Cage Systems for Fish farming

Cage Culture: Dive Deep for a Sustainable Leap!

Cage Systems for Fish Culturing is a method where young fish are grown in submerged cages in large water bodies. The cages protect the fish, provide nourishment, and monitor their health. Once mature, the fish are harvested. This technique allows for natural, secure, and regulated fish farming, akin to a floating aquaculture facility.

Floating cage for tilapia farming inside Lake Victoria
(Credit: Erick Ochieng Ogello)

WorldFish
Bernadette Fregene

This technology is **pre-validated**.

8•8   Scaling readiness: idea maturity 8/9; level of use 8/9

Gender assessment   **3**

Climate impact   **1**

Problem

- **Space and Control:** Traditional fish farming requires large, expensive land and lacks control in open waters, leading to losses from predators and disease.
- **Water Quality:** In other forms, especially in small ponds, water quality can deteriorate quickly causing problems like low oxygen levels and harmful substance buildup.
- **Environmental Impact:** Some methods can negatively impact the environment, such as causing pollution from waste products.
- **Unpredictable Events:** In open waters, upwelling events can drastically change conditions in the cage, affecting fish health.

Solution

- **Space and Control**: Cage systems efficiently use water bodies, reducing the need for large land areas and providing a controlled environment for the fish.
- **Water Quality**: They help manage water quality issues common in other forms of aquaculture.
- **Environmental Impact**: Cage systems aim to minimize the environmental impact of aquaculture.
- **Upwelling Events**: High-tech solutions have emerged to predict and mitigate upwelling events.

150 USD
Fish cage of 8 cubic meter

IP
Open source / open access

Commodities

Fish

Sustainable Development Goals
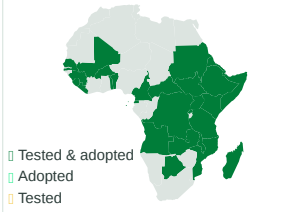
1 NO POVERTY

2 ZERO HUNGER

Categories
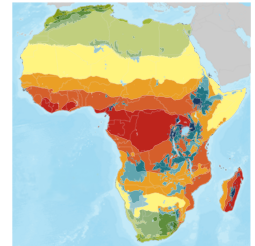
Production, Equipment, Aquaculture Systems

Best used with

- All Male Tilapia Fingerlings with Greater Yield and Uniformity ›
- Fast Growing and Hybrid African Catfish ›

Tested/adopted in

- Tested & adopted
- Adopted
- Tested

Where it can be used

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

Target groups

Fish Farmers