Upland rice begins to boost production, reduce imports in Africa

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The successful development and release of stress-tolerant upland and lowland irrigated rice varieties has begun to significantly increase rice production in some African countries, including Uganda and Tanzania.
The announcement was made at the inaugural meeting of the Rice Breeders Network, a consortium of eminent rice breeders, researchers, and seed companies from more than 10 African countries. According to the Alliance for a Green Revolution in Africa (AGRA) who made the announcement today in Kampala, Uganda, “these are critical steps towards ensuring self-sufficiency and boosting African rice production even as concerns builds up globally around the impact of food prices and restrictions on Asian rice exports”. “As long as Africa depends on imports for meeting our food demands, we will experience food crises as the costs continue to rise for consumers”, said Dr. Ngongi Namanga, AGRA’s President. “We must boost local production. We must grow our own food”. The Rice Breeders Network hosted their first meeting in Uganda, which has scored recent successes in developing upland varieties and getting them into the hands of farmers. Recent advances are largely result of funding from the Nairobi-based AGRA, which also announced ambitious plans to support the development and release of new rice varieties in Mozambique, Kenya, Uganda, Mali, Nigeria and Malawi that will ultimately boost local production, improve regional food security, and reduce Africa’s over-reliance on rice imports from Asia. Speaking at the meeting, Dr. Dennis Kyetere, head of Uganda’s National Agricultural Research Organisation, NARO, said “African agriculture has always depended on Mother Nature. As a result, we have experienced 40 years of declining production and an increase in rural poverty. More than 200 million people are malnourished. This is not a bible that we should continue quoting in our prayers”. “Our dependence on Asian rice imports is putting us more at risk. We must make new varieties available and give farmers access to them”, he added. African rice consumption exceeds production. “Only 54 percent of sub-Saharan Africa rice consumption is supplied locally”, said AGRA program officer Jane Ininda at the Kampala meeting. “Farmers need new high-yielding, locally adapted varieties to raise rice yield and turn around Africa's food crisis situation. Governments should develop policies that speed up the breeding and distribution of new varieties. There is need for urgent action here”. The demand for rice in sub-Saharan Africa is double the rate of population growth and consumption is growing faster than that of any other major food staple. But rather than substantially increasing local production, demand for imports has surged. In Mali, for example, rice imports doubled over a four-year period, increasing from 51,969 tones in 2000 to 105,390 tones in 2004. In Uganda, 50 percent of rice is imported, which amounts to USD 60 million annually. However recent successes and future efforts focus on breeding locally adapted varieties of Nerica rice, which is a resilient, high-yielding cross of an African and Asian rice species. Breeders of Nerica rice won the World Food Prize in 2004. In March 2004, Ugandan President Yoweri Museveni launched the Upland Rice Project with support from United Nations Development Program (UNDP). Since then, rice farming in Uganda has grown from 4,000 farmers in 2004 to over 35,000 in 2007 and the acreage for rice growing areas has increased dramatically. In addition, Uganda has reduced its rice importation from 60,000 metric tons (MT) in 2005 to 35,000 MT in 2007, saving Ugandans roughly USD 30 million in the process, according to NARO. As an ‘upland’ rice, Nerica is not restricted to growing in paddies, thus enabling African farmers to grow rice in places that no one before thought possible. But to make use of Nericas, farmers need locally adapted varieties that are early maturing, disease resistant, have the aroma and taste that local communities prefer, and have ‘spikes’ that protect the rice from hungry birds. The meeting highlighted current efforts to develop and release improved disease-resistant rice varieties and to overcome the barriers that prevent new varieties from reaching farmers and improving food security. The delayed release of new varieties slows commercialization and denies farmers access
to new improved varieties. This problem further aggravates food insecurity and poverty among small-scale farm households, according to AGRA. In Uganda and Tanzania, new NERICA varieties were released to farmers in late 2007 and as a result there has been increased production and consumption on the farm level. From the earlier releases of three upland rice varieties in Uganda in 2002 courtesy the Rockefeller support, farmers were able to reap USD9 million in 2005. The meeting also addressed current efforts to tackle diseases such as Rice Yellow Mottle Virus (RYMV) and Rice Blast that are devastating farmers in several regions, most recently in Kenya where rice farmers are counting their losses after this season’s crop was attacked by blast. Some have lost up to half of this season’s crop. Meanwhile, Tanzania breeder Dr. Nkonki Kibanda reported that the country’s Department of Agricultural Services has identified local varieties resistant to Rice Yellow Mottle Virus, which can decimate 90 percent of rice yield. Kibanda expects that new disease resistant versions of farmers’ favorite variety, known as Supa, will be available by 2009. However, the development of new varieties is only a first step. According to experts, the second major challenge is multiplying large quantities of the new varieties and getting them to farmers. This requires that public breeding institutes work far more closely with small private seed companies, helping to build an African private seed sector that is responsive to the needs of small-holder farmers. According to Ininda, Uganda provides a strong example of this kind of collaboration.“The activities of companies like FICA, Naseco and Victoria Seeds, working with public breeders, have been a major part of the success story of the Nerica rice varieties in Uganda”, she said. Seed companies have seen annual sales grow from zero to 3,500 metric tons in the past six years. In the past, seed distribution was mostly carried out by national governments with very limited financial resources. For their part, multinational seed companies have had little to no interest in fostering the sale of African crops to smallholder farmers, as the profit margin would be too small. To fill this gap in seed distribution systems, AGRA has begun facilitating growth in Africa’s

private sector by providing loans and technical assistance to small- and mid-size seed companies, allowing farmers to access locally adapted, higher quality seed. “In addition to Uganda, national seed industries are also taking root in Mali and Mozambique”, said George Bigirwa, the program officer for AGRA’s African seed production initiative. For the private seed sector to grow and effectively serve smallholder farmers, policymakers need to give these African start-ups the freedom to operate and to access publicly bred varieties without restriction. Where this is happening, farmers are gaining access to high-yielding new varieties. The Rice Breeders Network, comprised of public and private sectors, is moving together to tackle these issues. “We would like other governments to support private sector entities”, said Bigirwa. This public-private approach has worked in Uganda, and, as a result, five new rice varieties have been available to farmers since 2002. “Kenya is quickly moving in this direction as well. We need other governments to move forward and take the next step”. In addition to these countries, network participants hailed from Benin, Ghana, South Africa and Tanzania.