

JeevaFlow

Venture Viability Analysis

Fr. Conceicao Rodrigues College of Engineering ,Mumbai, Maharashtra

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Smart water, healthy lives our AI and IoT-powered device spots waterborne risks before they strike.

**Fr. Conceicao Rodrigues College of Engineering
, Mumbai, Maharashtra**

SMART WATER, HEALTHY LIVES

Our AI and IoT-powered device
spots waterborne risks before
they strike!



Context

37M+ Indians get water-borne diseases yearly; 117k child deaths link to unsafe water.



SMART COMMUNITY AND HEALTH MONITORING: Early Warning System For Waterborne Diseases

1 GOOD HEALTH AND WELL-BEING



Problem Statement

Problem

Unsafe water causes hidden illness. Our app detects early risks to keep families healthy.

Impact

Water-borne diseases cause sudden sickness, missed school and work, high medical costs, and pressure on families and health systems.



Problem Statement/Industry

Problem Being Solved

Many people don't realize the water they drink or use every day could make them seriously sick. By the time symptoms appear, it's often too late, the illness has already spread, and families struggle to get proper care in time. There aren't easy tools that help people on time. Our app steps in early, spotting warning signs before the situation

Supporting Data

37M+ Indians get water-borne diseases yearly; 117k child deaths link to unsafe water.

Source: United Nations in India – “Health, Water and Sanitation” Report, 2022



Area
Health



Industry
Pharmaceuticals,
Healthcare and Wellness



Domain
Telemedicine & Digital
Health

Problem Analysis



Affected Stakeholders

People living in areas with limited access to clean and safe drinking water are the most affected, especially families in rural communities, low-income urban neighborhoods, and places with poor sanitation systems. Children under 5, elderly individuals, and those with weaker immunity are at the highest risk of getting sick from contaminated water.



Impact on Stakeholders

They often fall sick without warning, leading to missed school and work, high medical expenses, and emotional stress on families. Communities can face frequent outbreaks, and local health systems become overloaded trying to treat preventable diseases.



Root Causes

This problem exists because many communities still lack access to clean drinking water and proper sanitation. Water sources get contaminated due to poor waste management, industrial pollution, and limited awareness of hygiene. Slow detection and late action allow diseases to spread quickly.



Personal/Team Connect

We've seen how unsafe water silently harms families and disrupts lives. We want to build a solution that helps people stay healthy with early warnings, not late treatments. Working on this problem lets us make a real difference in protecting our communities and giving everyone access to safer water.

Target Customer Segments

Primary

Parents aged 25–45 with young children relying on unsafe or uncertain water sources.



Secondary

Local municipal health departments responsible for water quality monitoring.

Customer Segment & Persona

Primary Segment

Parents aged 25–45 with young children relying on unsafe or uncertain water sources.

Persona



Secondary Segment

Local municipal health departments responsible for water quality monitoring.

Brijesh Beura

Age in years: 40

Location: Rural

Organizational Role: {Persona's primary role}
(if applicable)

Customer Profile



Education: No formal education

Gender: Male

Occupation: Self-employed

Interests/Hobbies: Arts and Crafts

Primary Source of Information: Traditional Media (TV, Newspapers)

Shopping Preference: Mostly Offline

Comfort with Technology: Low

Favourite Social Media: Facebook

Favourite Offline Gathering Spots: Tea shop in his village

Jobs-to-be-Done

Functional JTBD



Ensure the water his family drinks is safe and clean. Detect early signs of water contamination or water-borne disease symptoms. Get timely alerts before anyone in the family falls seriously sick.

Emotional JTBD



Feel confident that his family is protected from water-related illnesses. Feel relieved instead of constantly worrying about water safety. Feel in control of his family's health and everyday choices.

Social JTBD



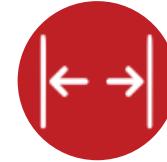
Be seen as a responsible family member who protects his loved ones. Show others he is aware and proactive about health and safety. Gain respect in his community for making smarter health decisions.

Current Alternatives



Current Alternatives

Boils water before drinking to try removing germs. Buys packaged drinking water when he feels the water quality is bad. Uses basic household water filters or purifiers.



Gaps in Current Alternatives

He still worries daily about water safety and his family's health because current methods don't detect problems early, they only react after someone becomes ill.

Problem Validation (GOOTB)

Partial List of Potential Customers/Users Interviewed

Name: Ashutosh

Occupation: service

Name: Arya

Occupation: Student

Name: Grinal

Occupation: Teacher

Problem Validation

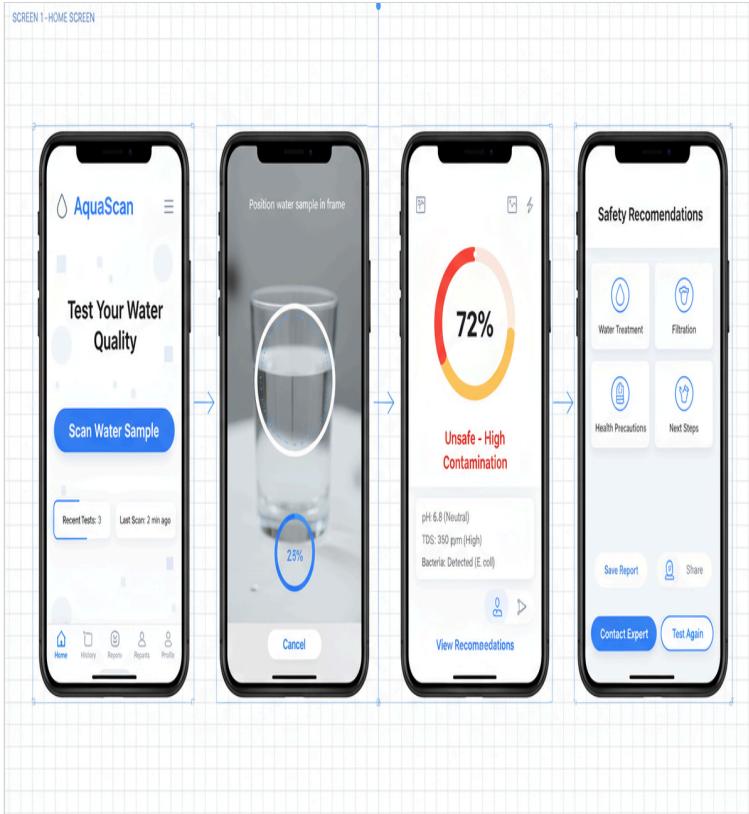
Total customers/users interviewed:

- In-person: 4
- Virtually: 6

Total customers/users for whom this problem is important to solve: 7

Total customers/users who are dissatisfied with the current alternatives: 2

Our Solution



Solution

A device that provides early alerts about unsafe water in the community and allows families to quickly test their water using low-cost check strips, with voice and icon support for easy use

Core Technologies/ Methodologies

IoT sensors, AI/ML models, mobile app, cloud storage, data analytics, SMS, and API integration.

Solution Design



Our Solution

A device that provides early alerts about unsafe water in the community and allows families to quickly test their water using low-cost check strips, with voice and icon support for easy use



Key Features

Real-time water monitoring, AI risk prediction, mobile app alerts, health data integration, and dashboards for officials.



Uniqueness

Our device uniquely combines IoT water sensors, community health data, and AI prediction to detect waterborne disease risks early and alert users in real time.

Solution Format:

A smart IoT- and AI-based device with a mobile app

Core Technologies/ Methodologies:

IoT sensors, AI/ML models, mobile app, cloud storage, data analytics, SMS, and API integration.

Solution Benefits



Functional Benefits

Real-time alerts on water contamination. Early detection of waterborne disease risks. Easy access to water quality and health data. Quick reporting through app or SMS.



Emotional Benefits

Peace of mind knowing their water is safe. Confidence in protecting their family's health. Trust in technology that cares for their community. Empowerment through awareness



Social Benefits

Healthier, safer communities with fewer disease outbreaks. Stronger collaboration between families and health workers. Improved trust in local health and water systems.



Macro Benefits

Society: Healthier communities, fewer diseases.
Economy: Lower healthcare costs, higher productivity.
Ecology: Cleaner water and sustainable use.

Competitors



Direct



mWater, WaterScope
Aquagenx, DrinkSafe

Indirect

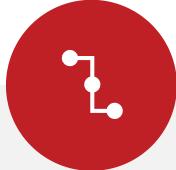


Government water safety alerts, RO water purifier companies
Bottled water brands, Hygiene/Water safety NGOs

Our UVP

AI-driven water testing with instant alerts, saving time, lowering health risks, and ensuring clean.

Competitors



Direct Competitors

mWater, WaterScope



Indirect Competitors

Government water safety alerts, RO water purifier companies



Direct Competitors Globally

Aquagenx, DrinkSafe



Indirect Competitors Globally

Bottled water brands, Hygiene/Water safety NGOs

Macro Analysis

Favourable Trends

AREA	DESCRIPTION
Social	People are becoming more aware of contaminated drinking water and its health effects.
Technology	Rising smartphone usage allows more families to use mobile solutions for health and safety.

Unfavourable Trends

AREA	DESCRIPTION
Economy	Costlier test strips and logistics make affordable rural solutions difficult.
Technology	some rural areas still lack reliable internet, which can delay alerts and reduce app usage.

Data Sources:

World Health Organization – Water Quality Report 2023, Government of India Rural Internet Penetration Report 2022.

Back-of-the-Envelope Financial Projections



Currency: Indian Rupee (INR)

Chosen Business Model: Subscriptions

AREA	YEAR 1	YEAR 2	YEAR 3
Revenues	1200000	1800000	2400000
Total Expenses	900000	1200000	1350000
Profit	300000	600000	1050000

Prototype

Prototype Format

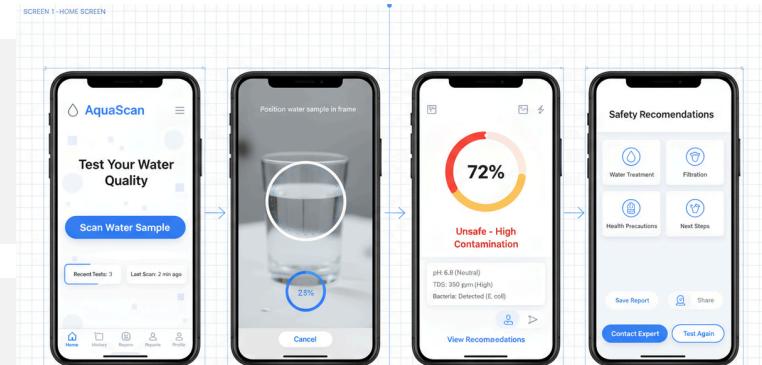
Mobile app prototype in Figma showing water scan, contamination results, and safety recommendations.

Functionality included in the Prototype

A system that can be operated online Login. Scan or enter water testing data. Display contamination results with color-coded risk levels. Provide safety suggestions and preventive tips.

Functionality NOT included in the Prototype

Real-time sensor integration. In-app payments/subscriptions. AI-based predictive analytics. Location-based contamination alerts.



Prototype Validation

Number of users engaged with?

10

How many people liked or loved the prototype?

8

How many people were either neutral or mostly unhappy with the prototype?

2

Prototype Feedback

What aspects of the prototype did the users LOVE?

Users loved the simple scanning process and quick results. They appreciated the clean layout, easy navigation, and clear contamination indicators with helpful safety tips.

What aspects of the prototype were DISLIKED by the users?

Some users felt the system's app needed more languages and offline access. A few found that the result details lacked deeper explanation and wanted alerts for nearby risky water sources.

Competition Analysis

COMPETITOR NAME	TYPE	STRENGTHS	WEAKNESSES
Aquagenius	Direct	Accurate AI water checks.	High cost, limited availability.
WaterChecker App	Indirect	Simple interface, affordable.	Not fully accurate in detection.
Aquagenx	Direct	Accurate results for rural areas.	Limited digital features.
Hach	Indirect	Highly accurate and advanced.	Expensive.

Our Product/Service will be better than the competitors' solutions because:

- 1** More affordable and accessible for rural communities. **2** Instant AI-based contamination detection with real-time alerts. **3** Easy-to-use mobile interface with actionable safety recommendations.

Market Size & GTM

GTM Channels

Digital

Social media platforms: Instagram, Facebook, LinkedIn, YouTube
Online ads: Google Ads, Meta Ads
SEO for search visibility (water quality testing, contamination alerts)

Physical

Community awareness drives & health camps
Partnerships with schools, hospitals & RWAs
Flyers/posters in urban residential areas
Demonstrations at apartments & water purifier shops

Market Size

Globally:
TAM: ₹10,000 Crores
annually

Growth Rate:
India Water Testing
Market: USD 2.4B
(2024).

Source: WHO Water Report 2023, India
Govt Internet Data.

Market Size

Total Addressable Market (TAM)

TAM: ₹10,000 Crores annually

Serviceable Available Market (SAM)

SAM: ₹1,500 Crores annually

Serviceable Obtainable Market (SOM)

₹2.5 Crores in the first 2 years .

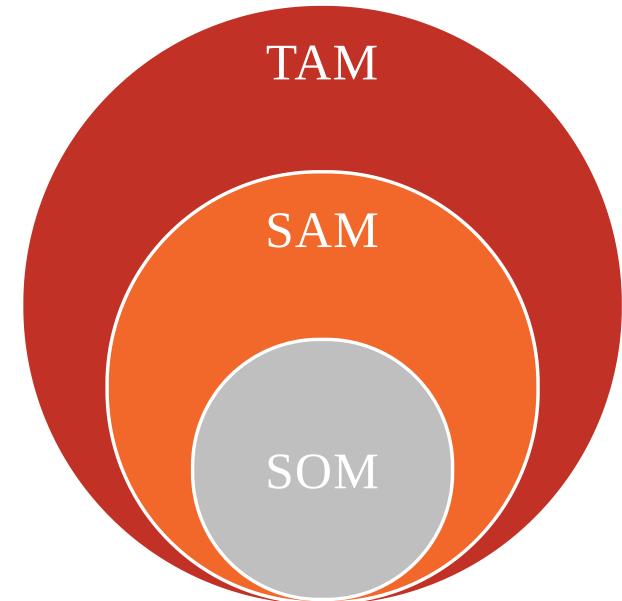
Assumptions

We are focusing only on the Indian market where rural and semi-urban populations struggle with access to safe drinking water. Our product is relevant to households using local water sources like wells, borewells, rivers, and tanks.,

500,
50000

Sources of Research

WHO Water Report 2023, India Govt Internet Data.



Revenue Models / Pricing

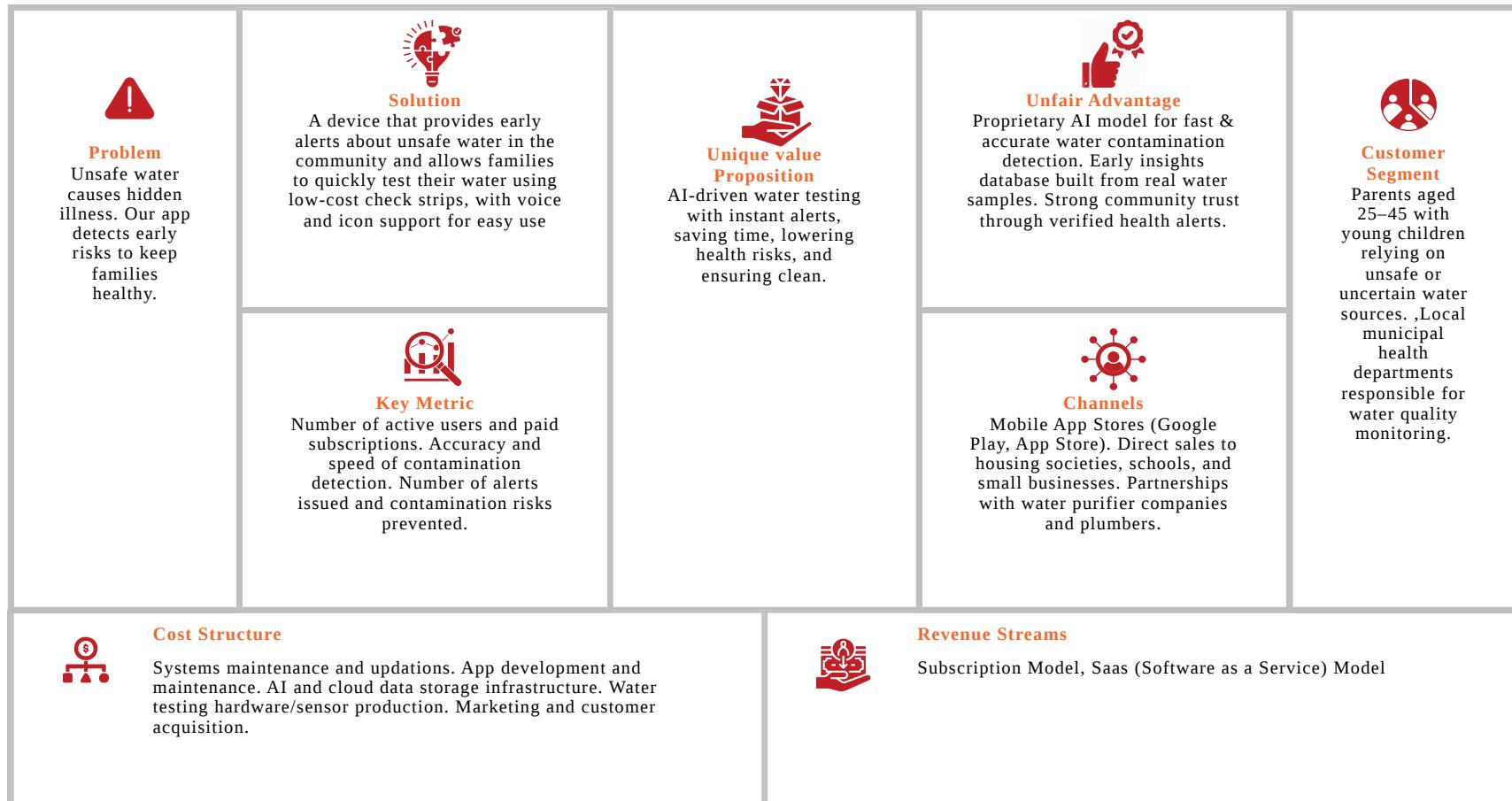
Revenue Model (Primary)

Subscription Model

Revenue Model (Secondary)

Saas (Software as a Service)
Model

Lean Canvas



Go-to-Market Approach

Geographic Focus

Bangalore, Hyderabad & Mumbai — large populations using water purifiers &
apartments Delhi NCR — frequent water contamination alerts

Digital Marketing Channels

Social media platforms: Instagram,
Facebook, LinkedIn, YouTube
Online ads: Google Ads, Meta Ads
SEO for search visibility (water
quality testing, contamination alerts)

Physical Marketing Channels

Community awareness drives &
health camps Partnerships with
schools, hospitals & RWAs
Flyers/posters in urban residential
areas Demonstrations at apartments
& water purifier shops

PRIMARY CUSTOMER SEGMENT

Parents aged 25–45 with young children
relying on unsafe or uncertain water
sources.

UVP

AI-driven water testing with instant alerts,
saving time, lowering health risks, and
ensuring clean.

Marketing KPIs

Customer Acquisition Cost (CAC) &
Conversion Rate Number of active
users testing water monthly App
engagement metrics — alerts
viewed, tests logged Customer
satisfaction (CSAT/NPS)

Competitors' GTM

Competitor A uses strong digital
marketing on YouTube & Instagram
to build trust Competitor B heavily
relies on partnerships with purifier
brands & health organizations

GTM Partners

Resident Welfare Associations (RWAs) in apartments & gated communities Water
purifier brands & local purifier dealers Hospitals, clinics & diagnostic centres for
trust-building

Sales & Customer Service

Customer Service

In-app support chat with AI-powered assistant Customer service helpline (phone)
WhatsApp support & automated alerts Email support for troubleshooting & test queries

Distribution Channels

Mobile App Stores (Google Play, App Store). Direct sales to housing societies, schools, and small businesses. Partnerships with water purifier companies and plumbers.

Digital Sales Channels

Official Website with subscription plans & online payments Mobile App (Google Play Store / App Store) for purchases & upgrades Marketplaces: Amazon, IndiaMART & Meesho Business

PRIMARY CUSTOMER SEGMENT

Parents aged 25–45 with young children relying on unsafe or uncertain water sources.

UVP:

AI-driven water testing with instant alerts, saving time, lowering health risks, and ensuring clean.

Physical Sales Channels

Tie-ups with water purifier dealers & appliance retail stores Direct sales in apartments, societies & RWAs Demonstrations at schools, hospitals & clinics

Sales KPIs

Sales Conversion Rate (leads → paying customers) Number of subscriptions activated per month Revenue growth and MRR (Monthly Recurring Revenue) Average deal size for B2B institutional partnerships

{Create a website}

{Video link sample}

GTM Partners

In-app feedback surveys & ratings CSAT (Customer Satisfaction Score) after each test & alert NPS (Net Promoter Score) to measure referrals & trust WhatsApp/Email feedback forms

Financials

Revenue Models/Streams

- Subscription Model
- SaaS (Software as a Service) Model

Pricing

- **Unit of Sale:** AI water monitoring plan
- **Selling price per unit:** ₹299 HH / ₹1499 Inst / mo

First Year Projections

Revenues: 9550276

Operating Profits: 145712

Revenue Models / Pricing

Revenue Model (Primary)

Subscription Model

Unit of Sale

AI water monitoring plan

Sale Price per Unit

₹299 HH / ₹1499 Inst / mo

Expected units to be sold in Year 1

33 units first month sales

Expected growth in monthly sales

10% monthly sales growth

Costs & Revenues: Key Assumptions

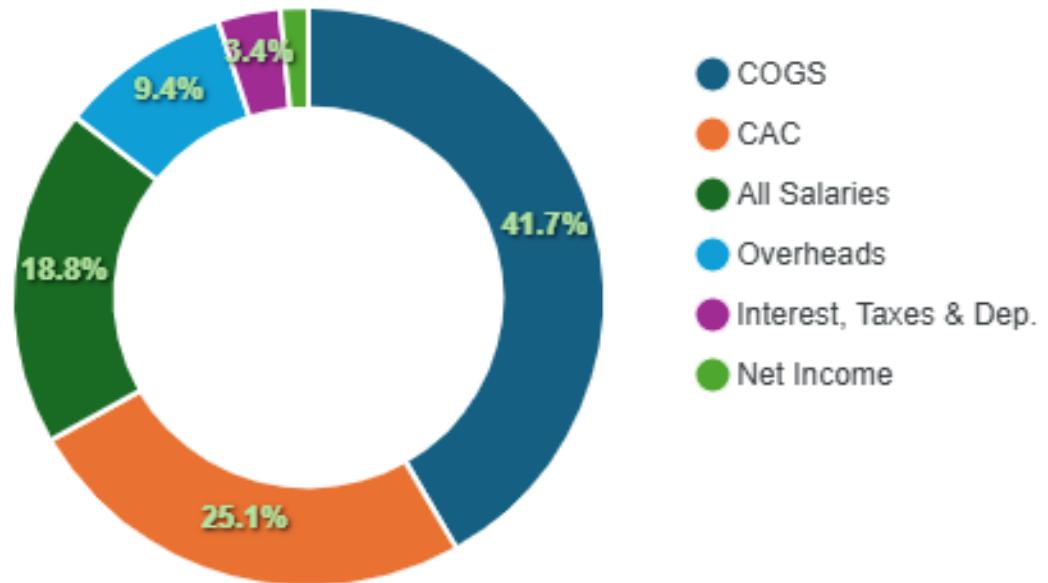
Assumptions

Currency	INR
Price per Household	INR 299 / month
Price per Institution	INR 1499 / month
First Month Units Sold	33 units
Monthly Sales Growth	10%
Customer Churn Rate	5%
Annual Price Increase	5%

Profit & Loss Projections: Summary

Performance & Break-Even Analysis

Year 1 Revenues	Gross Profits for Year 1
9550276	5570994
Net Profits for Year 1	Break-even Month
145712	7



Next Steps

Goals for Months 10-12

Launch beta product,
start sales pipeline

Goals for Months 4-6

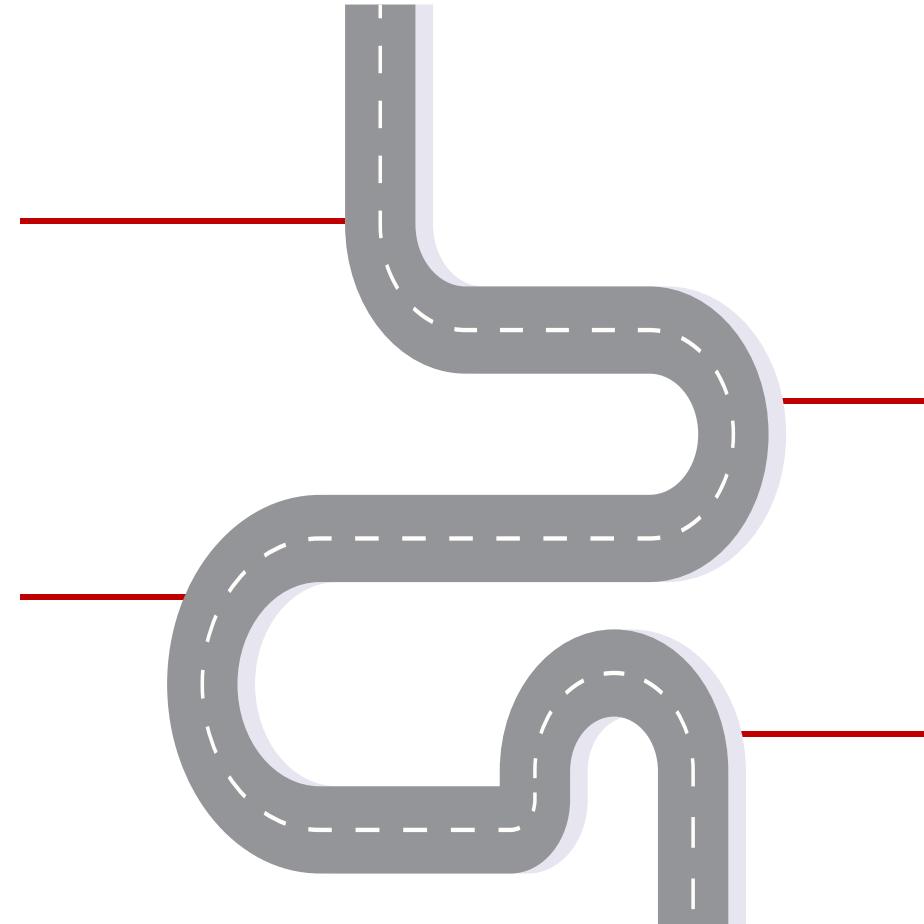
Improve prototype,
conduct pilot testing
with user

Goals for Months 7-9

Build near-final product,
create marketing content

Goals for Months 1-3

Build functional
prototype, run basic lab
tests



Venture Viability Assessment



Venture Viability Index
93.33%

Strengths

Solves a real problem by giving fast, on-site detection of water-borne diseases. High social impact helps prevent outbreaks and improves public health. Innovative and easy to use compared to slow lab testing. Positive early interest from users due to accuracy and affordability. Big market potential across communities, schools, industries.

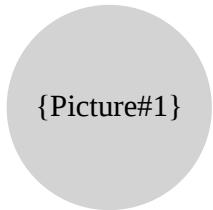
Areas of Improvement

Improve accuracy & reliability: Need more testing and validation to ensure consistent results across different water sources. Enhance prototype durability: Device should be more robust, waterproof, and suitable for field conditions. Reduce cost of production: Current components may be expensive; we need more cost-effective materials for scaling.

Next Steps

TIMELINE	GOALS	TEAM NEEDED	PHYSICAL RESOURCES NEEDED	FUNDS NEEDED
Months 1-3	Build functional prototype, run basic lab tests	bio expert	Lab access	₹3.5 lakhs
Months 4-6	Improve prototype, conduct pilot testing with user	engineers	Pilot kits	₹5 lakhs
Months 7-9	Build near-final product, create marketing content	technician	studio	₹7 lakhs
Months 10-12	Launch beta product, start sales pipeline	Saleintern	CRM tools	₹10 lakhs

Venture Team



Name: {Name#1}

University/College: {University/College#1}

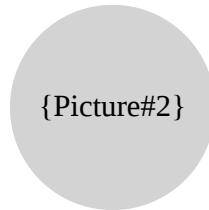
Major: {Major#1}

Key Skills: {Key Skills#1}

Role in the Venture: {Current Role#1}

Keen on continuing with the venture:

{Interested#1}



Name: {Name#2}

University/College: {University/College#2}

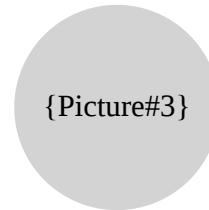
Major: {Major#2}

Key Skills: {Key Skills#2}

Role in the Venture: {Current Role#2}

Keen on continuing with the venture:

{Interested#2}



{Picture#3}

Name: {Name#3}

University/College: {University/College#2}

Major: {Major#3}

Key Skills: {Key Skills#3}

Role in the Venture: {Current Role#3}

Keen on continuing with the venture:

{Interested#3}

Current Mentors:

Currently no formal mentors, but actively seeking expert guidance.

Mentors Needed in these Areas:

Mentoring needed in hardware, water analytics, public health, and strategy.

Venture Summary

OVERVIEW

Our venture develops a smart water-quality detection device paired with an intuitive mobile app that identifies contaminants in real time and alerts users about potential water-borne disease risks. We empower households, communities, and organizations with accurate, accessible insights to ensure safe, healthy water for everyday life.

Mission

Our mission is to safeguard communities by delivering a smart, real-time water quality detection device and app that identifies contaminants early, prevents water-borne diseases, and empowers people with accessible, reliable information to ensure safe, healthy living.

Social/Economic Relevance

Focusing on water contamination and water-borne diseases is crucial because clean water is a basic human need. Contaminated water leads to millions of preventable illnesses and deaths each year, especially in vulnerable communities. Poor water quality harms public health, reduces productivity, increases healthcare costs.



Thank You!

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SMART WATER, HEALTHY LIVES

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