

Leonardo da Vinci once said: “Water is the driving force of all nature”



THIS VILLAGE IS 400KM APART FROM PHNOM PENH CITY



AQUACLEANSE

Cambodia

UNESCO Water Resilience Challenge 2024

Final Presentation



Table of Contents

01

Introduction

02

Solutions

03

Project impact

04

Project sustainability

Solution

Hard Approach

1 Solar Motor



The motor will utilize solar energy to pump water from the lake to the water tank resulting in savings on the electricity bill.

2 Water Tank



The water tank serves as a storage medium for water from the source before transferring it to the water purification system.

3 UF Water Purification System



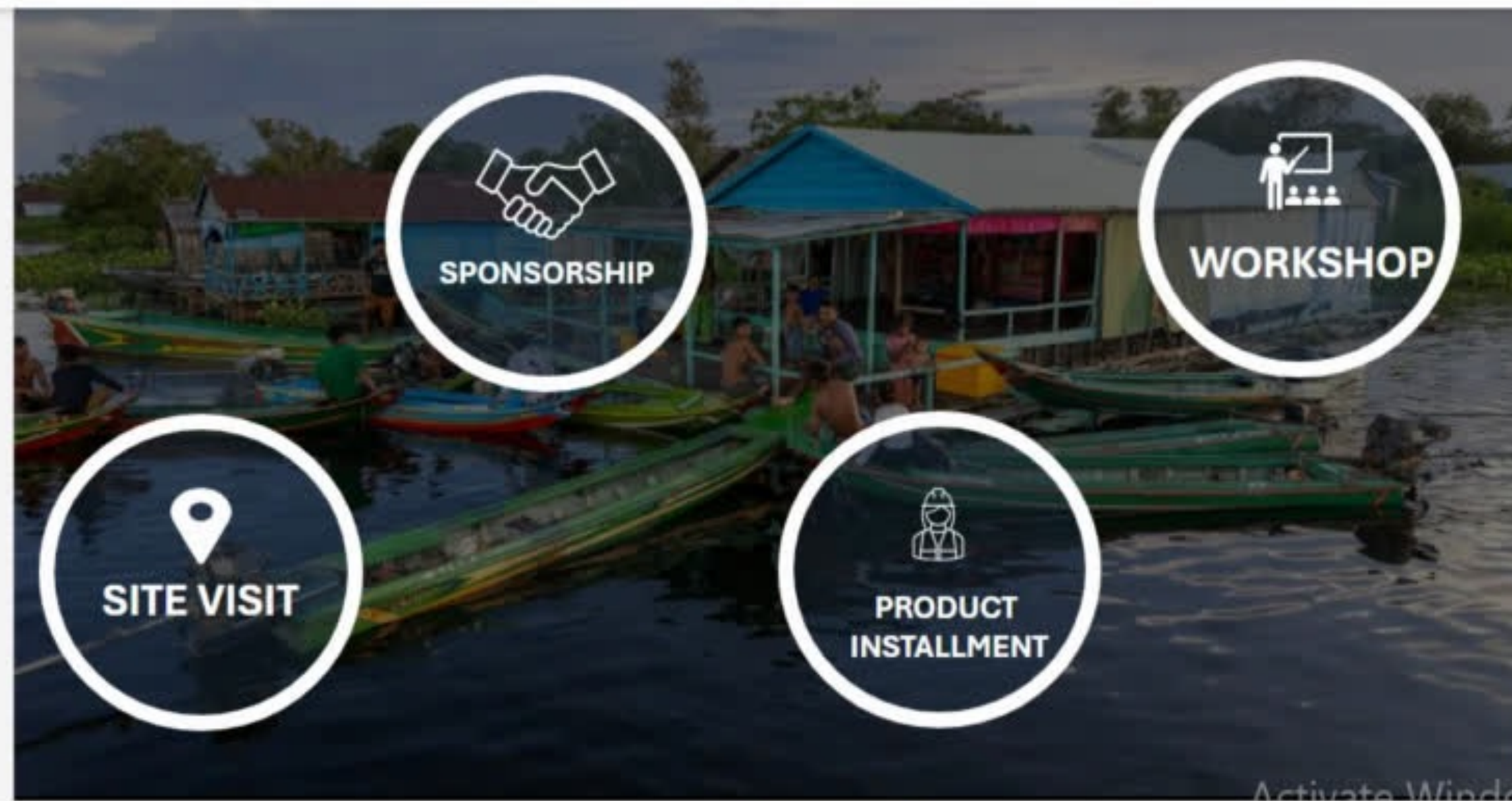
This purification process involves several stages, including the carbon filter, UV treatment, RO membrane, PP Spun filter, and others, ensuring the production of clean drinking water.

Solution

Soft Approach

We conduct hands-on educational sessions for the villagers and students , instructing them on the installation and operation of composting toilets , Water Management , and Sanitation Workshop.





Activate Windows
Go to Settings to activate Windows.

[Hide](#)



Effectiveness of the Water Purification System

Before



Collect water
from the river



Boil the water



Consume the water
with brown color

After



Go to the kitchen



Collect water
from the river

Water Quality Comparison



Before Purification



Color: Iron-Brown



**After AquaCleanse
Purification System**



Color: Slight Blue Tin

Result from Water Testing

Ref.: AI2024-0223



RESULT OF ANALYSIS

Organization / company	Heng Pich Solida Tel.: 087 212188
Address	Cambodia
Type of sample	River Water
Sample submitted date	24 April, 2024
Date of testing performance	24 April, 2024

N	Parameter	Standard of drinking water	Unit	Testing Result	Testing Method
1	Arsenic (As)*	< 50	µg/L	0	ISO 17378
2	Chloride (Cl ⁻)	< 250	mg/L	86.6	ISO 9297
3	Total dissolved solid (TDS)*	< 800	mg/L	349	AOAC 973.40
4	Iron (Fe)*	< 0.3	mg/L	0.02	ISO 6332
5	pH	6.50 – 8.50	-	7.08	AOAC 973.41
6	Turbidity*	< 5	NTU	4.00	ISO 7027
7	Total Plate Count	< 100	cfu/1 mL	7.0 × 10 ¹	ISO 6222
8	Coliform bacteria	0	MPN/100 mL	None found	ISO 9308-2
9	<i>Presumptive E. coli</i>	0	MPN/100 mL	None found	ISO 9308-2

* are not covered by the scope of the accreditation.

Phnom Penh, 27 April, 2024
Director



DR. DAVIN UY

A middle-aged man with dark hair, wearing a white long-sleeved button-down shirt, stands in a classroom. He is holding a small, pink, handheld microphone to his mouth with both hands and appears to be speaking. Behind him is a large whiteboard with some faint writing and a window with yellow horizontal blinds. To the right, there is a blue plastic chair and a table covered with a pink cloth. On the wall to the right, there is a small framed picture and a sign with Khmer text. The floor is made of brown tiles.

Today, I am honored to come up and give a feedback



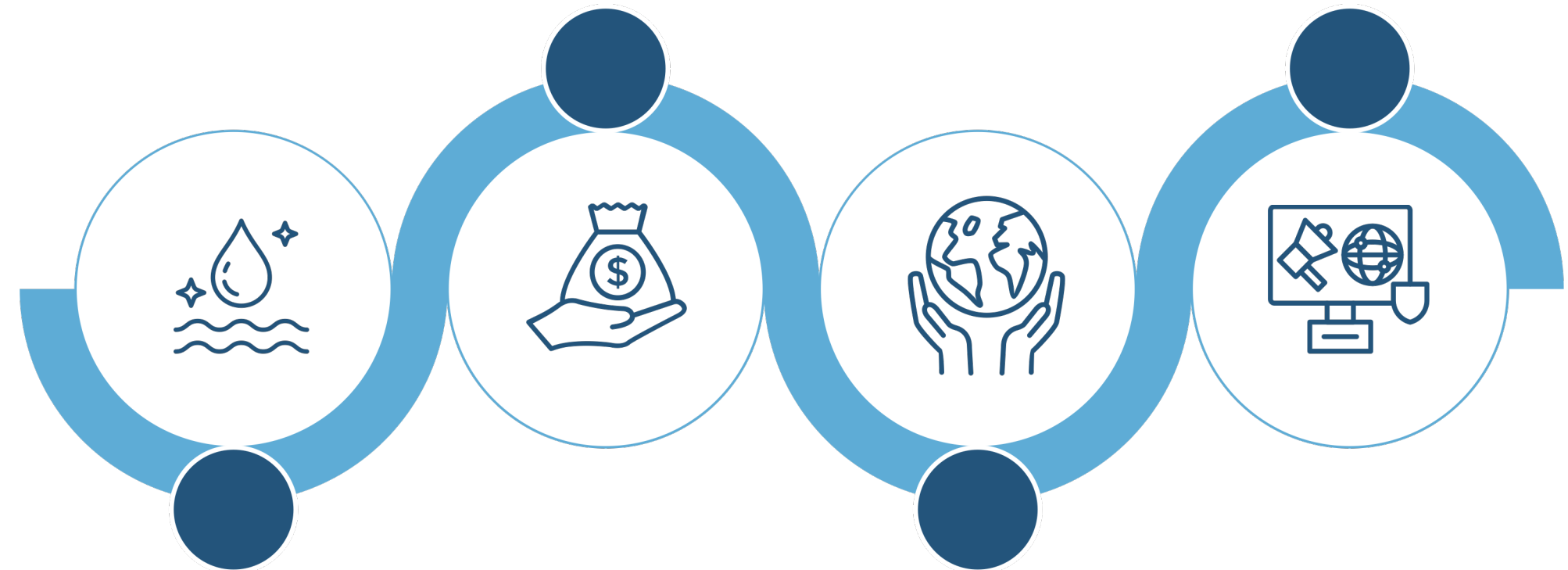
THE PROJECT IMPACT

Economic Impact

Annually it save the community **10,950,000** Riel from buying clean water

Awareness impact

Through community and student workshops, we raise awareness about clean water and waste management.

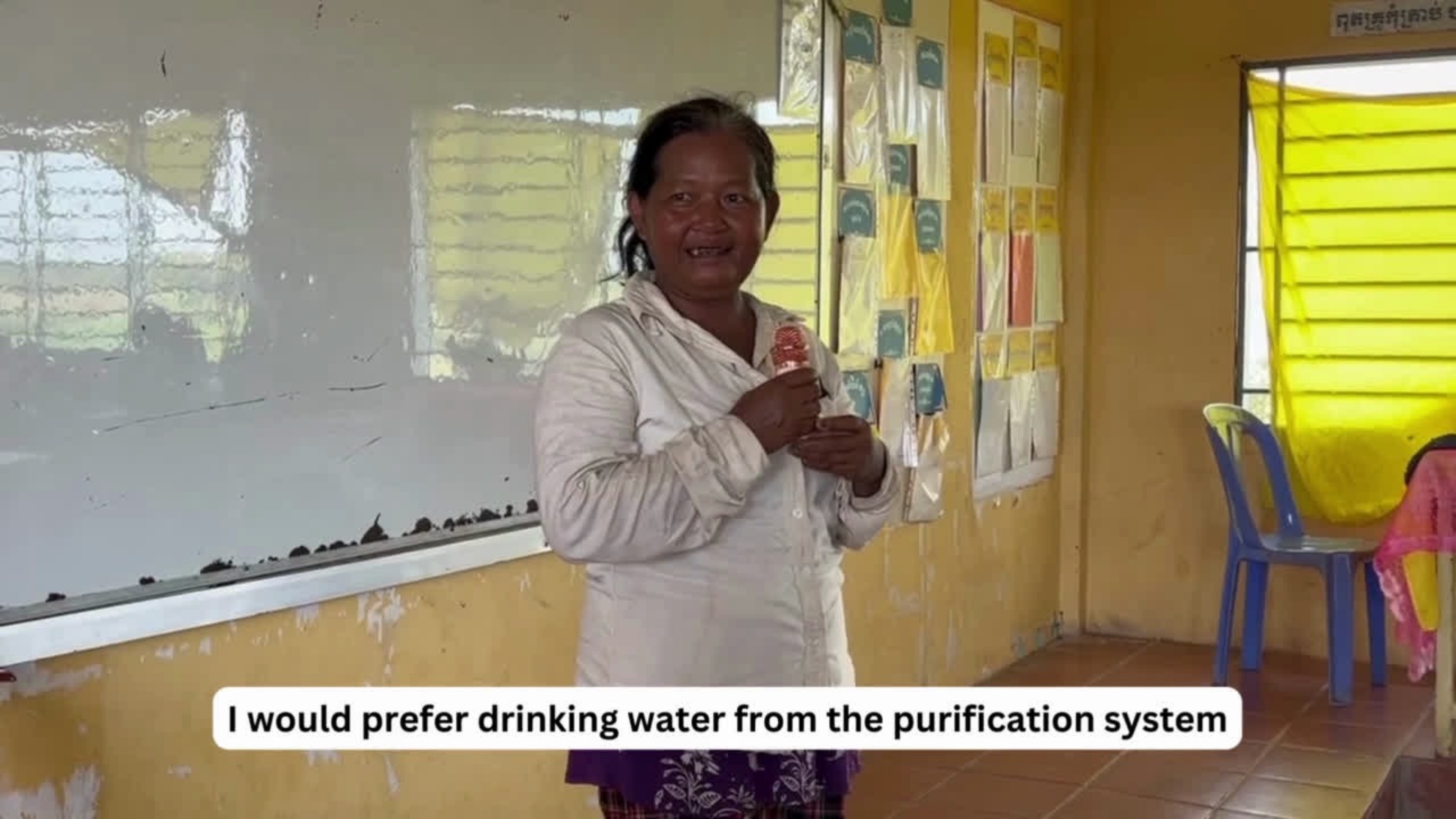


Health and Wealth being

Villager can access clean water for both usage and drinking water

Environmental impact

Imagine reducing **20 plastic bottles** per day; over 365 days, this would result in saving **7,200 bottles**.



I would prefer drinking water from the purification system



HOW DO WE SUSTAIN OUR PROJECT



Working with our partner to maintain the existing product



Create a new business model with the partner to create a port where villagers can access clean water at a lower price



Utilizing our existing connections with past sponsors to form collaborative partnerships and expand our outreach to potential sponsors and the local government



Community enagement with clean water and waste management workshop

DIGITAL AWARENESS



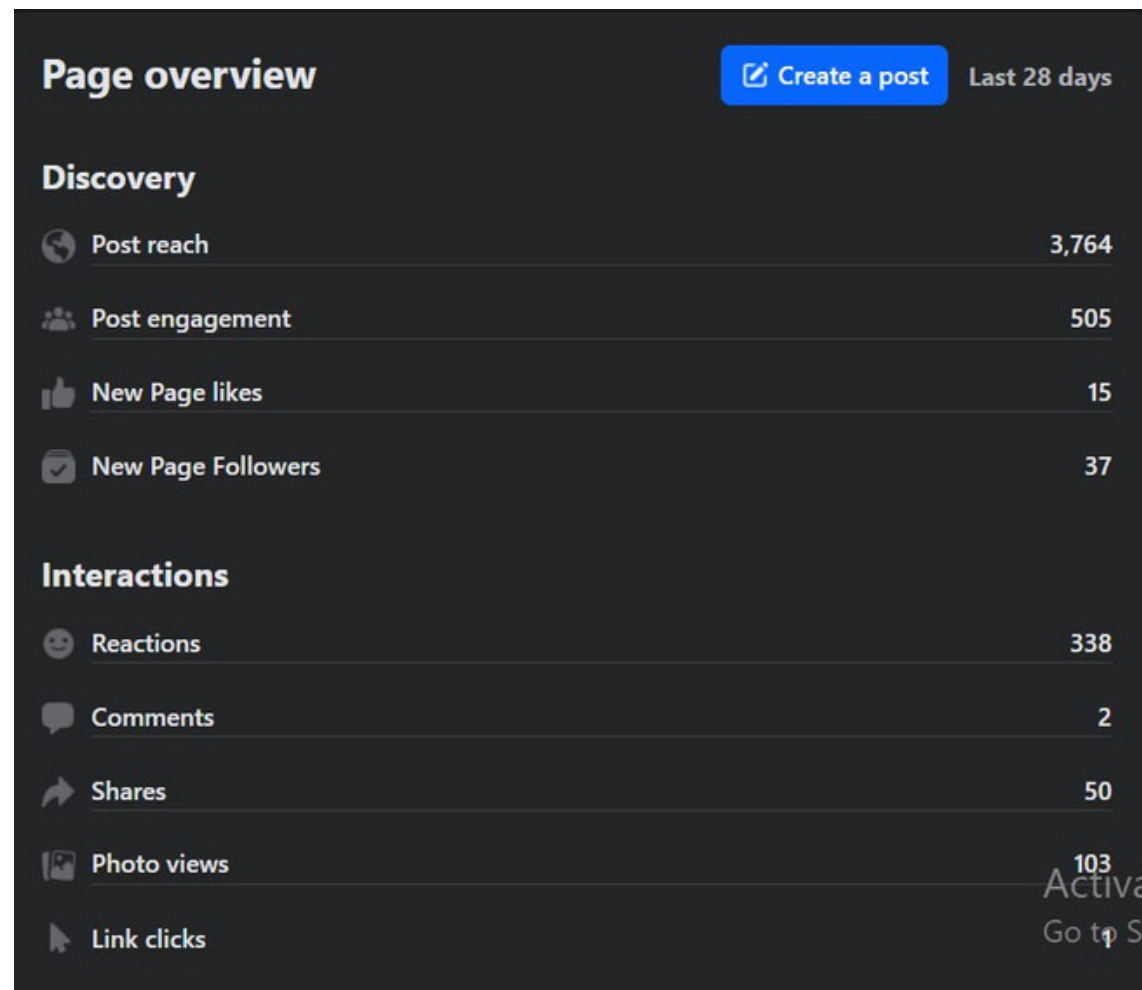
We have achieved 106 followers in 6 weeks.



DIGITAL AWARENESS



- Post Reach = 3,764
- Post Engagement = 505
- Engage 5 public participants to join our workshop



Water

The source of life, should not be a luxury or a danger.



“ទឹកស្អាតដើម្បីសហគមន៍ - Clean Water For Our Community”



Our Best Team



Phal Panhanyta

Marketing, Media & Communication



Lim Meyching

People Experience & Logistic



Heng Pich Solida

Operation, Finance & Sponsorship

Project of :



Program of :



Our Partner:



Main Sponsors:



In-Kind Sponsors:



SDG Goal Alignment:



THANK YOU

“ទឹកស្អាតដើម្បីសហគមន៍ - Clean Water For Our Community”





Appendix

Total Expenses

No.	Description	Quantity	Unit	Price	Amount
I	Site Visit 1				\$ 188.40
1	Breakfast				24.5
2	Lunch				24.5
3	Dinner				30.4
4	Other Expense				109
II	Site Visit 2				\$ 179.60
1	breakfast				15.35
2	Lunch				20
3	Car				90
4	Material				13
5	dinner				11.25
6	boat				30
III	Materials				\$ 326.25
1	Water Purification				\$155.00
2	Tank				\$52.00
3	Water Testing				\$ 50.00
4	Sticker				\$ 10.00
5	Water bottle				\$22.50
6	Plaster + Balm				\$20.00
7	Book + Pen				\$16.75
IV	Site Visit 3				\$917.50
1	Hotel				\$150.00
2	Car				\$360.00
3	Boat				\$103.00
4	Food				\$248.00
5	Pink House				\$14.00
6	water				\$12.00
7	IBC				\$4.50
8	Other Expense				\$26.00
	TOTAL Expense				\$1,611.75

Total Budget

No.	Description	Quantity	Unit	Price	Amount
1	Workshop Participant	5	person	\$80.00	\$450.00
2	Tumblr Sponsor	25	bottle	\$2.00	\$50.00
3	Water Agency				\$1,112.00
	Total Budget				\$1,612.00

Leftover Budget

Leftover Budget	Total Budget - Total Expense	
	1612 - 1611.75	0.25

Site visit



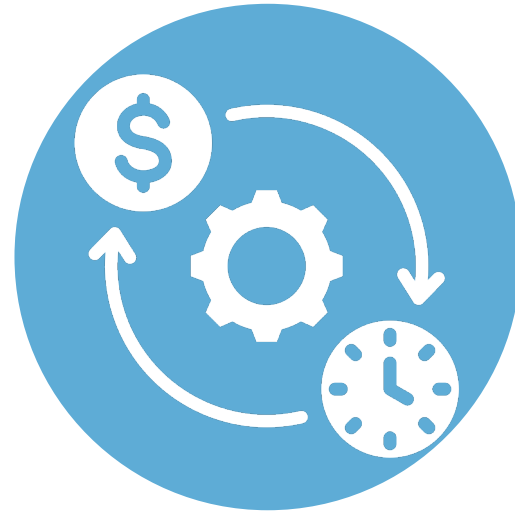
Product Installment



What makes our project stand out?



Easily accessible for
consumers



Eco-friendly and Cost-
Efficiency



Standard Quality
Water



Community health
guarantee



Ongoing Support for Self-Sufficiency
“Teach a man how to fish & we feed them for a
lifetime ”

Problem Statement

Access to clean water is crucial for meeting our daily needs, but individuals residing in the floating village of Prek Toal in Battambang Province face challenges :



Inadequate access to clean drinking water



Poor sanitation and wastewater management

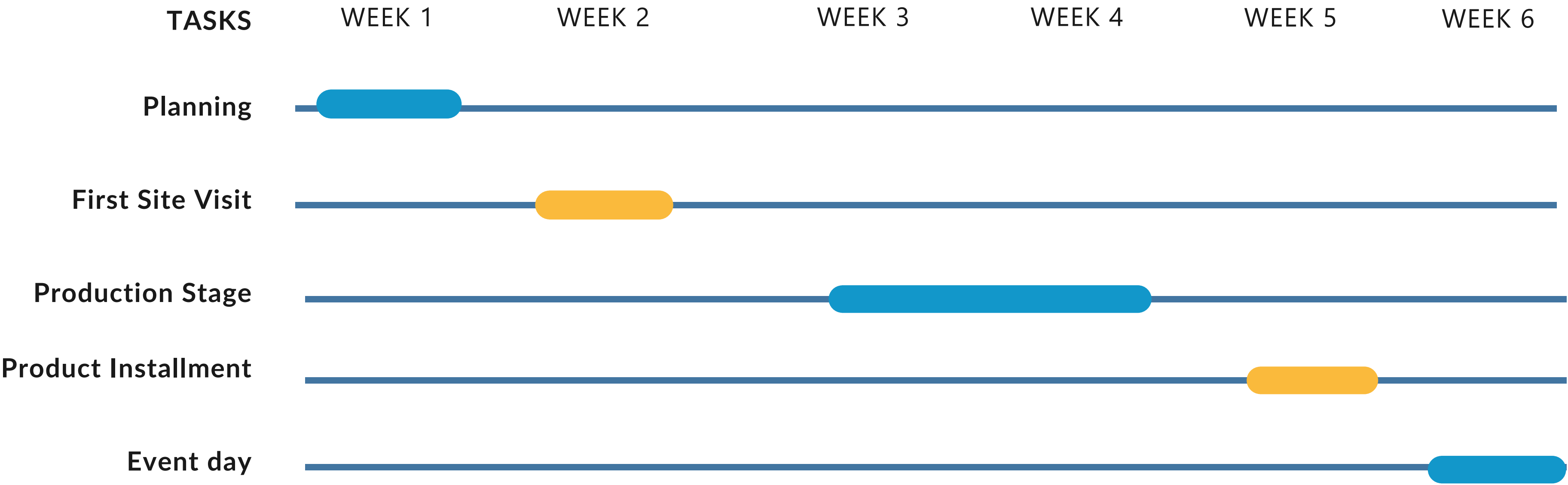


High prevalence of waterborne diseases



Environmental degradation due to unsuitable waste disposal practices

Pilot Project Timeline



Project Action

Site Visit Activity



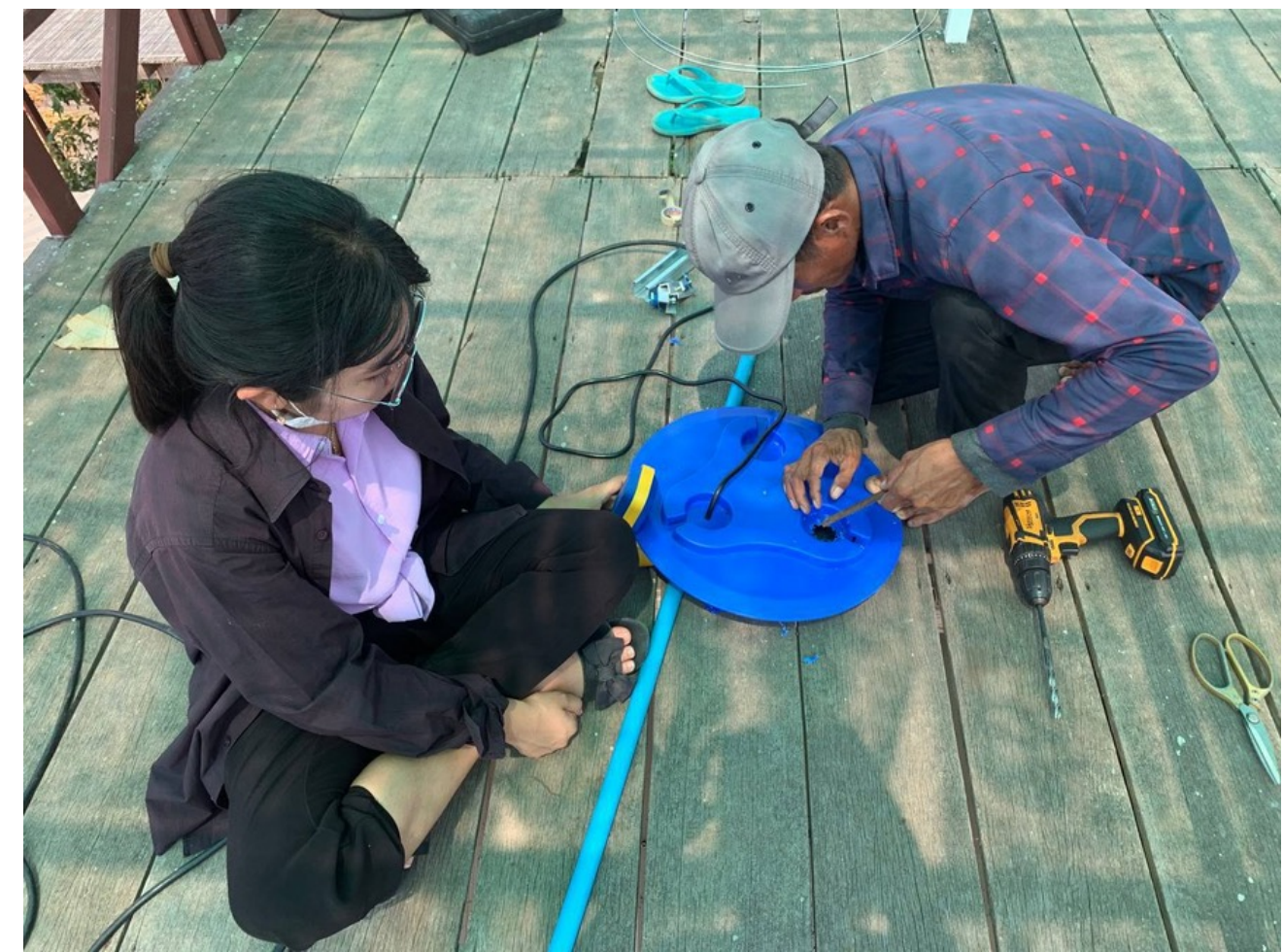
Project Action

Meeting Sponsor



Project Action

Product Installment



Project Action

Workshop day



Long term goal

MINISTRY AND GOVERNMENT



NGOS



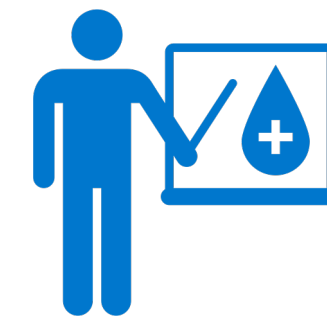
POTENTIAL COMPANY WITH CSR



WASTE COLLECTION COMPANY

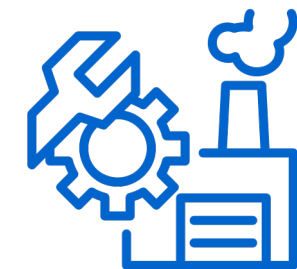


MONTHLY EDUCATIONAL WORKSHOP



• Sustain clean water

• Maintenances



• Digital Awareness Campaign

Timeline

2025(Q1)

Establish Foundation & Conduct R&D

Hire technical experts and business developers for ongoing operations. Conduct deep research. Prototype and test the product and design. Seeking for potential suppliers.

2025(Q2)

Marketing & Collaborations

Develop strong brand identity through media channels. Forge partnership and collaborations.
(Start from Q2 and ongoing)

2025(Q3)

Educational Workshops

Conduct workshops and develop educational materials. Conduct survey participants feedback for improvement.
(Start from Q3 and ongoing)

2025(Q4)

Monitoring & Evaluations

Collect data on water quality improvements and health outcomes. Conduct surveys and interviews with users to assess impact.

2026 (Q4)

Innovate New Product

Conduct deep research. Prototype and test new product and design.

2026(Q3)

Conduct Market Research

Conduct market research for Problem Identification and Problem Solving.

2026(Q2)

Innovate and Improve

Based on feedback and performance evaluation, innovate and improve current product.

2026(Q1)

Marketing & Sales

Scale up the workshops to reach a larger number of participants. Provide incentives for referral programs.