**Outaput Village Clean Water Initiative**

**Pilot Project Proposal**

**I. BACKGROUND AND JUSTIFICATION**

Bridge of Life School, a not-for-profit organization, has been providing educational related programming in Outaput village, Kompong Khleang Commune, Siem Reap, Cambodia since 2012. The village is home to a 353 families who live in 160 homes. Families earn a living through fishing on the Tonle Sap, and, when the water recedes during the dry season, farming the lakebed. Income per family is estimated at approximately $150 USD/per month.

While our organization to date has focused primarily on educational related issues, we find the lack of access to clean water and its impact on community health to be a critical situation. Most families still draw their water from the Tonle Sap, which is polluted and, especially during the dry season, riddled with bacteria and parasites. In addition, we have found many families using ceramic filters that are not capable of properly filtering the water. By continuing to use untreated water from the Tonle Sap families are at risk of a variety of bacterial and parasitic infections that are expensive to treat and worsens one’s standard of living

After discussing this issue with the village chief and community elders and meeting with experts at Water for Cambodia, a not-for-profit organization providing clean water filters and trainings in Siem Reap, Bridge of Life School has decided decided to launch a pilot project to address the problem of a lack of access to clean water for an initial 10-20% of the village.

**II. OBJECTIVES**

**A. Development objectives**

* To provide clean water for all families living in Outaput village through the use of biosand filters.

**B. Immediate objectives**

* To immediately provide clean water for 10-20% of families living in Outaput village through the use of biosand filters.

**III. PROJECT IMPLEMENTATION AND MANAGEMENT PLAN**

**A. Expected project results**

* We believe by providing filters families will be able to drink, cook, shower, and do laundry with water free of bacteria and parasites. This lends us to believe we will see less rates of preventable illnesses and a general improvement in family and community health.

**B. Project activities and work plan**

* Project will be divided into three major phases:
  + **Baseline Survey:** An initial clean water survey of the village will be conducted to get a better idea of clean water access for families. Upon completion of the survey we will have:
    - A better idea of sources of water (river water, rain tank, bottled water)
    - The average amount of water consumed by a family unit per day
    - How families treat water before consumption (i.e. boiled, filtered via ceramic filter or both)
    - How water consumption patterns change based on season

Five individuals from the village will be hired to survey all of the homes over a three-day period. After we receive the results, they will be analysed in Siem Reap. Total estimated time spent on this phase will be one week. Upon conclusion, the baseline survey will, amongst other things, help us identify the initial recipients of the filters.

* + **Selection & Equipment Distribution:** The selection of participants will not be randomized – we plan to choose middle to middle-upper class families who have adults or elderly staying at home. After the survey, we will purchase equipment to provide clean water to the pilot group (minimum 10% but no more than 20% of the entire population). It will take Water for Cambodia approximately one week to build the filters. They will be transported to Outaput and delivered to resident’s homes in one day. Each filter recipients must pay a $10 deposit to be returned after the pilot phase ends.
  + **Monitoring:** After receiving the filters, a 6-month monitoring period will ensue. Homes of recipients will be visited on a monthly basis to ensure the filters are being used daily and maintained properly. In the event a family is not using or maintaining the filter, it will be removed from the household and kept at our school until further notice. The family will also lose their $10 deposit.
  + **Endline Survey**: After the completion of the 6-month trial period we will conduct an endline survey. This will be the same as the baseline survey with additional health related questions. After reviewing the results we will decide whether we can justify providing biosand filters to the rest of the village.

**C. Project Beneficiaries**

* Initial project will benefit approximately 16-32 households in Outaput Village comprised of approximately 100-200 residents. As mentioned, we will be choosing middle to middle-upper class families who have at least one family member staying at home. While it might sounds counterintuitive (as you would typically want to help poorest families first) Water for Cambodia who has had less success in pilot phases when selecting the poorest families. This is because they are less likely to have family members at home during the day, will be less likely to afford the $10 deposit, and generally less likely to take care of the filters without support.

**D. Implementing agent(s) management of project**

* Project with be managed by Bridge of Life School which is based in Siem Reap and works in Outaput village. Bridge of Life School will purchase materials from Water for Cambodia which is based in Siem Reap but does not work in Outaput Village.
* Paren, the director of Bridge of Life School as well as a tour guide for Community First: Kompong Khleang Floating Village tours, will manage operations from Siem Reap city and serve as a liaison and translator between all parties invovled. He will be in charge of all purchases, transportation and accounting. He will also hire an individual to translate and input pre-survey data.
* Sarin, a teacher in Kompong Khleang, will be in charge of managing the project in Kompong Khleang. He will be responsible for hiring 5 assistants to survey residents pre-distribution. He will also be in charge of monthly monitoring and all recipients will receive his phone number and contact information. He will provide Paren with a written monthly update and contact Paren when he has questions or concerns. Sarin has participated in several clean water trainings and is capable of assisting residents if they have any questions. In the event a family is not maintaining the filter, he will be in charge of removing, repairing, and re-distributing the filter to as he deems fit. He will also be in charge of maintaining two water filters at our school.
* Eddie, the President of Bridge of Life School, will be in charge of maintaining relationships with and updating international supporters, in particular Simon Nash and members of the Connected Supper Club, on the project’s progress. Paren will report to Eddie as needed on project updates so he can maintain open lines of communication with supporters. Eddie is fluent in English and will also be in charge of any proofreading that may be needed.
* Rory, a foreign volunteer with a background in data analysis, will help process the initial survey results. He will also create and assist with the endline survey.
* Massismo, a Italian national, is a Technial Advisor at Water for Cambodia in Siem Reap. He has over 10 years experience providing clean water solutions in both developed and lesser-developed countries. He will serve as the point of contact for the construction and transportation of filters as well as an expert consultant as needed.

**IV. PROJECT MONITORING AND EVALUATION**

In the interest of full transparency, we should note that Bridge of Life School has limited experience with clean water initiatives. We have built wells, distributed filters, and conducted trainings in Banteay Srey, but it is an entirely different community and ecosystem, as they draw their water from aquifers not a fresh water lake. We have only worked with ceramic filters not biosand filters.

As mentioned prior, in order to better ensure success, we will purchase filters from Water for Cambodia, a not-for-profit organization based in Siem Reap that builds the biosand filters in house. To date they have distributed over 19,000 filters in Cambodia. In addition to filter distribution and trainings, they have the only water-testing lab outside of Phnom Penh, allowing them to monitor already filtered water to ensure the filter is functioning properly. Massimo, who directs the operations in Siem Reap, has been extremely forthcoming with information and, while non-binding, expressed a sincere willingness to help as needed.

**V. BUDGET**

The budget for the project is based on the cost of the actual equipment (biosand filters) as well as costs associated monitoring the filters pre and post-deployment.

Pre-Survey

* An initial clean water survey of the village will be conducted to get a better idea of clean water access for each family. It will also help us identify the initial recipients of the filters.
* We have already developed an English/Khmer survey. It is attached to the proposal for reference purposes [See Exhibit A].
* We will be hiring five paid Khmer surveyors for up to three days. Upon completion, Rory, introduced prior, will help us analyze the data as needed.
* Total estimate is $200 USD to conduct the survey (wages, transportation, meals). Bridge of Life School, via profits from Community First: Kompong Khleang Floating Village Tours, will fund the pre-survey.

Equipment Distribution

* After the survey, we will purchase equipment to provide clean water to our initial target group (10-20% of the entire village population). Estimates are based on communication with Water for Cambodia who will build the filters
* Biosand Filters for 16 – 32 homes (10-20% of population) and two additional filters for the school ($1080 - $2040 USD)
* Transportation Estimated at $7/Filter ($126 - $238 USD)

Monitoring

* After distribution, we will be visiting homes on a monthly basis to ensure the filters are being properly maintained, providing repairs if needed, and removing filters from homes who do not meet their agreed upon maintenance obligations. We estimate this to cost $50 USD per month. Bridge of Life School, via profits from Community First: Kompong Khleang Floating Village tours, will fund any costs associated with monitoring.

**Bridge of Life School is looking to raise approximately $1500 USD to fund the purchase of the biosand filters.**

Disclaimer

* The budget assembled is a calculated estimate but there is a possibility of cost overrun. Bridge of Life School will notify all donors if we reach a point where we material overruns we will promptly alert donors with an explanation.

**V. CONTACTS**

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