High-impact Rice Breeding in East and West Africa (HiRice)

Project brief

Consumer demand for rice is growing faster than any other staple crop in Africa, but crop yields remain low. An estimated 36% of rice consumed on the continent is imported at a cost of US $7 billion each year. This project aims to modernize national agricultural research system (NARS) breeding programs in Africa to deliver **better varieties faster**, helping farmers meet consumer demand while improving food security and livelihoods.

Outcomes

The CGIAR Excellence in Breeding Program (EiB) will provide a full assessment of key national breeding programs in East and West Africa. Through technical support and access to best practices, tools and services, the project will contribute to five key outputs by December 2021:

- **Product design and management** using **product profiles** to target customer needs and guide variety development.
- **Breeding schemes optimized** to deliver measurable increases in genetic gain in key traits demanded by consumers.
- Integration of **genotyping** to accelerate breeding, with access to world-class genotyping services.
- **Continuous improvement** of breeding operations, including cost-effective equipment upgrades.
- **Digitization and data management**, preparing for full adoption of the Enterprise Breeding System software.

Impact

Increased performance of NARS rice breeding programs in 7 countries representing 37% of the total rice growing area in Africa.

RICE GROWING AREA (HA)

- Ghana: 272,000
- Madagascar: 928,000
- Mozambique: 228,000
- Nigeria: 3,346,000
- Senegal: 174,000
- Tanzania: 1,200,000
- Uganda: 93,000

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