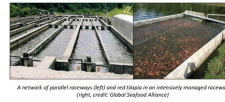


# In-Pond Raceway Systems for Fish Farming

Revolutionize your fish farming with IPRS for maximum yields and sustainability.

The In-Pond Raceway System (IPRS) is an advanced aquaculture technology that maintains optimal water quality through continuous water flow and waste management, allowing for high-density fish farming.



**WorldFish**  
Bernadette Fregene

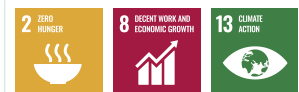
Technology originally documented by

ProPAS

Commodities

Fish

Sustainable Development Goals



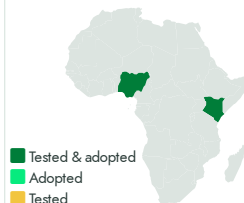
Categories

Production, Practices, Production system

Best used with

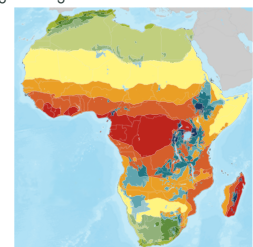
- [All Male Tilapia Fingerlings with Greater Yield and Uniformity >](#)
- [Fast Growing and Hybrid African Catfish >](#)

Tested/adopted in



Where it can be used

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



✓ This technology is **TAAT1 validated**.

7-7



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

Gender assessment

4

Climate impact

7

## Problem

- Traditional pond farming limits fish productivity per area, reducing profits.
- Inadequate waste removal causes pollution and harms fish health.
- Traditional methods demand extensive land and labour, raising costs.
- Inadequate water circulation and oxygen levels lead to inefficient feed conversion.

## Solution

- The In-Pond Raceway System (IPRS) enables stocking densities of up to 150 kg per cubic meter.
- IPRS recreates the fish's natural environment, promoting faster growth and keeping them free from diseases and stress.
- Production of higher-quality fish in less water and often exceeding traditional pond production by 200 to 300%.

Cost: \$\$\$ **4 000 USD**

IPRS of 5 m long, 1.2 m wide, and 1.2 m deep

ROI: \$\$\$ **30 %**

Profit margin increased

**0.5882 kg of fish**

for 1kg of feed

**1.57 USD**

8-month total variable costs per kg

**0.31 USD**

8-month total fixed costs per kg



Patent granted



In-Pond Raceway Systems for Fish Farming

<https://e-catalogs.taatafrica.org/org/technologies/in-pond-raceway-systems-for-fish-farming>

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