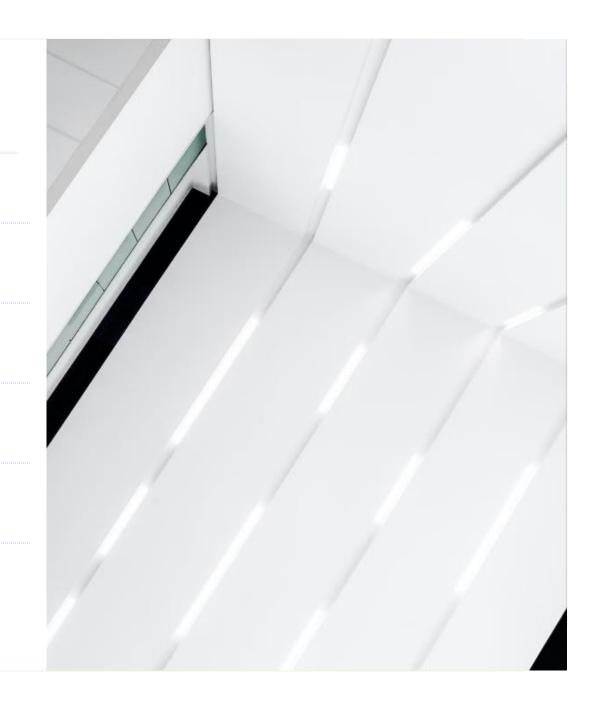


#### **Table of Contents**

- The Overview
- Problem
- Objective
- Methodology
- Solution & Innovation
- 6 Market & Opportunity



## The Overview

## **Scalability**

Its modular design allows for easy expansion or customization to meet different water reuse needs.

## **Accessibility**

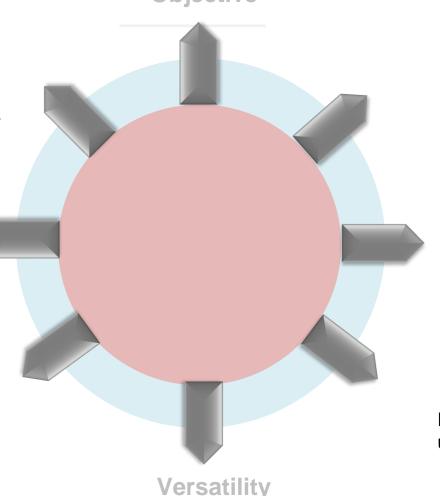
Our system is designed to be accessible and easy to install, making it suitable for a wide range of users and settings.

## **Impact**

Significant impact on reducing water footprint and promoting sustainable water management practices.

To treat greywater effectively for reuse in various non-potable applications.

## Objective



## **Functionality**

This multistage filtration process ensures that the greywater is thoroughly.

#### **Tech Integration**

smart monitoring system (WQQM system), which provides real-time data on water quality parameters.

#### **Alert System**

Dedicated Alert System for notifying users about issues or maintenance

The design of our system makes it versatile and suitable for various non-potable uses.

# The Problem

Problem & Pain Points:

Innovation & Solution:

Key Elements:

Brief Tech Involved:

#### **Problem:**

•Water scarcity and contamination in India.

#### **Pain Points:**

- Limited access to centralized water treatment.
- Health impacts due to contaminated water.
- High costs of existing water solutions.

#### **Concept:**

A decentralized Grey Water Treatment methodology

 Targets grey wastewater, a significant contamination source.

## **Affordable Pricing:**

Priced at 20,000 rupees, making it accessible.

## Kitchen Wastewater Purification:

Addresses contamination concerns.

## **Decentralized System:**

Targets areas with limited centralized treatment

## **IoT Integration:**

- •Real-time monitoring of water quality.
- Alert system for timely

## **App Development:**

•Supports real-time monitoring through a user-friendly app.

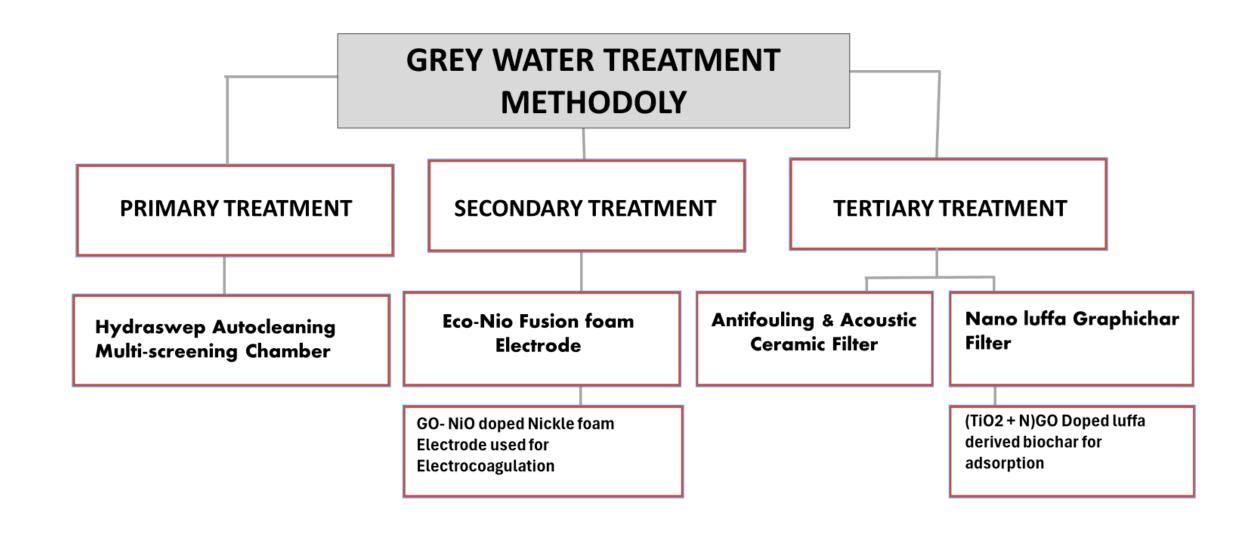
## **Water Treatment Technology:**

Advance water filtration unit for kitchen wastewater purification

# Objective

Objective of our innovative greywater filtration system is to provide a sustainable solution for treating greywater and making it suitable for various non-potable uses.

- Water Conservation
- Environmental sustainability
- Cost Effectiveness
- Health and Safety
- Scalability
- Education and Awareness

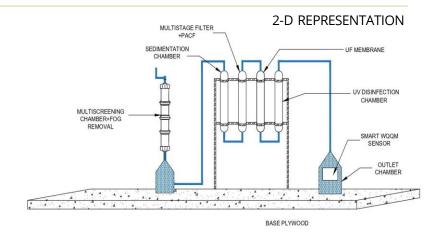


Solution & Innovation

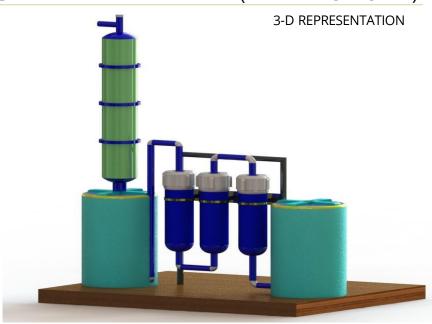
#### KITCHEN/ BATHROOM 0000 SCREENING CHAMBER BLACK WATER **TECHNICAL ROOM** Sensors ACTIVATED UF CHARCOAL Membrane/ TAP (DISCHARGE) DISINFECTION CONTROL MULTISTAGE FILTER Oxidation STORAGE CHAMBER Bore well Ground water solenoid recharge valve

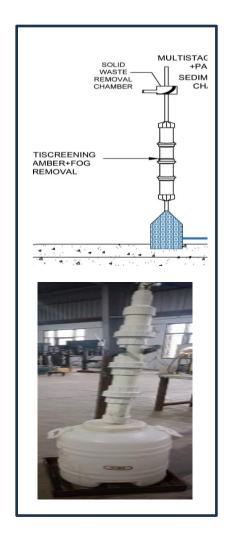
## WATER TREATEMENT PLAN

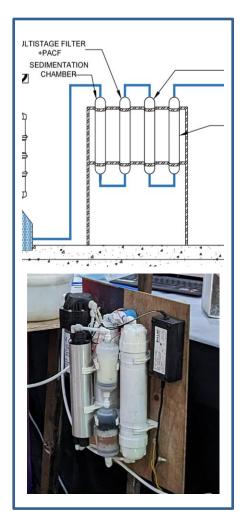
## Aquafy Grey Water Treatment Unit.

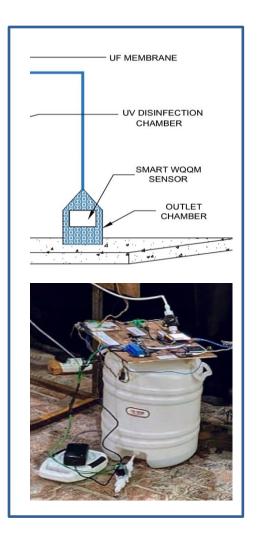


#### GRAY WATER TREATEMENT(FILTRATION UNIT)

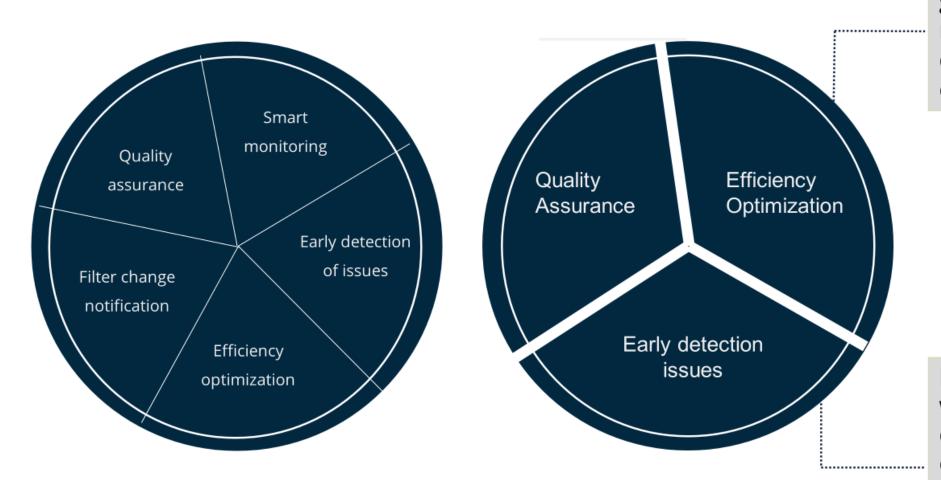








Filtration Unit System

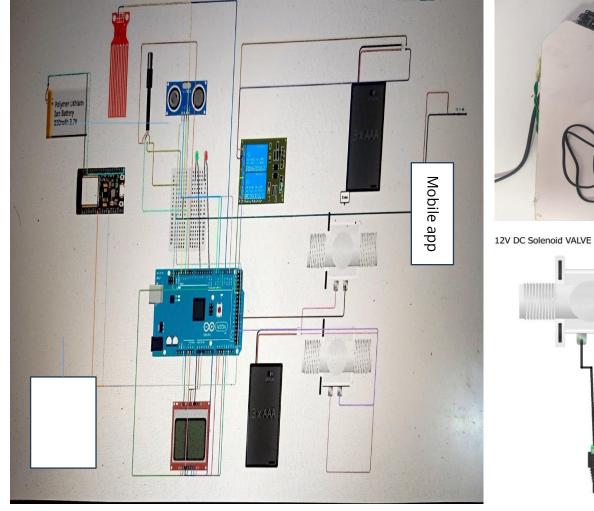


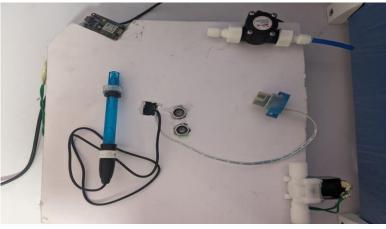
The WQQM System to generate alerts & notifications in case of deviation from desired level of water quality parameter.

Realtime monitoring of water quality parameters can help optimize the operation of your treatment system.

## **SMART WATER QUALITY AND QUANTITY**

## MONITORING SYSTEM (Embedded IOT)





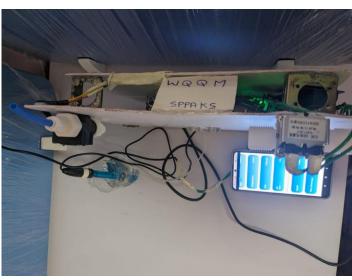
Single Channel Relay Module

12V DC JACK

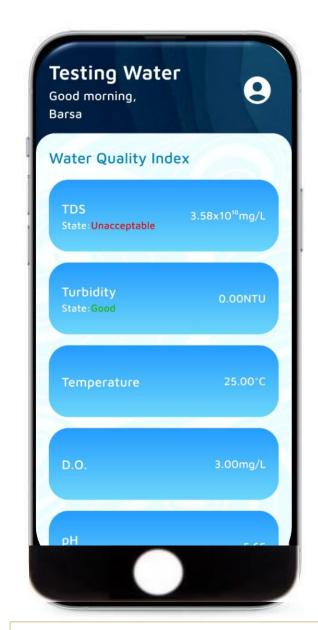


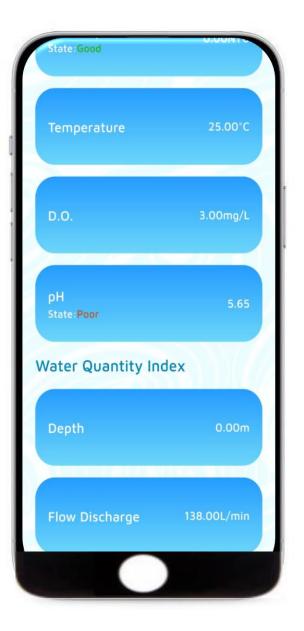








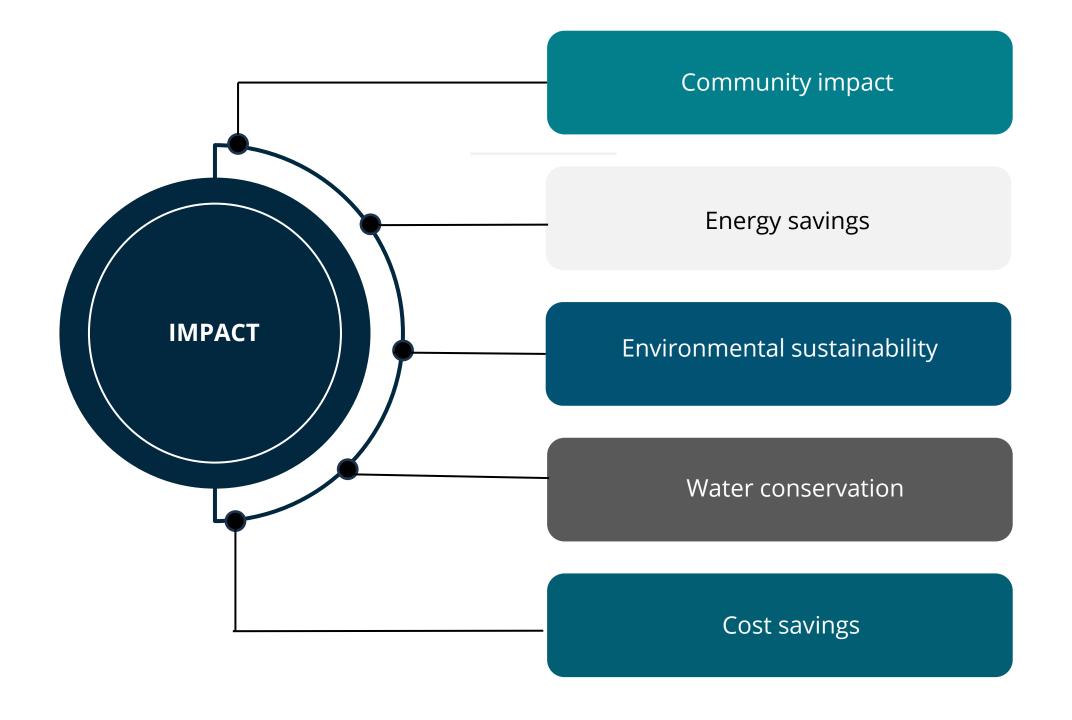




U I Interface of AQUAFY App



- Cost-Effective Retrofitting
- Sustainability and Resources Optimization
- Decentralized approach
- Smart Monitoring and Alerts for Timely Intervention
- Remote Maintenance Integration for Efficiency
- Environmental Friendliness
- Long-Term Sustainability and Predictive
  Capabilities for CSR activities as well.



# **Business Perspective**

## **Competitors Overview**

#### EnviroWay



- Extensive Service
  Network
- Operationally Expensive
- Not suitable for small scale

#### Siemens



- Al for predictive analysis
- High complexity
- High cost barriers.

#### Aqua Mech



- Industrial-scale solutions
- High setup cost
- Limited focus on affordability.

- Green chemistry
- SustainableSolutions
- Lacks
  Affordability
- Real-time monitoring



Evoqua

- Advanced industrial hydronic systems
- Not affordable for small scale deployment



**GE Vernova** 

- Advanced filtration
- High maintenance cost
- Limited smart features



Thermax

#### Cost effective solution

- Priced at Rs- 25,000/significantly more affordable than competitors
- Ideal for small scale and individual use

#### **Smart Technology**

 Machine learning enhances predictive maintenance, automated reporting, and water quality monitoring.

#### Real-time Monitoring

 IoT integration enables real-time tracking of Ph, TDS, turbidity, BOD 7 COD for proactive maintenance

#### Efficient treatment

 Innovative self-cleaning chamber, electrocoagulation units, and anti-fouling membranes ensure superior water purification with minimal manual intervention.

## CONCLUSION

Aquafy systems offers a uniquely affordable, smart, and efficient solution in a market dominated by costlier and less versatile competitors, making it ideal for widespread adoption in resource-constrained environments.

## **Business Model**

#### Revenue Model

#### 1.Direct Sales

- 1. Unit Price: ₹25,000
- 2. Profit per Unit: ₹5,000
- 3. Target Sales: 500 units/year
- 4. Annual Profit: ₹2,500,000

#### 2.Subscription Service

- 1. Fee: ₹500/month per unit
- 2. Target Subscriptions: 300 units/year
- 3. Annual Profit: ₹1,000,000

#### 3.Extended Warranty

- 1. Fee: ₹2,000 per unit
- 2. Target Sales: 200 units/year
- 3. Annual Profit: ₹300,000

## Total Operating Income

#### 1. Incorporating Cost of ₹20,000:

- 1. Assume each unit has a production or operational cost of ₹20,000.
- 2. Calculate the total cost of revenue
- 3. Cost of Revenue = ₹20,000 (500 + 300 + 200) = ₹6,000,000
- 4. Gross Profit = ₹12,500,000 (from direct sales) + ₹1,800,000 (from subscription services) + ₹400,000 (from extended warranties) = ₹14,700,000
- 5. TOI = Gross Profit Cost of Revenue = ₹14,700,000 ₹6,000,000 = ₹8,700,000

## Investment | Costing

• Total cost per unit: Rs- 20,000/-

#### **BREAKDOWN:**

- 1. Development and Initial setup: Rs- 1000/
  - a. Includes- Design, R & D, initial setup, and prototyping
- 2. Operational cost: Rs.- 3,500
  - a. Includes- Power consumption, routine maintenance, and monitoring.
- 3. Filter change and Maintenance: Rs.- 2,000/
  - a. Includes- Regular filter replacement and minor maintenance.

#### Profit Margin:

- Selling Price: Rs.- 25,000/- per unit
- Profit: Rs.- 5,000/- per unit (25% profit margin)

