

CRAM varieties: High Yielding Climate Resilient Upland Rice Varieties for Africa

Climate resilient CRAM varieties for enhanced rice productivity for African farmers

CRAM (Climate Resilient Upland Rice Varieties for Africa) are early-maturing, high-yielding rice varieties developed by AfricaRice and CNRA for rainfed upland production, including areas receiving around 800 mm of annual rainfall. Their 101–104-day maturity helps farmers escape late-season droughts while achieving yields of up to 5.0 t/ha.



AfricaRice

Africa Rice Center
Negussie Zenna

Commodities

Rice

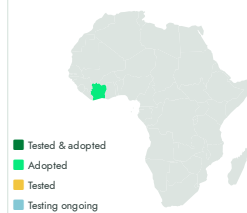
Sustainable Development Goals



Categories

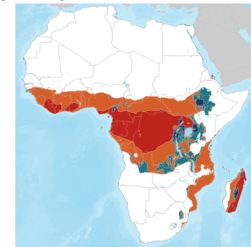
Production, Improved varieties,
Disease resistance, Insect resistance

Tested/adopted in



Where it can be used

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



Target groups

Breeders, Farmers, Seed companies,
Researcher center,
Cooperatives and Agribusinesses

This technology is **pre-validated**.

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

Inclusion assessment



Climate impact



Problem

- Low rice production: Climate variability reduces domestic rice supply.
- Disease pressure: Major diseases reduce national rice productivity.
- Climate vulnerability: Rainfed production remains exposed to water stress.
- Harvest losses: Lodging and shattering reduce effective production.
- Weak market competitiveness: Poor grain quality limits local rice demand.

Solution

- Higher rice production: High-yielding varieties strengthen domestic supply.
- Disease resistance: Genetic resistance reduces disease-related losses.
- Climate resilience: Early maturity and drought tolerance improve adaptation.
- Stable harvests: Lodging and shattering resistance protects yields.
- Stronger rice markets: Better grain quality supports consumer acceptance.

Key points to design your project

By advancing **SDGs 1, 2, 13 and 15**, CRAM helps governments strengthen rice production, climate resilience and sustainable land use. To scale CRAM effectively, programmes should:

- **Target** suitable rainfed upland areas and climate-vulnerable farmers.
- **Strengthen** quality seed production and distribution.
- **Combine** CRAM with good agronomic and soil management.
- **Engage** national research, seed, extension and private-sector partners.
- **Track** adoption, productivity, food security and resilience outcomes.

1012 USD

Cost USD per hectare

1320 USD

Revenue USD per hectare

308 USD

Net income USD per hectare

30 %

ROI per hectare

1.78 USD per kg

Certified Seed Purchase

3,220.00 USD per ha

Official Variety Certification & Inspection

3.57 USD per kg

Foundation Seed Procurement

4,000 kg per ha

Expected Seed Yield



Open source / open access



CRAM varieties

<https://taat.africa/hrc>

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