lifestraw Community Filter as part of a water treatment system to provide hygienically clean drinking water to all the children attending Government Funded Schools on our islands.

Rotary Club of Samui-Phangan (RC-SP.) chose Vestergaard to be our partner because they provide a guarantee that their device is pre-tested to .02 microns (99.8% of all contaminants and virus removed) whilst additionally returning a % of the profits to provide their systems to impoverished locations and children.

The project will begin by the RC-SP team conducting inspections of all the Government Schools on the islands to survey the total scope of the works needed. The RC-SP team will then estimate a budget to raise money to complete the project. The RC-SP will then coordinate with various organizations and the local community to raise these funds through various donations and charity events.

A pilot project was completed in 2017 at Wat Lamai School with a recent inspection conducted by the RC-SP team. The project is delivering fresh drinking water to 600 students plus teachers and staff.

## Vestergaard Lifestraw Community Filters

https://www.lifestraw.com/products/lifestraw-community

#### Filter Performance and Specifications:

- Purification removes viruses, bacteria, parasites and micro-plastics
  - Purifications up to .02 microns
    - 99.999999% of bacteria (E.coli)
    - 99.999% of parasites (Giardia, Cryptosporidium, etc.)
    - 99.999% of micro-plastics
    - 99.999% of viruses (Rotavirus, Hepatitis A, etc.)
- Food grade materials (US FDA 21 CFR standards)
- High capacity: holds 50L at once, ultra-durable for harsh conditions
- Lifetime of 100,00L; 100 people for 3-5 years
- Tested by WHO, USEPA, NSF and ASTM
- Size (assembled): 22." x 22." x 33.5 "
- Size (box): 22.4" x 22.4" x 24.4"
- Replaceable purification cartridge
- All parts are recyclable

#### Charity Return on Each Product Purchase

one product = one school child, one year of clean water

#### Maintenance

- Built in back-wash handle to ensure longevity of the purification cartridge
- Weekly basic cleaning of the safe water tank
- \* User Manual in 4 languages with other language manuals available upon request





### Standard System Set Up

Based on a school of 250 People (students, teachers and support staff)

- 3 x Vestergaard Lifestraw Community Filters Water cooler tank/ 6 taps with tap locks
- Pre-Filter Activated Carbon/ Iodine 1000 Auto Backwash
- Ultraviolet Water Purifier for the Tank (15w)
- Stainless Steel Tank (1,000∟)
- Vending Machine
  - (100L 500 L/Day at 1 THB / L = approx. 500 THB / Week)
- Pump, Plumbing, Electrical
- Installation
  Including Lockable Cage, Platform, Roofing, etc.
- 2 x Spare membrane Filters

# **Project Budget and Fund-Raising**

### Installation Budget

RC-SP initial rough estimates expect around a total project budget requirement of THB 5.5 Million/ \$US 175,000 just for Koh Samui and (7-8 MillionTHB/ \$US260,000 inclusive of Koh Phangan Projects) and with our fundraising campaign underway both locally and Internationally, promises are already in hand from some of our Sister overseas Rotary Clubs.

#### Additional Project Support

The Vestergaard Lifestraw Community Filters offers purification levels up to .02 microns but unfortunately the best the RC-SP team can find in Thailand is testing up to .8 microns. This is the current American standard, however our most common water borne virus' in Thailand (Rota and Noro Virus; causes of food poisoning) are commonly under .8 microns.

Projects would benefit from find funding or a partner company to provide water testing down to .02 microns to ensure the maintained purity of the system.

