

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 improves existing ricefield–pond systems through better water connectivity, fish habitat and ecological management while integrating rice, fish, vegetables and livestock. The approach supports diversified and resilient production from existing land and water resources.

 This technology is **pre-validated**.

 **8·7**

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

Inclusion assessment

 **14**
 **13**

 **13**

Climate impact

 **7**

Problem

- **Climate-sensitive ricefield systems:** Water variability and pond drying affect rice and fish production and local food supply.
- **Underused and degraded aquatic resources:** Poor pond–ricefield integration, habitat and pesticide pressure limit productive use of land, water and fish resources.

Solution

- **Climate-sensitive production:** Water variability affects rice, fish and local food production.
- **Underused aquatic resources:** Poor connectivity and habitat limit productive use of ricefield–pond systems.

Key points to design your project

IRFPS improves existing ricefield–pond systems to increase and diversify food production while strengthening resilience to seasonal water constraints.

- **Target suitable areas:** Prioritize rice-growing communities with existing ponds and water or production constraints.
- **Use existing delivery systems:** Integrate IRFPS into rice, fisheries, food-security and climate-adaptation programs through extension services.
- **Build adoption:** Use demonstrations and farmer-to-farmer learning to support local adaptation and wider deployment.
- **Engage WorldFish:** Access technical guidance, capacity building and support for deployment.

43
USD/household
 Initial cost of the IRFPS
[See details >](#)

57 %
 Increase in rice yield

67 %
 Increase in wild fish production

250 USD/year
 Additional income from diversified production

 **IP**
 No formal IP rights



WorldFish
WorldFish Center
Vichet SEAN

Commodities

Rice, Fish, Vegetable crop, Small livestock

Sustainable Development Goals







Categories

Production, Practices, Water management, Yield improvement

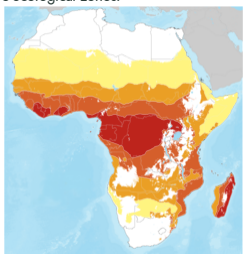
Tested/adopted in



 Tested & adopted
 Adopted
 Tested
 Testing ongoing

Where it can be used

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



Target groups

Development institutions, Farmers, Governments, Fish Farmers



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<https://taat.africa/dvl>

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

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