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**GAIN Report Number:** 

# Nigeria

# **Grain and Feed Annual**

# Annual

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## **Report Highlights:**

The Central Bank of Nigeria continues to restrict access to foreign exchange in an effort to reduce rapid spending of U.S. dollars outside of Nigeria. This restriction is hindering all direct imports, including food and agricultural products. Post estimates that Nigeria's MY2016/17 wheat imports will decline by 5 percent to 4.1 million tons. MY2016/17 rice imports are expected to fall 400,000 tons to 2.1 million tons. Declines in corn production are expected to increase MY2016/17 imports to 400,000 tons, a 33 percent increase from the previous year. Sorghum consumption is raised due to sustained demand as substitutes for higher priced grains, such as corn, wheat, and rice. Of the grains discussed, sources note that overall production will not change significantly, despite stalled implementation of government policies, poor infrastructure, and restricted access to fertilizer.

#### **Commodities:**

Wheat Corn Sorghum Rice, Milled

## Nigeria's Current Agricultural Economic Landscape

## Foreign Exchange Access

Declining oil prices continue to restrain Nigeria's revenues (in U.S. dollars), adding surmountable pressure on repaying its financial obligations. To help secure supplies of foreign currency, on June 23, 2015, President Buhari imposed a monetary policy to restrict foreign exchange access for 41 imported goods and services which include highly consumed food and agricultural products. These products are deemed substitutable with domestic alternatives. Among the food products affected by this import restriction includes are rice, margarine, palm kernel/palm oil products, vegetable oils, meat and processed meat products, vegetables and processed vegetable products, poultry, eggs, turkey, frozen and tinned fish as well as tomatoes/tomato pastes. Recent announcements suggest that the Government of Nigeria believes that local food production will feed its rising population.

Foreign exchange is available at different rates: at the time of this report, the official GON rate is at about 200 Naira to 1 USD; and the parallel market rate fluctuated between 300 and 340 Naira to 1 USD. Food importers note that they are able to obtain only 20 - 30 percent of their foreign exchange demand from official sources; however, for the remaining 70 - 80 percent, they rely on the high-cost parallel market. [Note: Government sources note that foreign exchange is more readily available for improving infrastructural development and services.]

#### Security

On security, sources note that the government of Nigeria is making progress on addressing challenges with the Boko Haram and migrant herdsmen insurgencies in the Northeast grain-producing region. That said, the majority of farmers are still dislodged, settled in camps as internally displaced persons and are living on donated food items. Reportedly, there are limited government funds to rehabilitate the massive destruction of farmlands and infrastructure and to procure supplies from grain farmers for government-held stocks.

## Slow Implementation of Agricultural Policies

Farmers note that the new government regime has yet to allocate adequate funding support for agricultural development and transformation. It was also stated that the government is still operating under the previous government's budget. Anecdotal information notes that the Government of Nigeria aspires to reach a 20 million metric ton increase in overall production of priority commodities – wheat, rice, and sugarcane. It also wishes to attain rice self-sufficiency by 2017 and lower wheat imports by 50 percent by the end of 2017. Sources further mentioned that the Government may set aside N40 billion (about \$200 million) for farmers at a single-digit interest rate of 9.0 percent under its new Anchor

Borrowers Program, which will be managed by the Central Bank of Nigeria (Federal Reserve equivalent). Allegedly, under this program, farmers would be given financial assistance through a bank loan. That loan would be held in an account where agricultural input suppliers will be paid directly based on the cost of supplies provided to the farmer, e.g. seeds, fertilizer, and equipment.

At the time of this report, there had been no clear indications that these plans will improve the current production season or when government support will be available. With Nigeria's 2016 budget proposal currently set at less than 2 percent for agriculture, analysts indicate that this signal contradicts GON's propositions to shift from the failing oil-dependent economy to an agriculture-based economy.

Sources noted that the GON recently convened the National Council on Agriculture where stakeholders discussed issues about the current and future agricultural situation and policies. The Growth Enhancement Scheme (GES) of the Agricultural Transformation Agenda was largely referenced. It is possible that the Government of Nigeria will modify and adopt current policies set under the GES/ATA. [For background purposes, the GES/ATA is the agricultural policy formulated and implemented by the preceding GON to protect domestic agriculture and food processing through various measures, such as high tariffs, levies, and import quotas and bans.]

Please visit the below link for information on the Agricultural Transformation Agenda: <a href="http://gain.fas.usda.gov/Recent%20GAIN%20Publications/Grain%20and%20Feed%20Annual\_Lagos\_Nigeria\_4-4-2014.pdf">http://gain.fas.usda.gov/Recent%20GAIN%20Publications/Grain%20and%20Feed%20Annual\_Lagos\_Nigeria\_4-4-2014.pdf</a>

## Availability of Fertilizer

Fertilizer use is expected to be limited this year for a few reasons: (1) the government intervention program has not been announced; (2) movement of fertilizer is restricted, particularly for urea, on the basis of security concerns; (3) fertilizer is used only within the producing region; it has been prohibited to move across states or through the ports since March.

# **Wheat Production, Supply and Demand Data Statistics:**

Wheat	2014/2015 Jul 2014		2015/2016 Jul 2015		2016/2017 Jul 2016	
Market Begin Year						
Nigeria	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested	70	70	60	60	0	60
Beginning Stocks	200	200	200	200	0	180
Production	70	70	60	60	0	60
MY Imports	4244	4244	4400	4300	0	4100
TY Imports	4244	4244	4400	4300	0	4100
TY Imp. from U.S.	1844	1844	0	0	0	0
Total Supply	4514	4514	4660	4560	0	4340
MY Exports	400	400	400	400	0	300
TY Exports	400	400	400	400	0	300
Feed and Residual	50	50	50	50	0	50
FSI Consumption	3864	3864	4010	3930	0	3830
Total Consumption	3914	3914	4060	3980	0	3880
Ending Stocks	200	200	200	180	0	160
Total Distribution	4514	4514	4660	4560	0	4340
(1000 HA),(1000 MT)						

#### **Production**

Post estimates that Nigeria's 2016/17 wheat area and production will remain unchanged at 60,000 hectares and 60,000 tons, respectively. Government sources note that Nigerian wheat yields have recently improved from 1-2 metric tons per hectare to 4-6 metric tons per hectare based on improved seed and management. However, industry insiders suggest 1 metric ton per hectare based on low soil quality and limited land suitable for wheat production. Moreover, industry insiders claim that the official yield estimate is only possible with government intervention, including an official announcement for the minimum guaranteed price. The Ministry of Agriculture, the Flour Millers Association and other relevant stakeholders are determining the minimum purchase price for this year's wheat. Flour millers have suggested that the price should be competitive against international prices. Compared to imported wheat, locally produced wheat tends to have higher protein content, lower moisture, but lower gluten, which is a characteristic not well suited for bread production, according to local millers.

To date, the Government of Nigeria's agricultural policy and funding has not yet to be announced. Farmers doubt that government support will be provided under current economic conditions. In the past, government sources noted that public interventions included: seed (at 90 percent subsidies), fertilizer at (50 percent), water pumps (75 percent) and threshers (75 percent). Reportedly, there is memorandum of understanding between the Ministry of Agriculture and the Flour Millers Association of Nigeria noting that any wheat produced will be purchased by the millers. The Ministry of Agriculture established an aggregation point in Kano and is requesting additional aggregation points in Jigawa and Kebbi to ease transportation issues.

Nigeria's traditional wheat producing regions are in the Northeast and the highlands. In recent years, production has declined in the northeast where there have been insurgencies. Large-scale millers have noted marginal increases, but Nigeria's overall production is estimated to be relatively stable. Wheat is typically planted in the fall and then harvested around April. The land used for wheat production is then

used for other rain-fed crops during the rainy season, which lasts from April to September. Rice is sometimes double-cropped with wheat.

Claims of Self Sufficiency in Wheat Production

The Government of Nigeria announced its interests in reducing wheat imports by 50 percent starting 2017; however, farmers and industry insiders note that local wheat production face on- and off the farm challenges that would prevent reaching such goal. Separately, Boko Haram insurgents and herdsmen in Nigeria's wheat belt continue to dislodge farmers and limit investment. Long-term private-sector investment is needed before local production can meet demand. Sources are noticing that some agribusinesses are contracting more wheat farmers and are providing on the farm training to help boost quality production in untapped areas.

### **Consumption**

Nigeria's 2016/17 wheat consumption is estimated to decrease by 3 percent to 3.9 million tons from the current MY 2015/16 estimate of 4.0 million tons. Wheat millers note slower-than-normal flour production largely due to limited domestic supplies and restricted access to foreign exchange for imports. Weakening local currency coupled with higher-than-normal market prices is lessening consumers' purchasing power and preventing wheat millers to share rising production costs in the marketplace. Major millers want to keep their factories at productive levels, so they are adjusting some of their formulas and origins in order to maintain profits at reasonable levels. Bakers are also increasingly becoming proficient in mixing wheat flours. Wheat products, especially bread, will continue to be widely consumed as a major staple.

Strong recent growth for pasta, noodles, and semovita are expected to decline as they are considered to be luxury items. [Note: In Nigeria, wheat flour is used as inputs for bread (at 70 percent), pasta (15 percent) and other products including semolina (15 percent). Also, wheat by products, such as wheat bran, is used in animal feed.]

The Government of Nigeria is currently requiring an inclusion of five percent of cassava into locally milled bread flour. Use of local commodities in flour—the cassava inclusion—is much lower than initially planned. Millers indicate insufficient supplies of quality cassava flour (used for blending) with wheat flour. Cassava flour is also not protein-rich and does not meet milling characteristics; bakers also indicate that Nigerian consumers do not prefer to purchase bread with cassava-included flour. As a result, some flour millers have recently ventured into other more protein-rich sources, such as sorghum flour, with significant investments being made.

With lowering purchase power of consumers, as the economy has been affected by various macroeconomic issues, Post lowered its MY 2015/16 consumption estimate by 100,000 tons to 3.9 million tons. Flour millers have raised their prices over the past year, which has dampened some consumption growth. Bread prices have gone up 30-35 percent over the past year. Given high market prices, consumers are eating less wheat products (like bread, pasta, and instant noodles) and more of cassava, millet, beans, sorghum, and yam which Nigeria grows locally.

#### Trade

## **Imports**

The Government of Nigeria wants to reduce wheat imports by 50 percent over the next year. However, given low production prospects and sustained wheat consumption by Nigerians, Post estimates that its MY2016/17 wheat imports will decline by only 5 percent to 4.1 million tons.

With the declining purchasing power, Nigerian consumers increasingly seek inexpensive product substitutes. U.S. wheat prices are premium (by \$40 - \$50 per ton) and no longer competitive to imported Black Sea wheat. This will remain a challenge for U.S. wheat and other higher-priced wheat.

To remain competitive in the market, Nigerian wheat millers are blending higher quality U.S. wheat with lower quality, inexpensive wheat from other suppliers. With Nigeria's current economic situation, lowering purchasing power, and limited availability of foreign exchange, Post is reducing its MY 2015/16 wheat import estimate by 100,000 tons to 4.3 million tons. Importers who have direct access to foreign exchange (due to their export business) will gain market share in this current business climate.

# Exports

Nigeria's MY2016/17 wheat export estimate is lowered by 100,000 tons to 300,000 tons largely based on limited exportable supplies of flour, as millers are import-constrained and are now seeking local market demand. Due to recent insurgencies in the North, traders are skeptical with delivering products across the border into neighboring countries, so there have been slower-than-normal movements to date. However, insiders note that this informal channel is still active. Nigerian wheat is facing competition with Turkish flour in Benin and neighboring countries.

#### Stocks

Given limited access to forex, importing flour mills indicate that they are maintaining a lower-than-average supply of stocks on hand. To reflect this, 2015/16 ending stocks have been lowered by 20,000 tons to 180,000 tons, and 2016/17 ending stocks are anticipated to decline even further if current policies continue.

## **Policy**

The Government of Nigeria's new regime is expected to maintain the existing position to reduce wheat imports by 50 percent at the end of 2017. Government has announced aspirations of dramatically increasing production and reducing imports; however, analysts seem to be unclear of the new government's policies and funding support. Flour millers are required to include 10 percent of cassava flour in their bread flour, with the goal to ultimately include 40 percent in the coming years. Actual rates of inclusion are much lower, with Post estimating that inclusion is closer to 1.5 percent. Current import tariff on wheat is five percent duty plus 15 percent levy. Imports of flour pasta, including noodles, continue to be banned.

#### **Marketing**

Over the last two decades, the U.S. wheat industry invested countless capacity-building activities for Nigeria's flour millers, bakeries and pasta manufacturing sector through sponsored trainings in the United States and Nigeria. To address challenges with declining market share, the U.S. wheat industry is exploring various strategies to improve sales and its market presence.

#### **Rice Production, Supply and Demand Data Statistics:**

Rice, Milled	2014/20	015	2015/2	016	2016/2017	
Market Begin Year	Oct 2014		May 20	)15	Oct 2016	
Nigeria	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested	2700	2700	2400	2500	0	2500
Beginning Stocks	657	657	1192	792	0	651
Milled Production	2835	2835	2709	2709	0	2700
Rough Production	4500	4500	4300	4300	0	4286
Milling Rate (.9999)	6300	6300	6300	6300	0	6300
MY Imports	3500	3000	2500	2500	0	2100
TY Imports	3000	2500	2500	2300	0	1900
TY Imp. from U.S.	0	0	0	0	0	0
Total Supply	6992	6492	6401	6001	0	5451
MY Exports	0	0	0	0	0	0
TY Exports	0	0	0	0	0	0
Consumption and Residual	5800	5700	5850	5350	0	5151
Ending Stocks	1192	792	551	651	0	300
Total Distribution	6992	6492	6401	6001	0	5451
(1000 HA), (1000 MT)						

#### Production

Post estimates Nigeria's 2016/17 rice area and production will remain unchanged at 2.5 million hectares and 2.7 million tons, respectively. Post revised its 2015/16 rice area. Backward integration in the form of installation of rice mills and direct farming seems to be gaining more ground, but overall production remains at 4.3 million tons.

With limited government support and low-level private sector investments in paddy production, domestic supplies still fall significantly short of local demand. Small scale farmers are uncertain about the government's policy direction. For example, stalled activities under the Government of Nigeria's Growth Enhancement Scheme continue to limit new investments in land preparation and expansion, especially for reclaimed area from insurgencies. Farmers have been motivated by an unusual increase in local rice demand as the Government of Nigeria and international donor agencies make local rice purchases for feeding internally displaced persons in camps.

The rice milling rate is 65 percent for integrated rice mills, and 55-60 percent for small-scale mills which represent 60-70 percent of Nigeria's total milling capacity. Large mills claim that there are limited supplies of paddy rice, often operating at less than 20 percent. Small scale mills are very active, but their final products tend to be of lower quality because of limited equipment.

Nigeria's wet planting season captures 80 percent of overall production, starting in April and harvested in August. The remaining 20 percent is produced during the dry planting season, starting in September and harvested in December. Sources note that the wet planting season has higher yields, compared to the dry planting season with limited irrigation systems. Maturation is 3-4 months depending on varieties. Rice seed varieties include Faro 54 and 52, as well as Nerica, a rice variety developed specifically for Africa.

The current government seems to have adopted similar goals as its predecessors with regard to obtaining self-sufficiency in rice production by 2017. According to government officials, there are single-digit interest rates available for agricultural loans on paddy production; however, farmers report challenges with accessing such loans. Processors report that local rice production costs are considered relatively expensive, largely due to rising costs for low-yielding seeds/seedlings and transportation to/from milling facilities which are located in areas of inadequate infrastructures, such as roads and electricity.

#### **Consumption**

Post estimates 2016/17 rice consumption at 5.2 million tons, a 4 percent decrease from the revised 2015/16 estimate of 5.4 million tons. This is largely due to declining consumer purchase power and rising market prices; both caused by current price inflation and currency devaluation.

Imported rice has become more popular and common. Thailand rice is preferred for its extra-long grain (7 mm), even though it may be slightly more expensive. Indian rice has been cheaper, but has a shorter grain (6 mm). Occasionally, there are imports from Brazil. Local rice also tends to be offered at a higher price. Price for the preferred domestic rice, packaged in 50 kilograms, is reported at 35,000 Naira (equivalent to 102 USD on parallel market); meanwhile, imported rice is quoted at 13,000 Naira (equivalent to 40 USD). [Note: In April 2015, imported rice was noted at 7,000 Naira.]

Nigeria's rice per capita consumption is estimated at 40 kilograms. Popular rice dishes include:

- jollof rice, which is cooked rice with spiced tomato paste;
- plain rice is consumed with tasty stews;
- coconut rice cooked with processed coconut powder or milk;
- MASA: a fried dough consumed in the North and is made from local rice flour and water;
- TUWO: domestic rice often made into flour and prepared into a paste—eaten with soup—and popular in northern Nigeria.
- Rice is also given as gifts in Nigeria.

Parboiled rice is almost entirely consumed in Nigeria; neighboring countries mostly consume white rice. Most parboiled rice shipped to neighboring countries is consumed by Nigerians.

Given the current economic situation, with currency devaluation and high market prices, sources note that rice consumption is declining, while consumption for cassava and yam-based tubers are increasing. Traditionally, rice had only been consumed by the elite class. It is only within the last three decades that low and middle income families have added rice to their everyday plate and not just on special

occasions. Consumers are starting to return to more affordable foods for everyday consumption, such as yam, cassava, millet, and even sorghum (mainly in the North).

## **Imports**

MY 2016/17 rice imports are forecast to fall by 400,000 tons to 2.1 million tons from the MY 2015/16 estimate of 2.5 million tons. Key factors influencing this decline are constraints on foreign exchange, the current ban on land imports, and the high prices which have shifted consumer demand to more affordable alternatives.

In July 2015, the Government of Nigeria announced that imported rice cannot be funded through the formal forex market; however, sources note that rice imports are mostly funded through off-shore funds or from the more-expensive parallel market. Four months later, in October, the Nigerian government lifted its ban on importing rice through neighboring countries. Although this opened the door for cross border rice imports into Nigeria, traders have indicated that Nigeria's volatile exchange rate constrains purchase decisions. In March 2016, the prospects for imports dampened even further when the government once again banned importation of rice via land borders. [Note: Imports to Nigeria come both as bagged and bulk. The bulk rice is then bagged at the port into 50 kg polypropylene bags.]

#### Stocks

MY 2016/17 ending stocks are forecast to decline further to 300,000 tons, indicative of the tighter supply situation expected in the coming year. MY2015/16 stocks are revised up by 100,000 tons to 651,000 tons largely due to market price increases and change in consumer preferences for more affordable foods, such as yam, beans, millet, cassava, and even sorghum (mainly consumed in the North).

#### **Policy**

Sources note that the Nigerian government has yet to approve foreign exchange allocations to rice importers since the initiation of the Central Bank of Nigeria's new monetary policy. It was also stated that the government regime may adopt the Agricultural Transformation Agenda's rice policy for self-sufficiency. Encouraged by official policy proposition to ban rice imports by 2017 as well as Nigeria's differential tariff policy, private sector investments in local rice farming have increased. The differential tariff policy provides: (1) integrated rice mill operations with grower schemes at 30 percent tariff; and (2) rice importers without backward integration at 70 percent tariff. This noticeable difference between tariffs has attracted private investment in integrated rice mill operations, partly offsetting production declines by small scale farmers.

## Marketing

Local rice production continues to be considered as underdeveloped and inefficient. Perception that local rice is of lower quality remains high among Nigerians despite efforts by public and private sector stakeholders who promote local rice as fresh and more nutritious as compared to the imported rice.

### **Corn Production, Supply and Demand Data Statistics:**

Corn	2014/2015 Oct 2014		2015/2	2015/2016		2016/2017	
Market Begin Year			May 2015		Oct 2016		
Nigeria	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post	
Area Harvested	4150	4150	3800	3800	0	3950	
Beginning Stocks	246	246	361	361	0	161	
Production	7515	7515	7000	7000	0	6800	
MY Imports	300	300	300	300	0	400	
TY Imports	300	300	300	300	0	400	
TY Imp. from U.S.	0	100	0	0	0	0	
Total Supply	8061	8061	7661	7661	0	7361	
MY Exports	200	200	200	200	0	200	
TY Exports	200	200	200	200	0	200	
Feed and Residual	1900	1950	1800	1800	0	1800	
FSI Consumption	5600	5550	5500	5500	0	5200	
Total Consumption	7500	7500	7300	7300	0	7000	
Ending Stocks	361	361	161	161	0	161	
Total Distribution	8061	8061	7661	7661	0	7361	
(1000 HA),(1000 MT)							

#### **Production**

Post estimates that Nigeria's 2016/17 corn production will decline by three percent to 6.8 million tons. Reportedly, with delays in implementing Nigeria's Agricultural Transformation Agenda (ATA), farmers have yet to receive improved seeds, fertilizers or on-the-farm training.

Area harvested in 2016/17 is estimated to increase by four percent to 3.95 million hectares from 3.8 million hectares in 2015/16, partially due to high market prices and reclaim land from insurgencies. Improved seed varieties are available; however, low scale farmers note that these seeds are at high prices. [In previous years, under ATA, the government contracted for improved seeds which were distributed to farmers at highly subsidized prices.] That said, the majority of farmers rely on the traditional low-yielding seeds, and they require government support and farm management training. Drought in some major corn-producing regions last year had affected yield. An additional constraint to expanding production is access to fertilizer, which is recently controlled at ports and producing regions for security reasons. Corn is grown throughout Nigeria. Some regions are able to cultivate corn two times a year. However, the Northern Central states, such as Kaduna and Kano, are major producer states.

#### **Consumption**

2016/17 corn consumption is estimated at 6.8 million tons, a decline of 500,000 tons compared to 7.3 million tons in 2015/16. Corn is largely consumed in the north, in the form of corn flour and corn grits; poultry feed demand is continuing to shift upward. However, market price increases, amidst declines in

purchasing power, will likely shift consumers to less expensive grain substitutes, such as sorghum, for both human and animal consumption.

#### **Trade**

MY2016/17 corn import estimate is at 400,000 tons, a 33 percent increase from the current MY 2015/16 estimate, due to tight domestic supplies resulting from limited access to quality seed and fertilizer.

Exports to neighboring countries, like Cameroon, Niger, Benin, and Chad are expected to remain around 200,000 tons.

# **Policy**

Corn imports into Nigeria are allowed at a five percent tariff.

# Sorghum Production, Supply and Demand Data Statistics

Sorghum	2014/2015 Oct 2014		2015/2	2015/2016 May 2015		2016/2017	
Market Begin Year			May 20			Oct 2016	
Nigeria	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post	
Area Harvested	5500	5500	5300	5300	0	5300	
Beginning Stocks	200	200	150	150	0	200	
Production	6700	6700	6150	6150	0	6200	
MY Imports	0	0	0	0	0	0	
TY Imports	0	0	0	0	0	0	
TY Imp. from U.S.	0	0	0	0	0	0	
Total Supply	6900	6900	6300	6300	0	6400	
MY Exports	100	100	50	50	0	50	
TY Exports	100	100	50	50	0	50	
Feed and Residual	150	150	150	150	0	200	
FSI Consumption	6500	6500	5900	5900	0	6050	
Total Consumption	6650	6650	6050	6050	0	6250	
Ending Stocks	150	150	200	200	0	100	
Total Distribution	6900	6900	6300	6300	0	6400	
(1000 HA), (1000 MT)	-		-	-	~		

#### **Production**

Post's 2016/17 production area estimate is expected to remain unchanged at 5.3 million hectares due to sustained demand as consumers shift from high price grains to sorghum flour foods. Millers are beginning to experiment with including sorghum flour into wheat flour. As a result, increased investments in sorghum flour processing are expected. MY2016/17 production estimate is noted at 6.2 million tons, a slight increase from the current MY 2015/16 figure.

# Consumption

MY2016/17 consumption is expected to increase by 4 percent to 6.3 million tons from the current MY2015/16 estimate. MY2016/17 feed and residual figure is increased by 50,000 tons to 200,000 tons in MY2015/16. With this year's high grain prices, sources note that more sorghum will be consumed in households and by livestock.

Given challenges with wheat importation, locally sourced commodities like cassava, sorghum, millet, and others will become alternatives. From this list, sorghum is deemed most suitable because of its protein content, which is an important characteristic for producing high quality bread flour. Other sorghum uses include beverages, both alcoholic and non-alcoholic. Sorghum can be used for feed as well, but the poultry industry is concerned about its tannin levels.

Due to religious beliefs, some farmers in the North are concerned that sorghum purchased from them will be utilized for alcoholic beverage processing and are reluctant to sell to malting facilities and breweries. The most common use for sorghum in the northern region is for porridge preparation.

Sorghum and millet are also close substitutes. With increasing use of sorghum for industrial purposes, demand for millet is expected to increase in the coming year. Sorghum is sold for about \$350 per 50 kilograms.

#### Trade

Sorghum can be imported into Nigeria at five percent tariff.

In 2011, the Nigerian government also removed its export ban to neighboring countries, mainly Niger and Chad. Sources note that only 50,000 tons of Nigerian sorghum is exported.