

Water Filtration Tank Construction Project Proposal

Presented by: Pastor Mei Kor (Myanmar)

Email: mkmeikkor@gmail.com

Location: Bamar Yae Thoe Street, Yae Thoe Village, Hmawbi Township, Yangon, Myanmar

Google Map: <https://maps.app.goo.gl/Sav3TNurqpD24Ygb9>

1. Project Summary

We propose the construction of a two-storied water filtration tank to provide clean water for our ministry household, which currently shelters our family and four orphans. Access to clean water is essential for health, hygiene, and sustainable daily living. This project is a critical step toward improving our living standards and ensuring the well-being of those under our care.

2. Background

Myanmar is a sensitive country with many conflicts in the past and ongoing. There are seven states and seven divisions in Myanmar, and the seven divisions are occupied by majority Burmese who are Buddhists. The Christian missionaries were oppressed in many indirect ways, but as we received our call from God, we moved on to manage our conditions in many areas. I was born in a small village of Chin State, where the majority are believers. I received a call from God when I was in tenth grade and later attended Bible school, then served Him as a missionary pastor in a place where the majority were under darkness.

After the military imposed a conscription law requiring all males aged 18–35 (eligible up to 45 years old) to serve, our rented area was greatly affected by the law, and some young men from our neighbors were taken. We are required to report the family member list to the administrative department every 10 days. On January 10, 2025, the village administration announced that all families must submit a copy of their list to the military, and that night, some young men were taken by force and their mothers were left in tears. On January 12, 2025, next to our rented home, our neighbor's son, aged 22 years old, was taken forcefully at midnight, and his father died

from shock. There are many tensions and risks surrounding us, and we are prayerfully seeking to relocate to another location.

We could not urgently find a rental home in a lower-risk area. Our situation now requires us to leave our current place as soon as possible. We found an urban village where there is open field to settle, but to relocate to this urban village, we need to own land there. As we don't have any other option in our current situation, we spent all our emergency savings and borrowed 18,000,000 MMK (equal to \$4,000) from others to buy a piece of land. In short, we urgently built a bamboo home and moved there completely on February 25, 2025. Therefore, when we relocated to a new place, it had given into a debt, and we now cannot afford for our filtration tank construction.

An open-field before we built a home



After building with a bamboo-home



3. Clean Water Challenge

When we settled in the new location, we found a major issue that concerns our health in the long run. Our water contains minerals that change color into yellow and become muddy. We are using it directly from the Artesian Well, which we dug 80 feet into the earth (approximately 25 meters). The water looks clean and white when we first pump it, but it slowly turns into a muddy color. The next morning, the water looks like oil, but it is actually an iron-yellow color. The smell from the first pump is like iron and also a kind of cow urine. We have been drinking it since we moved here.

My daughter, Deborah, who is 2 years old, had stomach pain a few weeks ago. She used to cry hard, putting her hands on her belly. We didn't notice it at first, but some of our orphans also mentioned the same symptoms. It is not all the time, but it happens occasionally.

The direct pump from the Artesian Well is used for cooking, bathing, and washing clothes. Our white clothes are slowly turning yellow within a few months. We therefore are concerned about our health, and the construction of a filtration tank can provide clean water and a sustainable solution.

Digging water on the earth



After installation Pump



The water slowly turns into oily and yellow the next morning.

4. Current Challenge

Myanmar's rainy season (June-September) brings heavy and frequent rainfall, flooding our entire campus and surrounding our home with standing water. During these times, the water we pump from our artesian well becomes muddy, yellow, and often smells metallic, making it unsafe for drinking or daily use.

We believe either minerals from deep underground rise due to pressure, or contaminated surface water seeps into the well. The children, especially the orphans and my kids, are at high risk of waterborne diseases like diarrhea, skin infections, and typhoid. All our skins are itchy and we sometimes experienced typhoid. We believe it would be because of the water. (Photo: our current living in rainy season)



Artesian Well flooded by rain.

5. Filtration Tank Details

Tank Size: Lower – 7 x 5 feet, Upper – 5 x 5 feet

Height: 6 x 5.5 feet

Structure: Two-storied design (primary filtering + storage)

Material: Concrete

Location: Ministry compound/home compound

Beneficiaries: 1 family + 4 orphans (plus members, guests and ministry use)

This family and Orphans, church members and guests will receive a valuable outcome from clean water project. The water will provide secure, safe and personal hygiene to the kids, family and those who around us.

Our Orphan Kids and Pastor Mei's Family



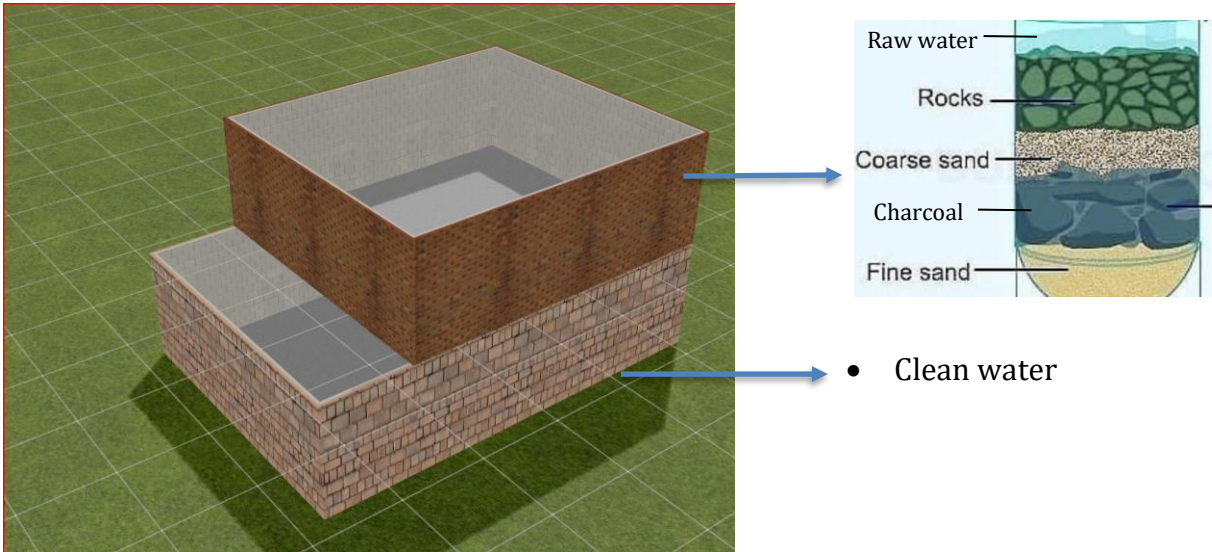
The Home church family member



We use the water for cooking, bathing, washing and sometimes for drinking when we cannot boil it. We drink directly when we cannot afford the firewood for boiling. (Photo: Pastor Mei's wife cooks for the food).



Two Steps Natural Filtration Tank Sample (for daily use)



6. Additional Filter System (for drinking)

A natural filtration tank will result to be able to use a clear water for **cooking, bathing and washing clothes**, but **we could not use it for drinking**. A clean water but it may still contain bacteria, therefore we still need additional filter system that kill bacteria, viruses, parasites, sediments and more.



Water Filter System

300GPD will result will provide 30 liters per hour.

Note: This can only use with electricity. Myanmar has fewer given power daily, however, providing 30 liters per hour would sustain our daily use.

7. Ongoing Consumables & Maintenance

For both the **Water Filter System** and the **Filtration Tank** to continue providing clean water, they will need regular maintenance and replacement parts.

In the **Water Filter System** pre-filters (sediment and carbon filters) need to be changed every 3-6 months, and the **Water Filter System** membrane itself might need replacement every 1-3 years.

In addition to the **Water Filter System** system's filter replacements, the **Filtration Tank** itself will also require periodic cleaning and maintenance. Over time, sediment, iron, and other particles from the raw well water will accumulate in the sand and gravel layers, which will reduce the filter's efficiency and flow rate. The cleaning process will involve manual cleaning and full replacement of the filter materials (especially charcoal, which loses its ability to remove odors over time) might be necessary every 6-12 months, depending on usage and water quality. We expect to have maintenance every 6 months.

8. Estimated Budget

Item	Qty	Estimated Cost (USD)
Cement	10	\$ 70
Brick	2,500	\$ 165
Sand	30	\$ 25
Iron	6	\$ 90
Labor		\$ 120
Filter system (sand/charcoal/gravel)		\$ 15
Plumbing (pipes, taps, connectors)		\$ 10
Miscellaneous (transport, setup)		\$ 20
Water Filter System	1	\$ 270
Ongoing maintenance cost (1 Year):		
Water Filter System pre-filters (2 times per year)		\$100
Water Filter System membrane		\$50
Labor (Filtration Tank cleaning)		\$70
Replacement of Filtration Tank materials (Charcoal/Sand)		\$ 15
Transport for Filtration Tank media (Charcoal/Sand)		\$30
Water Pump	1	\$85
Total Estimate		\$ 1,135

*Note: without water filter system, the natural filtration tank construction would cost only \$ 630.

9. Expected Impact

- Daily access to clean water.
- Long-term savings on medical costs related to poor water quality.
- Improved living conditions for orphans in our care.
- Model project for other ministry homes or village churches.

10. Sustainability Plan

We are located in an urban village and our village receives electricity only a few hours a day, often at odd times like midnight or noon. This makes it difficult to boil water regularly. While we sometimes use firewood, it is **expensive and unsustainable**, costing us for **10–15 bundles daily**, which is beyond our means.

Installing a **gravity-based water filter tank** and **filter system** will provide clean water **without relying too much on electricity or fuel**, reducing long-term costs and ensuring safe water for our family and the orphans. This is a **sustainable, low-maintenance solution** for our daily needs.

11. Call for Partnership

We prayerfully invite churches, individual donors, and organizations to join us in this vital project. A small contribution can make a great difference in the lives of our vulnerable children and household.

Contact Information

Pastor Mei Kor

Living Stream Ministries

Email: mkmeikor@gmail.com

Phone: +95 940 499 8689

Website: www.lsmom.org/project

“And if anyone gives even a cup of cold water to one of these little ones who is my disciple, truly I tell you, that person will certainly not lose their reward.” – Matthew 10:42