



International Year of Rice and NERICA

WARDA and its partners developed the New Rice for Africa (NERICA) varieties by crossing African rice species with Asian species. NERICA varieties have the rugged adaptation to the local environment of their African parent, combined with the high yield potential of their Asian parent.

Among NERICA varieties' advantages over other varieties are their higher yields, earlier maturity, greater resistance to local stresses, and higher protein content.

According to the projections of the African Rice Initiative, by the end of 2006, some 200 000 ha of land in sub-Saharan Africa will be under NERICA cultivation, producing nearly 750 000 tonnes a year and saving nearly US\$90 million a year on rice imports.

The present NERICA varieties were developed for rainfed upland ecologies. However, several NERICA lines for irrigated and lowland systems are already in the pipeline.

There is an ever-growing number of projects among national, regional and international development organizations, donors and African countries on the dissemination of NERICA varieties: Japan and UNDP; Sasakawa, Global and Sasakawa Africa Foundation; JICA; AfDB; FAO; NEPAD; WFP; and World Vision International.



THE SITUATION

In West and Central Africa – the most impoverished region on earth – rice is grown under subsistence conditions by about 20 million smallholder farmers who are shackled to slash-and-burn farming and who lack rice varieties that are appropriate to local conditions. The demand for rice in the region is growing by 6 percent a year (the fastest-growing rice demand in the world), largely because of increasing urbanization. As a result, current rice imports into the region amount to more than US\$1 billion a year.

In response to this growing problem, the West Africa Rice Development Association (WARDA), the Africa Rice Center and their partners have developed New Rice for Africa (NERICA) varieties by successfully crossing the African rice species (*Oryza glaberrima*) with the Asian rice (*O. sativa*). The initial focus was on rainfed ecologies, because they account for a large proportion (about 45 percent) of the total rice area.

NERICA varieties combine the rugged adaptation of the African parent with the yield potential of the Asian parent. They have the following advantages over other varieties:

- higher yields (by 50 percent without fertilizer and by more than 200 percent with fertilizer);
- earlier maturity (by 30 to 50 days);
- resistance to local stresses;
- ability to suppress weeds;
- higher protein content (by 2 percent);
- taller stalks that are resistant to lodging.

NERICA'S POTENTIAL IN SUB-SAHARAN AFRICA

NERICA's positive characteristics should lead to reduced imports and increased income for farmers, thereby enhancing the well-being of rural families and reducing overall poverty throughout the region. So far, two NERICA varieties have been released in Côte d'Ivoire, and one each in Uganda and Nigeria. Seven NERICA varieties are being cultivated in Guinea, three in the Gambia, and four in Sierra Leone. Several NERICA varieties are under extension in Benin, the Gabon, Mali and Togo, while six are being

evaluated in Madagascar and two in the United Republic of Tanzania. In 2002, NERICA varieties 1, 2, 3 and 4 were the top varieties selected by farmers in Côte d'Ivoire, Benin, Mali, Ghana, Sierra Leone, Burkina Faso, Togo and the Gambia.

According to projections made by the African Rice Initiative (ARI), by the end of 2006 some 200 000 ha of land in sub-Saharan Africa will be under NERICA cultivation, producing nearly 750 000 tonnes a year and achieving savings of nearly US\$90 million a year on rice imports.

NERICA DISSEMINATION

There is an ever-growing number of projects among national, regional and international development organizations, donors and African countries on the dissemination of NERICA varieties. Japan and the United Nations Development

Programme, under the Technical Co-operation Among Developing Countries initiative (UNDP-TCDC), plan to fund the multiplication of NERICA seeds in Ghana, Burkina Faso and Sierra Leone; Sasakawa Global and the Sasakawa Africa



Foundation have already started to multiply NERICA seed in Guinea, Ethiopia and Uganda; the Japanese International Cooperation Agency (JICA) is supporting a NERICA project in the United Republic of Tanzania; and the African Development Bank (AfDB) plans to support national programmes in NERICA dissemination over a five-year period.

NEPAD has selected NERICA as its crop of first priority, and will fund NERICA development and dissemination over five years, while the Food and Agriculture Organization of the United Nations (FAO), the World Food Programme (WFP) and World Vision International are including the dissemination of NERICA varieties in their work programmes.

Current NERICA varieties were developed for rainfed upland ecologies only. Now, several NERICA lines for irrigated and lowland systems are already in the pipeline, and are expected to have high potential for improving the food security of sub-Saharan Africa's populations.



FAO/WARDA

A SUCCESS STORY FROM GUINEA

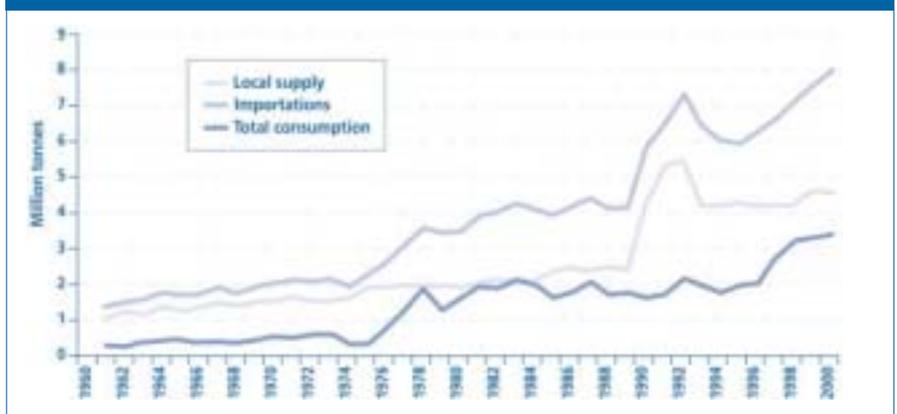
WARDA and its partners used farmer participatory approaches to introduce NERICA varieties to Guinea. As a result, Guinean farmers are now able to gross US\$65/ha with minimal inputs, and \$145/ha with a moderate level of inputs. For 2003, it is projected that Guinea will be saving more than US\$13 million on rice imports, while the area growing NERICA varieties is forecast to be 14 000 ha.

In 2002, WARDA and its partners launched the African Rice Initiative (ARI) to replicate the Guinea success story throughout Africa and to serve as a single focused channel for all NERICA dissemination efforts. An important follow-up to the Tokyo International Conference on African Development (TICAD), ARI is in line with the New Partnership for Africa's Development (NEPAD) and provides a framework for achieving the Millennium Development Goals of the United Nations and its partners.



FAO/WARDA

FIGURE 1. Rice trends in West and Central Africa



CONTACT

SAVITRI MOHAPATRA
WARDA - The Africa Rice Center
Tel.: (+225) 22410606 Fax: (+225) 22-411807
E-mail: s.mohapatra@cgiar.org
Web site: www.warda.org

WARDA Abidjan Liaison Office
01 B.P. 4029
Abidjan 01
Côte d'Ivoire