MahuWévi: Oxygenation device for aquaculture

MahuWévi, the solution for aquaculture that sustainably feeds

MahuWévi is an advanced oxygenation system for aquaculture ponds that uses micro-injections of pure oxygen to maintain high dissolved oxygen levels. It operates through short, repeated oxygen cycles, improving water quality and fish health. Available in Mini, Pro, and ProMax models, it offers both standard and customized options.

This technology is pre-validated.

9·7 Scaling readiness: idea maturity 9/9; level of use 7/9

Gender assessment 4

Climate impact 7

Problem

- High energy consumption of traditional oxygenation devices, increasing production costs and reducing profitability.
- Large water requirements in conventional aquaculture systems, raising resource consumption and costs.
- Significant nitrogen and phosphorus discharges, contributing to pollution of local ecosystems.
- Limited access to technology for young and non-professional users due to complexity of existing systems.

Solution

- Reduced oxygenation costs: Lowers energy use while maintaining high oxygen levels.
- Lower water requirements: Cuts fresh water usage by 50%, ideal for water-scarce areas.
- Decreased pollutant discharge: Produces less waste, which can be used as fertilizer.
- Ease of use: Simple for beginners and small-scale farmers, no technical skills needed.
- Repurposing water: Recycled water supports crop cultivation, enhancing sustainability.

Key points to design your project

The MahuWévi oxygenation technology is revolutionizing fish farming in sub-Saharan Africa by providing a scalable, energy-efficient solution that maintains optimal oxygen levels in ponds, improving fish growth while minimizing resource usage. This technology supports sustainable agricultural development by enhancing profitability and regional food security.

Key points for integrating MahuWévi into aquaculture projects:

- **Training and Capacity Building**: Essential for farmers to learn system operation, feed and water management, and maintenance procedures. Special emphasis on youth and women.
- **Key Partnerships**: Collaborations with technology providers, aquaculture specialists, research institutions, and local governments are vital for scaling and support.
- **Water Resource Management**: Reduces water use by 50%, making it ideal for water-scarce regions while minimizing environmental impact.
- **Market and Logistics**: Understanding local demand, consumer preferences, and logistical challenges is essential for efficient distribution and market access.

Cost: $$$ **250 USD**

Mini model

10 years	500 USD	667 USD	834 USD
Lifespan	Pro Customized	ProMax Simple	ProMax Customized

Gold's Farmers
HOUNSOU Tadagbé N. Eder

Commodities

Aquaculture

Sustainable Development Goals

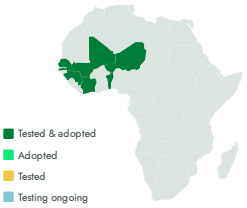
Categories

Production, Equipment, Aquaculture Systems

Best used with

- Cage Systems for Fish farming ›
- All Male Tilapia Fingerlings with Greater Yield and Uniformity ›
- Fast Growing and Hybrid African Catfish ›

Tested/adopted in



Where it can be used

This technology can be used in the colored agro-ecological zones.