Burundi and IRRI

n Africa, rice is one of the most important sources of dietary energy with a demand that is growing faster than any other staple in the region, at 6% each year. Rice has become a crucial component of people's lives especially for 35 million farmers who depend on it as a source of income.

IRRI assists Africa in increasing and sustaining the productivity of rice farmers, strengthening its national research capacity, and helping the region achieve self-sufficiency. In 2008, IRRI started its initiatives in Burundi through a memorandum of understanding with the Burundi Government and a Letter of Agreement with the University of Burundi in Bujumbura.

Four years later, IRRI established a regional office and a breeding hub for East and Southern Africa. Climatic conditions in Burundi's Imbo Plain are very ideal for varietal development. The country also has different ecologies with various biotic and abiotic stress hotspots. More importantly, the support from favorable germplasm exchange regulations provided by the Burundi government is also helpful in advancing research initiatives in the region.

Boosting regional productivity and national capacity

Rice has emerged as an important food staple in Burundi. The East African country has seen a substantial 316% increase in production between 1984 and 2011. However rice production in Burundi faces challenges, low production, biotic and abiotic stresses, overused land plots and limited use of fertilizers, and a small number of qualified researchers and technicians. These challenges can be addressed by better-performing varieties and post-harvest technologies.

Africa as an axis for South-South collaboration

IRRI envisions a strong regional cooperation between Africa and South Asia. Leveraging and investigating the innovations and research in South Asia and tailor-fitting them to the needs of Africa will amplify inter-regional knowledge sharing and capacity building, which in turn, will pave the way for global solutions to local problems.

Harnessing our networks and expertise

IRRI partners with the Ministry of Agriculture and Livestock, the University of Burundi and other research institutions and nongovernment organizations, with support from other governments and organizations in order to deliver impactful research for the region. Complete with facilities and laboratories, the research hub in Burundi enhances rice breeding expertise in other countries, including Kenya, Tanzania, Uganda, Malawi, Rwanda, and many others.

Creating opportunities for women and the youth

IRRI's projects in Africa encourage women to participate in farmer field schools and participatory varietal trials. IRRI is also opening more opportunities for around 200 million of Africa's youth by invigorating Africa's rice sector, increasing mechanizations, ICTs and other agribusinesses.

FAST FACTS

- Rice was introduced in Burundi in 1890 from Tanzania, but it did not develop until 1968 when the first irrigated scheme of 2,550 hectares was installed in the Imbo plain.
- Estimated land area currently being used for rice production includes about 5,000 h in the irrigated Imbo plain, 15,000 h in the non-irrigated Imbo plain, and 30,000 h in the Moso lowland.
- Between 1984 and 2011, rice production increased from 18,000 to 75,000 tons per year a 316% increase in 27 years.





KEY ACHIEVEMENTS

- **Improved rice varieties** IRRI is developing high-yielding varieties suited to Burundi's ecology and with better resistance to pests and diseases and tolerance to certain abiotic stresses while maintaining the high-quality grain preferred by consumers. Since 2011, IRRI was able to release five varieties in Burundi. Around 77 differential lines for blast have been tested in high elevation marshlands.
- **Germplasm conservation** Since 1962, IRRI has stored in trust 52 traditional and improved varieties from Burundi. This serves as a rich genetic source for rice breeders in order to develop new varieties with traits that are suited to Burundi's ecology and the preferences of farmers and consumers.
- Mechanization and equipment IRRI has trained technicians to operate two-wheeled hand tractors, threshers, and hydrotillers and conducted demonstration sessions with farmers. The equipment helps farmers save time, labor, and money, which can help reduce rice prices.
- Capacity building and development IRRI encourages and supports education and training of rice researchers, technicians, extension workers. Through short courses and graduate studies, IRRI has also trained more than 70 local researchers and technicians to ensure that the latest developments in research, and technologies are integrated into the country's rice production. IRRI has also trained more than three thousand smallholder farmers in Burundi,

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International Rice Research Institute

IRRI aims to improve livelihoods and nutrition, abolishing poverty, hunger, and malnutrition among those who depend on rice-based agri-food systems. In doing so, IRRI's work protects the health of rice farmers and consumers, and the environmental sustainability of rice farming in a world challenged by climate change. IRRI's work promotes the empowerment of women and supports opportunities for youth in an equitable agri-food system.