

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

This technology is **TAAT1 validated**.

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

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

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

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

Profit margin increased

0.5882 kg of fish

1.57 USD

0.31 USD



for 1kg of feed

8-month total variable costs per kg

8-month total fixed costs per kg

Patent granted

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%.

Technology from

ProPAS

Commodities

Fish

Sustainable Development Goals



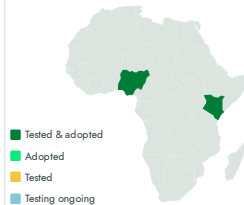
Categories

Production, Equipment, Production System

Best used with

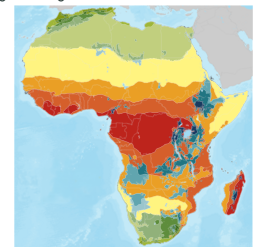
- [All Male Tilapia Fingerlings with Greater Yield and Uniformity >](#)
- [Fast Growing and Hybrid African Catfish >](#)

Tested/adopted in



Where it can be used

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



Key points to design your business plan

The In-Pond Raceway System (IPRS) technology offers solutions for managing pests and diseases, improving fish yield and quality, and promoting sustainable aquaculture.

To integrate it in your business,

- Suppliers of IPRS equipment are crucial partners, considering its availability in Kenya and Nigeria.
- Integrating complementary technologies can further optimize its benefits, potentially increasing profit margins by up to 30% while conserving water.

Gender assessment 4

Climate impact 7



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

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