

# ARICA: Advanced rice varieties for Africa

Arica rice, the high yield, disease and stress tolerant rice

ARICA hybrid rice lines offer high yields and resistance to diseases and environmental stresses. Developed through advanced breeding methods, they must surpass benchmarks in yield and grain quality over three seasons. Field tests show ARICA 1, 2, and 3 outperform NERICA-L 19, boosting rice production and food security in Africa.



AfricaRice

Africa Rice Center  
Sali Atanga Ndindeng

Technology from

ProPAS

Commodities

Rice

Sustainable Development Goals



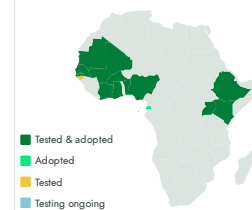
Categories

Production, Improved varieties,  
Yield improvement, Quality improvement

Best used with

- [Nitrogen management for Efficient Rice Fertilization >](#)
- [Foliar micronutrient addition for healthier rice >](#)
- [Precision Rice Irrigation and Surface Leveling >](#)
- [Motorized weeders for rice production >](#)
- [RiceAdvice digital support >](#)

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

Cost: \$\$\$ **0,8 - 1,2 USD**

Initial cost of a Kg of seed

ROI: \$\$\$ **40 %**

Increase in yield (income)

**356 USD**

Planting, maintenance, harvesting and winnowing

**50 - 111 %**

Potential yield

💡 IP

Open source / open access

## Problem

- Traditional rice varieties in Africa yield inadequately.
- Common rice diseases and pests diminish yields and threaten food security.
- Environmental variability poses significant challenges, affecting crop growth and productivity.
- Traditional rice varieties struggle to adapt to diverse agroecosystems, resulting in suboptimal performance.

## Solution

- ARICA varieties offer increased productivity and profitability.
- ARICA lines resist common rice diseases and pests, ensuring stable yields.
- ARICA hybrids withstand environmental stresses, ensuring consistent yields.
- ARICA varieties thrive in diverse agroecosystems, providing flexibility to farmers.
- Some ARICA lines possess traits like drought resistance and iron toxicity tolerance, addressing specific challenges.

## Key points to design your business plan

### For Multipliers:

- ARICA varieties allow manufacturers to produce high-yield, stress-resistant rice for Sub-Saharan Africa.
- Target customers include seed manufacturers and agricultural suppliers.
- Collaboration with research institutions is key for development and distribution.
- Essential resources include advanced breeding techniques and reliable distribution networks.

### For Users:

- ARICA varieties boost farmers' yields and profitability.
- They offer stress resilience and better grain quality.
- Partners include agricultural services and seed suppliers.
- Farmers can see yield increases of up to 40%, driving domestic rice production and economic growth.

Gender assessment

4

Climate impact

7



ARICA

<https://taat.africa/uhj>

Last updated on 11 December 2024, printed on 15 May 2025

Enquiries [e.catalogs@taat.africa](mailto:e.catalogs@taat.africa)