

# Integrated Rice-Field Pond System (IRFPS): Linking Rice, Fish, Vegetables and Livestock



Supporting Year-Round Food and Water Availability while Diversifying Farm Income and Building Climate Resilience

IRFPS connects existing ponds and rice fields to produce rice, fish, vegetables and livestock from the same farm resources. Improved water and fish habitat management, combined with nutrient recycling and complementary feeding options, supports diversified, low-input production.

This technology is **pre-validated**.

8·7



Scaling readiness: idea maturity 8/9; level of use 7/9

43

USD/household

Initial cost of the IRFPS

57 %

Increase in rice yield

67 %

Increase in wild fish production

250 USD/year

Additional income from diversified production



No formal IP rights

[See details >](#)

## Problem

- **Underused production potential:** Separate pond and ricefield management limits fish productivity and diversified farm outputs.
- **Seasonal production constraints:** Pond drying and water shortages disrupt production and reduce productive use of farm resources.

## Solution

- **Resilient production systems:** IRFPS integrates water management with diversified rice, fish, vegetable and livestock production.
- **Improved resource management:** Better connectivity, fish habitat and ecological practices strengthen ricefield—pond systems.

## Key points to design your business plan

### End Users

- **Diversify production:** Produce rice, fish, vegetables and livestock from existing farm resources.
- **Invest strategically:** Prioritize pond connectivity, water management and fish habitat before complementary components.
- **Track profitability:** Monitor production, costs, sales and returns before expanding.

### Distributors/Service Providers

- **Build your offer:** Provide pond-improvement, fish-habitat, BSF, solar-light and technical services.
- **Target suitable markets:** Focus on rice-growing areas with existing ponds and demonstrated farmer demand.
- **Combine products and services:** Add installation, maintenance and technical support.



#### Commodities

Rice, Fish, Vegetable crop, Small livestock

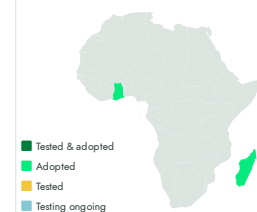
#### Sustainable Development Goals



#### Categories

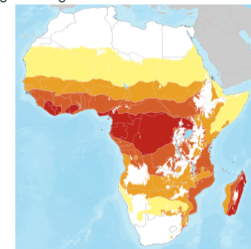
Production, Practices, Water management, Yield improvement

#### Tested/adopted in



#### Where it can be used

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



#### Target groups

Development institutions, Farmers, Governments, Fish Farmers

Inclusion assessment

14

13

13

Climate impact

7



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<https://taat.africa/hsx>

Last updated on Sep 25, 2026 printed on Sep 25, 2026

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