



AQUACLEANSE CAMBODIA
SAFEGUARDING HEALTH, SUSTAINING LIVES

Project Proposal

" Solving the Water Challenge in Tonle Sap's Floating Village: A Comprehensive Approach with Solar Water Purification and Compost Toilets. "

OUR TEAM MEMBER



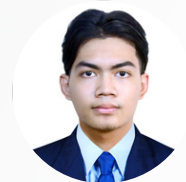
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I. The Big idea

1. Project Background

Location: Chong Kneas, Tonle Sap River, Cambodia

Main Beneficiary: Households living in the floating village with low and medium income that hard to can't access clean water for daily usage.

Problem Statements

- Lack of access to a safe water supply for floating villages
- Poor wastewater management

2. Project Objective

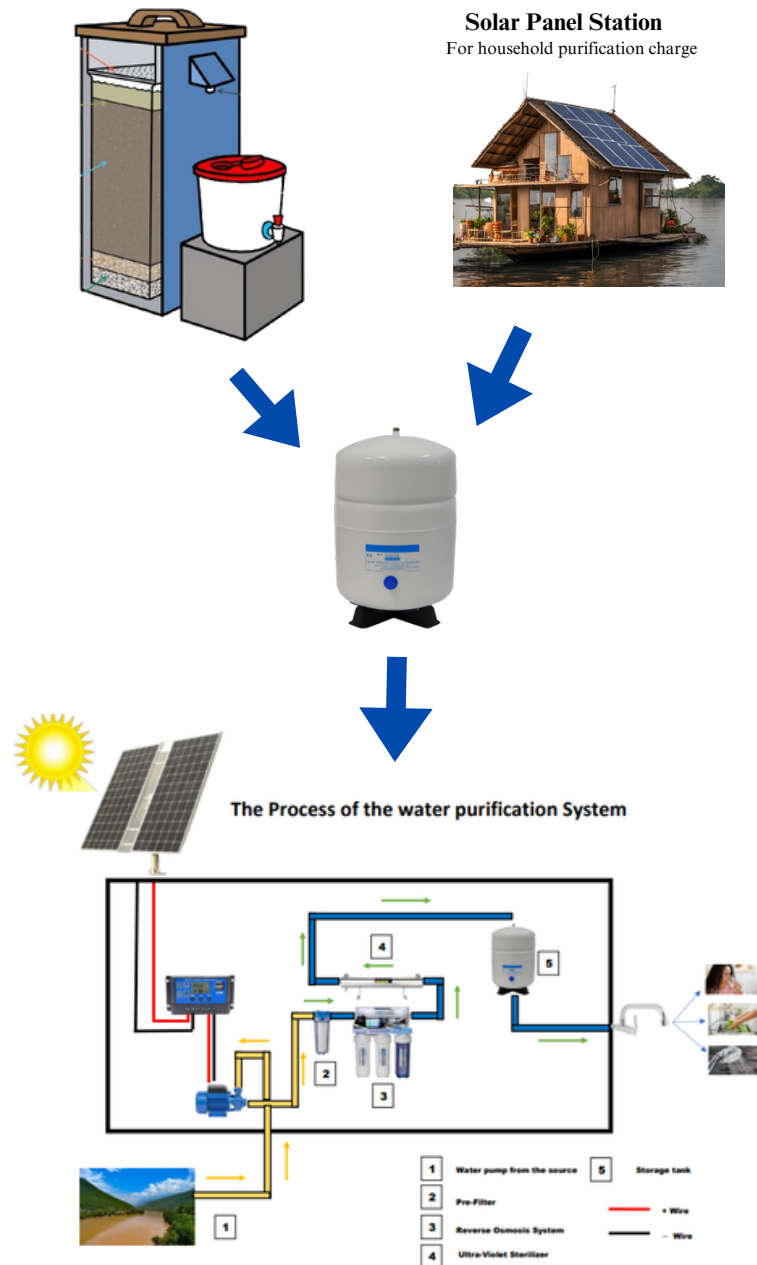
Our project targets the urgent need for clean water and improved sanitation in Chong Kneas by installing water purification systems and facilitating the construction of composting toilets. This dual strategy is aimed at enhancing community health, reducing economic strain, and mitigating environmental impact.

3. Project Approach and Methods

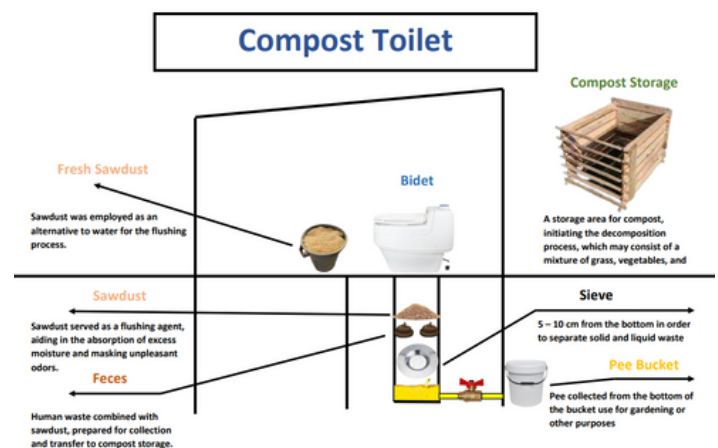
Our solution for Chong Kneas are solar-powered water purification system, educating villagers on the installation of composting toilets by themselves, paired with educational programs aimed at raising awareness on promoting water conservation and sanitation to prevent contamination, thereby fostering sustainable practices, and leading to improved community health and environmental protection.

The composting toilets and solar water purification systems in Chong Kneas create a symbiotic relationship enhancing environmental and public health. By preventing human waste from contaminating the water, the composting toilets inherently improve the efficiency and prolong the lifespan of the solar purification system, which in turn provides the community with clean water, reducing waterborne diseases.

Our project extends across health, environmental preservation, and community development. We wanted to Leverage social media channels such as Facebook, TikTok, and YouTube for educational outreach to broaden our impact, encouraging community engagement and sustainable habits. These efforts collectively contribute to improved well-being and a more sustainable future for the community.



The introduction of water purification systems is the centerpiece of our initiative, with composting toilets as an ancillary component to enhance the project's effectiveness. We aim to empower the Chong Kneas community to embrace a future that promotes better health, sustainability, and self-sufficiency.



4. Project Impacts

Objectives	Short-Term (6 weeks)	Long-Term (2 years)
Access to Clean Water	3 households will have 100% clean water access	Over 500 families will have sufficient clean water access
Reduction in Waterborne Diseases	A start in decrease of waterborne disease	75% decrease in waterborne disease
Economic Benefits	\$126 will be saved from not purchasing clean water	Community will save over \$300,000 annually
Sustainable Waste Management	Reduction in wastewater and a start in compost production	80% reduction in wastewater generation

II. The Pilot

1. The Pilot Project

Number of Households: We will be selecting 3 households from Chong Kneas with different household compositions, different geographic locations, different sanitation facilities, and different levels of education to test and demonstrate the systems' effectiveness, to ensure we can adjust a scalable model for the future.

Objective of the pilot project:







The success of the pilot project, through visible benefits in the local area, can act as social proof and promote broader community adoption. By recording diverse user experiences and monitoring system performance, we can underscore the system's merits and tackle any issues. Adjustments to the system should be informed by user feedback to ensure it meets various household requirements, including maintenance, reliability, and confirming the project's feasibility across different community environments.

2. Pilot Project Timeline

Week 1: <ul style="list-style-type: none"> Needs analysis and pilot household selection. Engage community leaders and initiate partner outreach. Procure assembly components. 	Week 2: <ul style="list-style-type: none"> Pilot the first water purification and composting toilet system.
Week 3: <ul style="list-style-type: none"> Test water quality. Finalize product design. Launch digital awareness campaign. 	Week 4: <ul style="list-style-type: none"> Present the finalized product to potential partners. Build the second and third systems and toilets.
Week 5: <ul style="list-style-type: none"> Installation for the households. Survey for initial user feedback. 	Week 6: <ul style="list-style-type: none"> Review pilot feedback. Host community workshop and invite the pilot households.

3. Stakeholder Mapping

Short term

Partnership	Approach
 Kamwork Providing Sustainable Solar Solutions to Rural Communities in Cambodia  WaterAid  unicef for every child  • Community leader  • Villagers  • Engineering experts	<ul style="list-style-type: none"> Seek support for our pilot project with free solar panels. In return, sponsors get visibility with their logo on our pilot product and social media and secure a position as our main supplier in the future. Join hands with a shared vision for clean water in Cambodia. Support in financial and workshop sessions. Informational session about the products and highlight the long-term benefits. Introduce new job opportunity We have support from the engineering expert in doing the pilot project

Long term

Partnership	Approach
       TwinAgri with the eco-friendly technology, integrating natural compost in farming practices.	<ul style="list-style-type: none"> Collaborate in financial subsidizing to benefit villagers in exchange for the development of the floating village and long-term tourism initiatives. Seeking financial support as they have the CSR program for clean water. According to data from 2020, they fund 150KS in water filtration in Cambodia's rural areas. https://www.cbcl.com.kh/we-are-committed-to-a-water-replenishment/ Collaborate in collecting solid waste from the household. Supplier in collecting the natural organic waste from the households

4. Budget Plan

Activity	Quantity	Price	Total Price
Site visit and Engagement			
Meeting and Workshop	1	\$ 100	\$ 100
Purification Costing			
Reverse Osmosis	3	\$ 100	\$ 300
DC Motor (260W)	3	\$ 30	\$ 90
PV Pipe	3 set	\$ 30	\$ 90
Solar Panel	2	\$125	\$ 250
Charge Controller	1	\$ 45	\$ 45
Battery Charge	3	\$ 35	\$ 105
Total Cost (Site Visit & Purification)			\$ 980
Compost Toilet (We'll teach villagers to build compost toilets but won't cover the cost of the components.)			
Bidet	1	\$ 6	\$ 6
Bucket	2	\$ 3.5	\$ 7
Valve	1	\$ 2	\$ 2
Plankwood	1 set	\$ 10	\$ 10
Total			\$ 25