



REVIEW ARTICLE

IMPACTS OF RICE IMPORTATION ON NIGERIA'S ECONOMY

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ABSTRACT

This study critically examined the negative effects of importation of rice on the Nigerian economy. The study also took a look at various import policies embarked upon by the Nigerian government as inconsistency in policy is a major hurdle to long term investment in the rice sub-sector. Nigeria spends billions of Naira on annual basis to import rice with its attendant depletion of the nation's foreign reserves and this study analyzed that this negative trend can be reversed as there are a lot of opportunities in the rice sub sector that will not only help the country to achieve self-sufficiency in rice production, but also transform the country from a net importer to an exporter of rice. In order to meet local demand, right investment has to be made in production, milling and grading (especially in the production of excellent quality rice that can replace imported rice), marketing, road infrastructure etc. It is recommended that farm inputs (fertilizers, improved quality seeds, pesticides etc.) should be heavily subsidized by the government at different levels as timely access to inputs can significantly raise the level of production and also lead to an increase in the quantity and quality of yield. Also, there has to be a consistent and business friendly government policy in the rice sub-sector in order to encourage investors.

Keywords: Consumption, Opportunities, Policies, Production, Systems, Tariff

INTRODUCTION

Nigerian economy is mainly an agrarian one, in spite of the fact that the country produces oil and gas. Although agriculture remains very vulnerable, it still accounts for about 70.0% of total employment [1]. This country is one of the leading consumer, producer and importers of rice in the world [2]. Rice is an important food crop and generates income for Nigerian farmers especially small scale producers who sell a larger percentage of their total production and consume only a few.

With the population of Nigeria on the increase, rice demand and consumption are also expected to increase. Nigeria's rice per capita consumption was estimated at 40 kg and it will continue to rise [3]. Out of available 4.6 million hectares of land for rice production, only 1.7 million hectares were used practical cultivation in the country [4].

In Nigeria, particularly in the 60's and 70's rice was consumed mostly in opulent homes and during religious festivities by those who could afford it. Since the mid 70's, rice consumption increased to a great extent in Nigeria [5] with an annual per capita consumption of 3 kg in 1960 to an average of 18 kg in the 1980s, reaching 22 kg between 1995 and 1999. And total consumption at 2000 stood at 4.4

million tons of milled rice with annual consumption per capita of 29 kg [5, 6]. The rise in rice consumption is expected to be influenced by income growth and a lot of other factors. As a matter of fact, the food sector in Nigeria is characterized by ever-growing demand over supply as a result of factors such as burgeoning population and rising per capita income which is creating more middle income earners.

In 2016, national rice demand was estimated at 6.3 million metric tons while domestic supply was put at 2.3 million metric tons [7]. The deficit of 4 million metric tons was expected to be filled by import. Importation of rice is detrimental to Nigeria's economy because it portends a serious danger in terms of foreign exchange (forex) earnings and its depletion of the nation's foreign reserves. As a matter of fact, the Nigerian Government spent a whopping \$2.41 billion on rice importation between January 2012 and May 2015 [8]. In order to bridge the gap between supply and the ever growing demand; the federal government of Nigeria, at one time or the other, has initiated policies and incentives for farmers to increase rice production locally. One of such policies is the 2006 presidential initiative on accelerated rice production, which was targeted at, reducing the import and developing of local rice industry and put a 50 percent duty on

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parboiled rice [9]. In addition, a levy of ten percent was imposed on rice imports to create a dedicated fund for the development of the local rice industry, including processing and marketing [9]. Considering the importance of rice as a popular menu on the table of many Nigerians and the income it generates for those who cultivate it, this paper critically assesses the impact of continuous rice importation on Nigeria’s economy and how this negative trend can be reversed through the various opportunities that are available in the rice sub-sector.

Rice production and consumption in Nigeria

Rice production systems in Nigeria

Rice was grown on approximately 3.7 million hectares of land in Nigeria, covering 10.6 percent of the 35 million hectares of land under cultivation; out of a total arable land area of 70 million hectares, 77 percent of the farmed area of rice was rain-fed, of which 47 percent was lowland and 30 percent upland [10]. Rice is grown in nearly all the agro-ecological zones in Nigeria. Nigeria has four rice production systems namely: upland rice, lowland rice, irrigated rice and mangrove/deep water rice production systems [11].

In the upland rice ecology, production strictly relies on the amount of rainfall during the cropping season and the system is characterized by limited use of modern farm inputs (fertilizers, herbicides and modern technology) [12]. Yield per hectare in this system is low but they perform better in the southern part of the country because of higher number of rainfall days [13]. This type of rice production system is found in states such as Ogun, Ondo, Ekiti, Benue, Oyo, Osun, Edo, Delta, Niger, Kwara, Kogi, Sokoto, Kebbi, Kaduna and Federal Capital Territory (FCT) as listed in table 1.

The lowland rice production system is found in waterlogged lowlands with variable flood levels and in this system, water control is nonexistent but modern farm inputs are moderately used [12]. Rice cultivation under

this system is grown also in small farm sizes of between 1 to 5 hectares and it is dominated by small family rice farmers [12].

The mangrove and deep water (floating) rice production system is found along the coastal parts of Nigeria and lies between the coastline and fresh water swamps [12]. The yield from this type of rice production system is low. The use of rudimentary technology could be a factor that contributes to low rice yield.

Irrigated rice ecology is also characterized by a wide array of rice-based production systems and it is characterized by supply of water from rivers, wells, boreholes and other sources to supplement rainfall [12]. The system is also partially dominated by multiple-year cropping seasons as rice cultivation takes place about two times a year [14].

Rice consumption in Nigeria

Rice consumption was 5 million metric tons in 2010 and is expected to reach 36 million metric tons by 2050 with 5.1% annual growth as reflected in fig. 1 [15]. Currently, Nigeria is one of the largest importers of rice in the world. The high importation of rice in Nigeria can be traced to rapid increase in population and also the demand for it by many Nigerians in their diets. Nigerian population is expected to be growing annually which implies that there will be increase in demand for rice. Also, the share of rice in Nigerians diet increased from 1% in 1960 to 7% in 1980 and 15% in 2000 [15].

Milled rice is widely consumed in Nigeria as household food item and it is also being used by industries to produce other rice-based food and pharmaceutical products [16]. Thus, the major industrial rice consumers in Nigeria are food and drink industries (for example, pasta and bread industries, beer and other liquor distilleries), and pharmaceutical companies [12].

Table 1: Distribution of rice production systems by states

Production systems	States
Upland	Abia, Bauchi, Benue, Borno, Delta, Ebonyi, Edo, Ekiti, Enugu, Gombe, Jigawa, Imo, Kaduna, Kastina, Kebbi, Kwara, Kogi, Nassarawa, Niger, Ogun, Ondo, Oyo, Osun, Sokoto, Plateau, Yobe, Zamfara, Taraba and FCT.
Lowland (Fadama)	Adamawa, Anambra, Akwa-Ibom, Bayelsa, Borno, Delta, CrossRiver, Ebonyi, Edo, Enugu, Kaduna, Katsina, Kebbi, Kwara, Lagos, Nassarawa, Ondo, Osun and Rivers.
Irrigation	Adamawa, Benue, Borno, Cross River, Ebonyi, Enugu, Kano, Kebbi, Kwara, Lagos, Niger, Ogun, Sokoto and Zamfara.
Mangrove/Deep water	Flooded Rima River Valley areas-Kebbi State and deep flood areas of Delta State. Other states are: Ondo, Edo, Rivers, Bayelsa, Cross-River and Akwa-Ibom.

Adapted from [12], Sources: [10, 13 and 15].

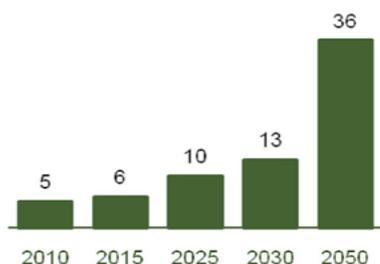


Fig. 1: Projected consumption of rice (Millions of metric tons), Source: [15]

Nigeria recorded steady growth in demand for rice by households, industries and livestock feeds manufacturers

since 1970 [12]. Different categories and grades of rice are widely consumed all over Nigeria. Imported rice has become more popular and some of this rice is imported from Thailand. In most urban areas in Nigeria, imported rice is largely consumed by a lot of people while locally milled rice is consumed largely by rural dwellers especially by those who cannot afford to buy foreign milled rice. Rice consumption varies from culture to culture in Nigeria. In most parts of Northern Nigeria, rice is used to prepare a special dish known as ‘tuwo’ while in most areas in Southern Nigeria, rice is consumed as ‘jollof’ (rice cooked with spiced tomato puree) or fried or is boiled and served with stew. Other popular rice dishes in the country include coconut rice (rice cooked or prepared with coconut), ‘masa’ (a fried dough made from local rice flour and water) mainly in the

northern part of the country. Since last 3 decades people in all levels of economy started consuming rice [3].

Negatives of rice importation, import policies and opportunities in the rice sub-sector
Negatives of rice importation

Continuous rice importation will worsen the poverty status of small scale holders in rice farming. Excessive importation of rice especially low quality rice into the country will make life difficult for small scale rice farmers because of high cost of production they have to bear as compared to their foreign counterparts who enjoy a lot of subsidies from their respective governments. Higher cost of production means that local rice farmers will be making little or no profit from their investment in rice farming, thereby, aggravating their poverty level.

Huge level of imported milled rice on regular basis into the country means that more jobs will be created in those countries where rice is being imported from while local rice farmers who cannot cope with high cost of producing rice will definitely be out of work; this will make life difficult especially in a country where there is high level of unemployment. More rice farmers out of work means a reduction in rice production at the local level which can lead to food insecurity.

Rice import dependency makes a country to be exposed to soaring and unpredictable price and does not give room for sustainable development. On the global market scene, developing countries have little or no say as far as prices of

milled rice are concerned i.e. developing countries are price takers and not price makers. Therefore, they are vulnerable to market manipulations by major players in the global rice industry. Over-dependency on rice importation if not checked, will give room for dumping of low quality, sub-standard and sometimes expired rice into any country that allows it. This in particular can lead to rice food swamps being created. Also, the dumping of heavily subsidized rice from developed economies into developing countries makes it difficult for local rice producers to compete favorably with their foreign counterparts.

Rice import policies in Nigeria

Traditionally, rice import policy in Nigeria has not been consistent due to change of government. Different government regimes come up with different policies and a new regime may not like to continue with the policies of the former regime. Therefore, frequent changes in policies have increased the risks and uncertainties faced by investors in the sector and these changes in policy have made long term investment in the sector a difficult task. The broad objective of all these policies is to discourage importation and foster domestic production to meet demand locally. Some of these policies prior to April 1974 up to 2014 are chronicled in table 2. In October of 2015, the Nigerian Government allowed the importation of rice through the land borders once appropriate charges and duty were paid [17]. But, there was a reversal of this policy in March of 2016 in which a zero-tolerance policy to importation of rice through the land borders was introduced [17].

Table 2: Rice import policies in Nigeria

Period	Policy measures
Pre Ban Period	
Prior to April 1974	66.6% tariff was in operation
April 1974-April 1975	There was a reduction in tariff to 20%
April 1977-April 1978	10% tariff
April 1978-June 1978	20% tariff
June 1978-October 1978	19% tariff
October 1978-April 1979	Imports in containers under 50 kg were banned.
April 1979	Imports placed on restricted license only for government agencies
September 1979	6-month ban on all rice imports
January 1980	Import license issued for only 200,000 metric tons of rice only
October 1980	Rice under import restrictions with no quantitative restrictions
December 1980	Presidential Task Force (PTF) on rice was created and issued allocations to customers and traders through Nigeria National Supply Company (NNSC)
May 1982	PTF began the issue of allocations directly to customers and traders in addition to those issued by NNSC
January 1984	PTF Disbanded and rice importation placed under general license
Ban Period	
October 1985-1994	Importation of rice banned as Structural Adjustment Program was introduced and all commodity boards were disbanded
Post Ban Period	
1995	100% tariff
1996-2000	50% tariff
2001	85% tariff
2002	100% tariff
2003	150% tariff
2004	75% tariff
2005-2006	100% tariff
2007	109% tariff
2008	0-30% tariff-This was 0% Jan-Sept, and 30% by Oct.
2009	30% tariff
2010	30% tariff
2011-2012	50% tariff
2013	110% tariff
2014	110% tariff

Adapted from [12]

Opportunities in the rice sub-sector

Nigeria's population is expected to be growing which implies more demand for rice and this has given rise to several opportunities across the rice value chain. Huge array of opportunities are available in the rice sub-sector from the cultivation stage down to the distribution stage. Some of these opportunities are enumerated below:

Inputs

Poor resource farmers are responsible for a greater percentage or quantity of local rice production, so timely access to farm inputs such as fertilizer, pesticides, improved quality seeds, credit and irrigation can raise the level of production to a large extent and also lead to an increase in the quantity and quality of yield under good agronomic practices. Increase in rice production means that a lot of job opportunities will be created for companies or industries that specialize in the production of farm inputs (seeds, pesticides, fertilizer, irrigation implements etc.) that are needed in rice production and by so doing a lot of people will be employed in the rice sub-sector. In order to meet the ever increasing demand for rice, more of the available arable land will have to be cultivated. This means that more opportunities will be created for local manufacturers of equipment that are needed in rice production such as land clearing machines, rice weeding machine, fertilizer applicator, irrigation implements especially for those of them who can introduce low cost and efficient technology which will help in reducing land clearing and weeding times.

Milling

A lot of rice produced by local farmers is processed by cottage mills that do not produce high quality milled rice. At times, some of this rice produced by small scale farmers is mixed with sand, pebbles etc. In order to meet domestic demand for high quality rice, more integrated rice mills will have to be established in different parts of the country to produce local rice that are of premium quality that can replace imported rice. Therefore, sufficient capital will have to be invested in highly sophisticated rice mills that can process a large number of paddy within a short period of time. These mills must be established in areas of rice production in order to ensure that they have sufficient supply of paddy to process so that they do not go moribund and also to ensure that farmers do not travel long distances before they can process their paddy. Investment must also be made in the power sector to ensure that rice mills have regular supply of electricity to make them function regularly and also to reduce the burden of using diesel or fuel to power them which can significantly raise the cost of production and also impact negatively on the environment.

DISTRIBUTION

A lot of job opportunities will also be created in the area of distribution as distributors will be needed to move rice from various mills to different parts of the country. For distribution to be effective, investments will have to be made in road infrastructure, rail network etc.

Restaurant/Catering business

Different job opportunities are available in the rice value chain as a lot of restaurant owners make money from using rice to prepare a lot of meals such as:

- 'Jollof' rice, which is, rice cooked with spiced tomato puree, vegetable oil, meat and other essential ingredients.
- Coconut rice, which is, rice cooked with processed coconut powder and other vital ingredients.
- Masa, a popular local delicacy in northern Nigeria which is a fried dough prepared from flour made from local rice and water.
- White rice (cooked rice that is served with stew and meat or fish)
- Fried rice, which is, rice cooked with green pepper, carrot, green beans, liver, seasoning cubes, spring onion, vegetable oil and other ingredients.

Livestock production

Rice bran is used to feed animals while rice hulls and husks can be used as bedding and brooding materials particularly in poultry farming.

CONCLUSION

Continuous importation of rice is doing a lot of harm to the Nigerian economy especially in the face of dwindling oil revenue occasioned by factors such as unpredictable nature of Niger Delta militants and volatile prices of crude oil at the global market. Importation of rice makes foreign rice farmers wealthier at the expense of local rice farmers who face high cost of production. As part of the remedies to the problem of excessive rice importation, there has to be a consistent and business friendly policy by the government as inconsistent and harsh policy will make investors to be jittery about long term investment in the sub-sector. In order to achieve self-sufficiency in rice production, a lot of investments has to be made by the government, rice farmers and major players in the sub-sector especially in the area of production such as increasing the area under cultivation, provision of more irrigation facilities to reduce susceptibility to drought, subsidizing farm inputs by the government at different levels; and integrated mills must be established by the government and agro-processors in rice producing areas across the country in order to produce high quality, locally milled rice that can compete favourably with foreign milled rice. Also, farmers should form a cooperative society where they can pool their resources together to buy farm inputs in bulk at a reduced price and do other necessary things. Awareness should be created by the government on the need to buy and eat locally made rice as a way of reducing excessive demand for foreign milled rice.

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