Technologies have helped transform one part of the world into a land of plenty. They can, therefore, be harnessed to make a difference to the lives in the less privileged part of the world.

This was the raison d’etre of the Green Revolution that fuelled economic growth and helped reduce poverty in Asian countries. However, the Green Revolution depended on high inputs, such as irrigation and fertilizers that poor farmers in Sub-Saharan Africa (SSA) can scarcely afford. SSA was thus bypassed by the Green Revolution.

To unleash a Green Revolution targeted to SSA, the approach has to be totally different taking into consideration the large disparity of conditions within the region.

For example, West Africa, which accounts for one-third of the African population, offers unique challenges. With an average population growth rate of 3 percent per annum, it is forecast that the subregion will have a population of about 430 million in 2020 — a major challenge to the food security of the subregion.

Poverty is widespread in West Africa. It has also been severely affected by over three decades of civil strife, recurrent droughts in its northern region, and the onslaught of the HIV/AIDS pandemic.

The economies of the West African countries are predominantly agricultural and depend on the export of one or two commodities for their revenues. These countries have been severely affected by the agricultural subsidies to farmers in developed countries.

West Africa accounts for about 70 percent of the total rice area in Africa. The demand for rice in West Africa is growing at the rate of 6 percent per annum — faster than anywhere else in the world. The subregion spends over a billion dollars annually for rice imports, which represent over 25 percent (in value) of total food imports.

The growing rice demand is largely the result of rapid urbanization in the sub-region and changing lifestyles.
Rice is largely grown under subsistence conditions in West Africa by about 20 million smallholder farmers, many of whom are women. Many of the Asian rice varieties grown by them are not adapted to African conditions.

Taking up this challenge, WARDA scientists, in collaboration with a host of partners, overcame enormous scientific hurdles and developed the New Rice for Africa or NERICA. The NERICA advantage consists in its combined characteristics of higher yields, earlier maturity, and higher resistance to local stresses than the traditional varieties.

NERICA’s unique characteristics should lead to reduced imports, increased farmers’ income and family well-being and overall poverty reduction in SSA. For example, Guinea saved over $13 million in rice imports in 2003, thanks to NERICA.

The key factors behind the NERICA success story were: technologies adapted to the local farming environment; initiative led by Africans with a wide spectrum of partners from across the world; political support at the highest level; novel participatory approaches in West Africa, which helped speed up technology transfer to rice growers.

NERICAs occupy about 23,000 hectares in West and Central Africa. Thanks to dissemination efforts from donors, NGOs, and national programs, the varieties are spreading fast in East Africa. In Uganda, about 6,000 hectares are planted to NERICAs.

Convinced that large-scale dissemination of NERICA is critical to reducing poverty and increasing food security, the African Development Bank launched in 2003 a $30 million project to support national programs in the dissemination of NERICA over a 5-year period in seven West African countries.

The NEPAD Steering Committee has identified NERICA as one of Africa’s ‘best practices worth up-scaling’ and has endorsed its expansion across the continent as part of a wider effort to boost agricultural production and food security in SSA.

In a region that is ravaged by civil strife, natural disasters, and pandemics like HIV/AIDS, here is a story of hope — hope for millions of poor people in rural Africa. It is a hope that was sown and nurtured in Africa by Africans for Africa.

However, technologies (such as NERICA) cannot alone solve the challenges in Africa. Complementary factors such as favorable agricultural policies, removal of unfair subsidies, trade liberalization, encouragement of the private sector, access of farmers to credits, and political support at the highest levels of government will lead to more competitive domestic and regional markets, so that Africa can take its rightful place in the world’s economy.

Note: This note has not been edited. The views expressed in this summary note are those of the author and are not necessarily endorsed by or representative of IFPRI or of the cosponsoring or supporting organizations.