Tank Systems for Fish farming

Aquaculture Innovation: Growing the Future, Nurturing the Waters

A tank system for fish culturing is a land-based, intensive aquaculture enclosure. Made from materials like concrete or plastic, it requires a complete feed diet and can operate on various water and air supply systems. It's designed for high-density rearing of species like catfish and tilapia, with regular sorting needed. Success hinges on excellent water quality and year-round availability.

A concrete tank for raising catfish

WorldFish Center
Bernadette Fregene

This technology is TAAT1 validated.

8·8 Scaling readiness: idea maturity 8/9; level of use8/9

500 kg
harvest every 9months for a stocking rate of 50 fish per square meter

330 USD
Gross margin after deducting operating costs

Problem

- **Resource and Environmental Challenges**: Limited land and water resources, difficulty in maintaining optimal water conditions, and significant environmental footprint of traditional methods.
- **Production and Efficiency Issues**: Limited capacity for high-density rearing, high death rates due to cannibalism, and inefficient feed use leading to slow growth.
- **Market Accessibility**: Increased costs and reduced freshness due to distance from markets.

Solution

- **Resource and Control Efficiency**: Less land and water usage with optimal environmental control.
- **Intensive Rearing and Survival**: High-density fish production with minimized cannibalism.
- **Market Proximity and Feed Optimization**: Close to markets with maximized food conversion.
- **Environmental, Biosecurity, and Energy Solutions**: Reduced footprint, disease risk, and energy use.

Key points to design your business plan

Manufacturers: Manufacturing aquaculture tanks enhances fish farming efficiency. Key steps include sourcing raw materials, efficient transportation, and storage. Customers include distributors, development projects, government agencies, and NGOs. Catering to all tank types broadens your customer base.

Resellers: Reselling aquaculture tanks offers opportunities in the aquaculture industry. Key considerations include sourcing quality tanks, efficient transportation, and storage. Costs vary based on tank type and technology. Customers range from small-scale farmers to large projects and cooperatives.

Fish Growers: Using various aquaculture tanks boosts productivity and sustainability. Key partners include reliable tank manufacturers and logistics partners. Costs vary based on tank type and size but can be offset by efficiency gains. Training in tank system management is crucial.

Inclusion assessment 4

Climate impact 7

Technology from

ProPAS

Commodities

Fish

Sustainable Development Goals

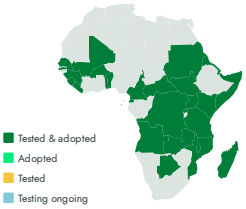
Categories

Production, Equipment, Aquaculture Systems

Best used with

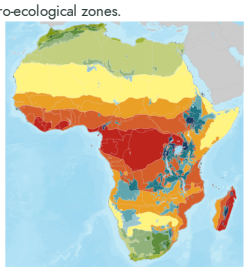
All Male Tilapia Fingerlings with Greater Yield and Uniformity, Fast Growing and Hybrid African Catfish
See all 2 technologies online

Tested/adopted in



Where it can be used

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



Target groups