Historic Opportunities for Rice Growers in Nigeria

I. Bamba (i.bamba@cgiar.org), A. Diagne (a.diagne@cgiar.org), J. Manful(j.manful@cgiar.org), O. Ajayi (o.j.ajayi-ng@cgiar.org)_____

THE RICE VALUE CHAIN IN NIGERIA is in a period of growth, thanks in particular to strong support policies. Work remains to be done, however, to give growers access to improved seeds and improve quality, so that locally grown rice can fully meet the needs of urban consumers.

▶ I. Bamba and A. Diagne are economists, and I. Manful is a specialist in seed quality at the African Rice Centre in Cotonou (Benin). O. Ajayi is the regional representative of the Africa Rice Centre (AfricaRice) and coordinator of the local office in Nigeria.

▶ The Nigerian office of the Africa Rice Centre (http:/ /www.warda.org/) is based at the International Institute of Tropical Agriculture (IITA) in Ibadan. The centre's objectives are to develop improved varieties of rice and new production techniques suited to the various ecosystems in the country. Research focuses on the selection of highyield, stressresistant rice varieties.

OCAL RICE CULTIVATION provides livelihoods for many producers, processors and vendors in Nigeria. However, it does not satisfy the totality of consumer demand in the country. Nigeria imports on average 1.7 million tonnes of white rice annually, making the country as the world's second-largest rice importer. The cost of these rice imports represents a significant amount of lost earnings for the country in terms of jobs and income.

Proactive Rice-Growing Policies. Given the crucial role of rice in the food security of urban and rural households alike, development of rice growing has long been considered a priority in Nigeria. The country has adopted a range of instruments designed to protect local production. The Nigerian National Rice Development Strategy (NRDS) set up in 2009 aims to make the country self-sufficient in rice by raising production of paddy rice from 3.4 million tonnes in 2007 to 12.8 million tonnes in 2018. The NRDS outlines three priority areas of focus to achieve this level of production: (i) improving post-harvest processing and treatment; (ii) developing irrigation and extending cultivated lands; and (iii) making seed, fertiliser and farming equipment more readily available.

Policy statements declaring the goal of self-sufficiency in rice for Nigeria are not new. The Presidential Initiative on rice implemented from 2001 to 2007 was centred on developing rice production, processing and exports, and aimed to achieve self-sufficiency and increase exports by 2007. While this initiative repositioned rice growing at the centre of the country's development concerns, and spurred a 4.5% increase in paddy production between 2001 and 2007, it did not achieve its main objective. Framed with a longterm outlook, the NRDS includes several key measures, e.g. subsidies for inputs (50% for seed and 25% for

fertiliser) and reduced custom tariffs on imports of agricultural machinery such as tractors, and on processing equipment. If suitable mechanisms are put into place to ensure that subsidies are directed first and foremost to the poorest farmers and to the right actors, one can reasonably expect the national strategy to stimulate domestic rice production.

The domestic rice chain is currently dominated by trade on traditional markets. New types of institutional arrangements are emerging, however, and involve the private sector to some extent, including multinational corporations. Various forms of contractual arrangements between farmers and processors are now being tested to ensure production of high-quality paddy and white rice. Measures to stimulate investment, such as concessional loans for investment in processing, are increasingly attracting foreign capital. The emergence of new stakeholders is also guiding political decisions affecting the rice sector in Nigeria. In 2010, rice importers, processing centres and vendors in Nigeria spearheaded an effective campaign to address politicians, obtaining a ban on re-exports of rice imported to Nigeria from Benin.

Underexploited Production Capacity.

Paddy rice is, for the most part, grown by small farmers in Nigeria; over 30% of rice growers cultivate less than 1 ha, and close to 60% less than 5 ha. Although the paddy harvest rose from under 1 million tonnes in the 1970s to 4.2 million tonnes in 2010, production has not kept pace with demand. There is considerable potential for extending and intensifying rice production in the five rice-growing ecosystems found in Nigeria (plateau, rainfed plains, irrigated plains, lowlands and mangrove). The land area that could be cultivated is roughly 79 million hectares. Less than 10% of the 3.4 million hectares that could be irrigated are currently irrigated. Rice yields in irrigated areas are between 3 and 3.5 t/ha, much lower than the potential yields estimated at between 7 and 9 t/ha. This production gap could be bridged by introducing improved varieties, with better use of water resources and integrated management of rice growing.

The high cost of seed is one of the main factors behind the low level of seed renewal by farmers. Some fifty-seven varieties of rice have been made available to growers, mainly through joint selection mechanisms. These improved varieties have not been widely disseminated, however, and most rice growers continue to use primarily seed rice produced and stocked on their farms. The formal seed delivery system is regulated by the National Agricultural Seed Council (NASC). Pre-base seed is produced by research institutes, e.g. the National Cereals Research Institute (NCRI) and the Africa Rice Centre. Basic seed rice is then produced by NASC and certified seed by commercial seed producers.

Quality at Stake. The top priority of Nigeria's NRDS is to improve postharvest conservation and processing of rice. Farmers' traditional practices for harvesting, threshing, drying and storing rice generally diminish the quality and homogeneity of paddy delivered to rice processing companies. Good-quality paddy is often mixed with damaged paddy rice that contains impurities. To improve postharvest operations, better technology will have to be introduced, and the different actors in the chain will need to be informed and trained. Quality will also have to be emphasised through a system of standards.

New parboiling and hulling techniques should also be adopted to better clean rice and enhance homogeneity compared to imported rice. Today, parboiling is done mainly using cottage-industry techniques. Mechanised parboiling techniques do exist, but are not widely disseminated. Small and me-

dium-sized business are predominant in rice processing. To achieve improvement in this subsector, the Nigerian government has decided to allocate 10 billion nairas (over €50 million) to support the creation of seventeen new private rice processing companies. Despite this, significant investment in quality processing techniques remains necessary, in particular for removing stones and for bleaching rice. These investments should be encouraged by the prospect of obtaining better prices for quality hulled rice.

Strong Rice Consumption Drives the Market. Since the 1960s, when rice was served essentially at banquets and celebrations, it has become one of the basic foods in Nigerians' diet. Urban growth has entrained a continual rise in annual rice consumption, which went from 8 kg per person in 1960 to 27 kg per person in 2007. The Nigerian rice market is divided into segments by price and by quality. Traditional rice dishes are prepared with different types

of rice, so that rice consumption varies across the country. Nigeria is a large basin of local rice consumption, and hence a market that also draws rice produced in neighbouring countries such as Cameroon.

Consumers in large urban centres have a marked preference for high-quality imported rice. The strong preference for parboiled rice is not uniform across all the states in Nigeria. Nonparboiled rice is consumed in quantity in Ekiti state, while most consumers in Niger state prefer parboiled rice. In south-western Nigeria, the local Ofada varieties of rice bring high prices at market. Several studies of consumer preferences in Nigeria show that the cleanness and uniform character of imported rice make it more attractive than locally grown rice. To enable local rice to gain a significant share of the market currently held by imported rice, particularly among high-income urban consumers, substantial work and investment are needed.

The Need for Long-Term Investment.

Despite support policies, the Nigerian rice-growing sector cannot keep up with the needs of local consumers, notably due to the instability of public policy. Institutions to build better horizontal and vertical coordination of local rice-growing activity must have a stable environment if they are to be effective. Current efforts at the national level to establish solid ties between different actors in the chain are still insufficient. Major investment is necessary to build the organizational capacity of growers' organizations, ensure better circulation of information between the links in the chain, and establish contractual agreements and ensure that they are respected. It is also crucial to take steps to improve public infrastructures, consolidate the electricity distribution network, and repair and extend the roadways. It will take time for these investments to bear fruit in terms of bigger harvests of high-quality local rice.



A feet to Disco Contraction