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## **Report Name:** Grain and Feed Annual

**Country:** Nigeria

**Post:** Lagos

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### **Report Highlights:**

In 2021, Nigeria is expected to face decreases in grain supplies due to conflict and economic factors exacerbated by the secondary effects of COVID-19. Internal security across the country is a serious challenge to food production especially in the corn belt. Insecurity is rife across the country's leading agricultural states. Corn and sorghum production are forecast to decline while rough rice production is forecast to grow by 17% higher than MY 2020/21 due to farmers now cultivating two crops per year. Consumption of wheat and corn is forecast to increase - especially corn being a critically important source of feedstock. Rice consumption is forecast to drop by 1.5% largely due to increasing prices amid lowering consumer purchasing power and declining household incomes. The government is unlikely to change its forex policy to help increase wheat, soybean, and corn imports.

## **MARKET OVERVIEW**

Nigeria is Africa's largest economy, and a major oil producer with a population of over 202 million people. The country marginally exited the recent recession in the fourth quarter of 2020 with GDP expanding by 0.11 percent (year over year), representing the first positive quarter growth in the last three quarters. Though weak, the meagre growth reflects the gradual return of economic activities following the easing of COVID-19 restricted movements and limited local and international commercial activities in the preceding quarters.

2021 was ushered in with the second wave of COVID-19, implementation of African Continental Free Trade Area (AfCFTA), a rise in oil prices, an upsurge in insecurity (terrorism, kidnapping, and banditry) and an increase in clashes between herdsmen and farmers. The pandemic worsened inflation, which has been over ten percent since 2016. Given the low-growth and high-inflation backdrop, the Central Bank of Nigeria (CBN) is implementing a policy to reverse galloping food inflation by purchasing grains produced by farmers financed under the 2020 wet season Anchor Borrowers Program (ABP). Currently, the CBN is sitting on thousands of metric tons of grains in strategic grain silos and warehouses. The CBN is also trying to resuscitate the moribund Nigeria Commodity Exchange (NCX) to facilitate price stability for grains.

Towards the end of 2020, the Government of Nigeria (GON) announced the reopening of four land borders with neighboring countries. This policy ended a 16-month closure of all borders to business traffic. The GON closed its land borders to curb the influx of smuggled goods from neighboring countries such as Benin, Niger, and Cameroon, as well as boost local food production. The border policy was implemented three months after Nigeria signed the AfCFTA agreement, which aims to create a continental borderless market.

Nigeria's agricultural policy prioritizes domestic food and agricultural production through protective trade policies amid low productivity. In September 2020, President Buhari called for a ban on dollars for food imports and added fertilizers to the restricted items list. Currently, this action is forcing wheat and soybean importers to source dollars at higher rates through the parallel markets. The high foreign exchange rates are increasing the cost of flour and leading to rising prices and declining consumption of bread and other wheat flour-based products during the out-year.

## WHEAT

### Production, Supply and Distribution Table

Wheat Market Year Begins	2019/2020		2020/2021		2021/2022	
	Jul 2019		Jul 2020		Jul 2021	
Nigeria	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested (1000 HA)	60	60	60	50	0	55
Beginning Stocks (1000 MT)	200	200	298	209	0	189
Production (1000 MT)	60	60	60	55	0	55
MY Imports (1000 MT)	5338	5249	5500	4900	0	5000
TY Imports (1000 MT)	5338	5249	5500	4900	0	5000
TY Imp. from U.S. (1000 MT)	1382	0	0	0	0	500
Total Supply (1000 MT)	5598	5509	5858	5164	0	5244
MY Exports (1000 MT)	400	400	500	500	0	200
TY Exports (1000 MT)	400	400	500	500	0	200
Feed and Residual (1000 MT)	50	50	50	50	0	50
FSI Consumption (1000 MT)	4850	4850	4900	4425	0	4888
Total Consumption (1000 MT)	4900	4900	4950	4475	0	4938
Ending Stocks (1000 MT)	298	209	408	189	0	106
Total Distribution (1000 MT)	5598	5509	5858	5164	0	5244
Yield (MT/HA)	1	1	1	1.1	0	1

(1000 HA) ,(1000 MT) ,(MT/HA)  
 MY = Marketing Year, begins with the month listed at the top of each column  
 TY = Trade Year, which for Wheat begins in July for all countries. TY 2021/2022 = July 2021 - June 2022

### PRODUCTION

Nigeria is again heading toward another year of low wheat production. FAS Lagos (Post) forecasts Nigeria's wheat production in marketing year 2021/2022 to reach 55,000 metric tons (MT). Area harvested the same marketing year is also expected to decrease by 5,000 hectares, from 60,000 hectares forecast by USDA in the previous year to 55,000 hectares. Banditry and kidnapping activities have reached high levels in Northwest Nigeria, which is the primary wheat cultivation region. Wheat is grown mostly in Borno, Bauchi, Yobe, Kano, Jigawa, and Zamfara States. Currently, these states are under intense military operations to expel terrorists and bandits. These restrictions make it highly difficult for farmers to access their farms.

The issue of climate change is of great concern to agricultural productivity. Lake Chad was once one of Africa's largest freshwater bodies and a source of livelihood for about 30 million people. However, the size and economic vibrancy of the lake have diminished significantly due to climate change, impacting food systems especially wheat production.

Nigeria's wheat production has been hampered by a lack of modern agronomic practices and the unavailability of improved seeds. The national average yield for wheat is 1MT/Ha. Late last year, the CBN imported improved wheat seeds to support wheat farmers. The central bank is planning a Seed Multiplication Project this year through the cultivation of 80,000 ha and later offtake and recirculate them in the next planting season. There will be a lot of activities around seed multiplication this year, which will affect the total wheat output.

## **CONSUMPTION**

Nigeria is struggling to meet rising wheat demand. MY2021/22 consumption is forecast at 4.9 million metric tons (MMT), up nearly 10% higher than 2020/21 Post estimates. Wheat consumption is expected to grow, but the recent foreign exchange restriction is impeding growing domestic demand. The GON through the central bank is implementing measures to increase the foreign exchange (forex) availability. Importers are forced to source forex outside official CBN sources. Many of the milling companies have started looking at partners like subsidiaries or parent companies outside of Nigeria for help in getting dollars.

This situation is negatively impacting the price of wheat products like bread. The prices of bread and other wheat derivatives increased between 10 to 15 percent over the last 12 months due to high costs of production by the millers and bakers. Many households are already using yams, plantain, sweet potato, and garri (cassava products) as substitutes for bread. Bread loaves are staying longer on retail shelves and consumers are not purchasing the same amounts as before.

## **TRADE**

### ***Imports***

The government's efforts to boost wheat production and productivity while reducing imports will test Nigeria's ability to remain self-sufficient in wheat. FAS Lagos projects MY2021/22 wheat imports at 5 million metric tons (MMT), a 2 percent increase compared to the previous year. GON's foreign exchange restrictions on imported agricultural commodities, such as wheat, continue to add extra cost to flour, bread, and other wheat flour-based products.

The price of wheat influences market share of major suppliers. Russia, U.S., Black Sea countries, Canada and Australia are the major wheat suppliers to Nigeria for flour milling. Black Sea wheat exports to Nigeria have increased over the past years due to lower prices. To reduce the domestic price of wheat flour and sustain profitability, most Nigerian flour mills have shifted to buying cheaper wheat from Latvia and Lithuania. Mills are blending cheaper, low-quality wheat with more expensive high-quality Hard Red Winter from the United States.

### **Exports**

Nigeria does not export wheat. However, there are informal sale outflows of Nigerian wheat flour through major trade centers in northern Nigeria into landlocked neighboring Sahel countries. This practice has been increasing mostly amid Nigeria's currency devaluation that is resulting in attractive prices.

## **POLICY**

Generally, Nigeria is a net importer of wheat. The country imposes a 5 percent tariff on wheat imports, plus an additional 15 percent levy (earmarked for the national wheat development program) for a total 20 percent duty. Despite the preferences of Nigerian millers for imported wheat, there is a constant

government focus on reducing wheat imports by 50 percent. Recently, the Ministry of Agriculture underscored its commitments to reduce wheat imports, enhance food security, and conserve foreign exchange. To reduce imports, the government is requiring millers to purchase local wheat at a fixed price of \$400 per ton (above international prices). However, farmers of the Wheat Farmers Association of Nigeria (WFAN) prefer to sell their limited output to the more attractive markets in Sahel countries, including NGOs - the latter feeds internally displaced persons in the crisis-torn northern regions. Meanwhile, the government is collaborating with milling companies to enhance wheat self-sufficiency – especially strengthening backward integration projects (Backward integration refers to an arrangement in which a company acquires or merges with other businesses to improve supply chain efficiencies). Olam, one of the country's main flour milling companies, indicated its commitment to partner with the Ministry of Agriculture to expand wheat production. Furthermore, the Flour Milling Association of Nigeria (FMAN) and WFAN continue to express their solidarity with the government's backward integration project.

The government's policy on composite flour (i.e., substitution of cassava flour for wheat flour for use in bread making and other flour-based products) remains in place. The policy offers a 12-percent tax rebate to bakers willing to blend cassava flour with wheat flour for bread making. Full enforcement of the composite flour policy is unlikely until flour millers, bakers, and other stakeholders overcome technical challenges in developing an appropriate mix of wheat and cassava flours. Market analysts also do not foresee the GON imposing an import ban or restrictions on wheat, considering the major challenges confronting wheat production in Nigeria.

On March 25, the Governor of the CBN reiterated the central bank's commitment to increase domestic wheat production and reduce imports by 60 percent over the next 2 years.

## **STOCKS**

FAS Lagos forecasts MY2021/22 stocks be maintained at 189,000 metric tons (MT) and 106,000 metric tons (MT) for beginning stocks and ending stocks, respectively. Despite foreign exchange challenges, importers are optimistic the market will still be able to absorb some wheat flour price increases in the upcoming years. This optimism is based on the reality that as the economy will rebound after COVID-19. Wheat flour products are expected to remain less expensive staple options for the steadily growing Nigerian population, especially the urban dwellers.

## CORN

### Production, Supply and Distribution Table

Corn Market Year Begins Nigeria	2019/2020		2020/2021		2021/2022	
	Oct 2019		Oct 2020		Oct 2021	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
<b>Area Harvested</b> (1000 HA)	6500	6500	6500	4950	0	6000
<b>Beginning Stocks</b> (1000 MT)	322	322	222	222	0	269
<b>Production</b> (1000 MT)	11000	11500	11500	9000	0	11077
<b>MY Imports</b> (1000 MT)	250	400	500	600	0	1000
<b>TY Imports</b> (1000 MT)	250	400	500	600	0	1000
<b>TY Imp. from U.S.</b> (1000 MT)	33	0	0	0	0	250
<b>Total Supply</b> (1000 MT)	11572	12222	12222	9822	0	12346
<b>MY Exports</b> (1000 MT)	100	100	100	150	0	50
<b>TY Exports</b> (1000 MT)	100	100	100	150	0	50
<b>Feed and Residual</b> (1000 MT)	1900	2200	2000	1900	0	2500
<b>FSI Consumption</b> (1000 MT)	9350	9700	9800	7503	0	9600
<b>Total Consumption</b> (1000 MT)	11250	11900	11800	9403	0	12100
<b>Ending Stocks</b> (1000 MT)	222	222	322	269	0	196
<b>Total Distribution</b> (1000 MT)	11572	12222	12222	9822	0	12346
<b>Yield</b> (MT/HA)	1.6923	1.7692	1.7692	1.8182	0	1.8462

(1000 HA) ,(1000 MT) ,(MT/HA)  
 MY = Marketing Year, begins with the month listed at the top of each column  
 TY = Trade Year, which for Corn begins in October for all countries. TY 2021/2022 = October 2021 - September 2022

### PRODUCTION

Corn accounts for the majority share of Nigeria's coarse grain production. FAS Lagos forecasts Nigeria's MY2021/22 corn production at 11.1 million metric tons (MMT), a roughly 4 percent decrease compared to 11.5 million tons (MMT) for last year's forecast by USDA. The decline is expected due to the negative effect of insecurity that has taken over the corn belt in Nigeria. In Nigeria, corn production is rain-fed and the planting season starts in mid-March through mid-June annually (March/April in the South and May/June in the North). The crop matures within 3 to 4 months of planting. Currently, major areas of the corn belt are experiencing intense conflict conditions, which are major threats to agriculture. The corn belt spanning from Nasarawa, Kaduna, and Katsina States is under persistent localized conflict. Currently, farming communities are under intense fear. Many Farmers are not going to farm because of fear of kidnapping for ransom.

MY2021/22 area harvested is forecast at 6 million hectares (MH), an 8 percent drop compared with 6.5 million hectares (MH) forecast in MY2020/21 by USDA. This situation is due to growing insecurity, which continues to limit land area under cultivation during the year. Though the high price of corn in the market is a motivating factor for farmers to produce, the fear of abduction and kidnapping are making farmers afraid to venture into active farming. However, farmers in areas where insecurity is not so deadly are likely to plant corn to capitalize on the poultry feed crisis. The unavailability of poultry feed has resulted in strong prices for corn – compared to other competing crops.

MY2021/22 yield per hectare is expected to increase slightly to 1.84 tons per hectare from approximately 1.77 tons per hectare recorded the previous years by USDA. FAS Lagos forecasts

increasing yields during the upcoming years due to the five years of GON's increased collaboration with National Agricultural Seeds Council, National Biotechnology Development Agency, agricultural research institutes, and reputable seed companies. This collaboration has focused on developing and introducing improved seeds to farmers. The seeds and seedlings are also resistant to the crop-destroying Fall Army Worm (*Spodoptera exempta*), which has constrained corn productivity across Nigeria and the entire West African region for more than five years. Additionally, market sources report an increasing use of hybrid corn.

## **CONSUMPTION**

MY2021/22 Consumption is projected at roughly 12.1 million metric tons (MMT), an estimated 2.5 percent increase compared to USDA's figure of 11.8 million metric tons (MMT) projection for MY2020/21.

Corn constitutes the staple meal for a significant number of Nigerians and is the most critical ingredient in the production of animal and aquaculture feed. Nigeria's corn consumption occurs in the form of corn flour, confectionery, roasted corn, boiled, or prepared as porridge. Green (fresh) corn is also boiled or roasted on its cob and served as a snack. Household consumption accounts for 10-15 percent of total consumption, while the remainder goes towards food manufacturing. Over 40 percent of Nigeria's corn production goes into animal feed, especially for poultry feed. Nigeria's expanding poultry sector is expected to boost corn production and consumption. On the other hand, Nigeria's poultry sector is the most threatened by high corn prices as consumers resist any increase in poultry product prices. From January to February 2021, corn prices experienced almost a daily upward movement.

Prevailing higher corn prices are making it extremely difficult for poultry farmers to survive in business. To alleviate this dire situation, the Poultry Association of Nigeria (PAN), the umbrella body representing all poultry farmers in Nigeria sent an urgent message to the government about the imminent shut down of the subsector due to the high cost of grains. Over the past five years, Nigeria has been rated as the top egg producing nation in Africa and ranks number five in poultry meat production. PAN mentioned to the GON that poultry farmers need 4.5 million tons of corn per year. Poultry feed comprises about 60-65% of corn. As a result, strong corn prices also increase the price of poultry feed. According to PAN, many poultry farmers sold all their stocks between December 2020 and January 2021 because of high prices for poultry feed. To further improve the poultry feed situation, PAN is proposing the government allow the association to import corn to cushion the current scarcity. The association also suggests the government implement reduced or zero duty for corn imports.

## **TRADE**

### ***Imports***

Post forecasts MY2021/22 Imports at 1 million metric tons (MMT), an estimated 100 percent increase compared to 500,000 metric tons (MT) recorded last marketing year by USDA. Supply shortfalls due to growing insecurity across all farming regions, currency devaluations, and climatic changes are expected to compel the GON to approve corn imports during the marketing year. The poultry industry had indicated it would need to import about 1.5 million metric tons (MMT) of corn to satisfy domestic feed

demand during the year (MY2021/22). However, the lack of storage capacity and the suspension of importers from accessing foreign exchange at CBN rate would likely limit the import volume.

Meanwhile, the country's increasing populations and demand for poultry and other animal feed continue to grow. This situation is promoting commercial activities that increase the demand for corn, especially for animal feed production. Earlier this year, Nigeria's Maize Growers and Processors Association of Nigeria (MAGPAN) indicated it would be unable to meet its production level under the current economic environment. Cross River State recently set up a broiler processing plant that has the capacity to process about 25,000 broilers per day. To meet this capacity, the state is mobilizing smallholder farmers to raise the broilers and the state will provide offtake agreements. However, the project faces a serious challenge – the unavailability of corn, which is the main ingredient for broiler feeds.

## **Exports**

FAS Lagos forecasts MY2021/22 corn exports at 50,000 metric tons (MT) as against 100,000 metric tons (MT) estimated by USDA in the previous year. Nigeria bans the export of corn. However, the informal trade between Nigeria and Sahel countries occurs. Despite constraining factors such as high transportation costs and insecurity, traders are capitalizing on exports. The prices of the latter are considerably higher than domestic prices due to Nigeria's dual currency devaluations. Overall, the devaluations have also made Nigerian corn less expensive in the Sahel markets. However, market sources indicated that Nigeria's corn exports are mostly informal across countries in the Sahel region.

## **POLICY**

Nigeria has maintained a 5 percent tariff on imported corn for more than a decade and implements stringent import permit requirements. The CBN is sitting on roughly 200,000 metric tons (MT) of corn that are stored in ABP-supported silos and warehouses. The central bank opted to accept grains instead of cash as a form of repayments from farmers. To control prices, the CBN promised to release 300,000 metric tons (MT) of corn to the market in February 2021 and the release occurred in early March.

Post understands that the CBN will release the corn in four phases due to logistics constraints and for managing price volatility. The first 50,000 metric tons (MT) was released during the first week of March 2021 to poultry feed manufacturers, large poultry farms, and PAN. The corn market adjusted to the release by a fall in price from N200,000.00 per metric tons to about N180,000.00 per metric tons.

## **STOCKS**

Post forecasts MY2021/22 opening and closing stocks at 269,000 metric tons (MT) and 196,000 metric tons (MT) respectively.



## RICE

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

Rice, Milled Market Year Begins	2019/2020		2020/2021		2021/2022	
	Oct 2019		Oct 2020		Oct 2021	
Nigeria	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested (1000 HA)	3500	3500	3250	3600	0	3800
Beginning Stocks (1000 MT)	1222	1222	812	862	0	732
Milled Production (1000 MT)	5040	5040	4725	4890	0	5000
Rough Production (1000 MT)	8000	8000	7500	7762	0	9000
Milling Rate (.9999) (1000 MT)	6300	6300	6300	6300	0	6300
MY Imports (1000 MT)	1400	1400	1800	1750	0	2000
TY Imports (1000 MT)	1600	1800	1800	1750	0	2000
TY Imp. from U.S. (1000 MT)	1	0	0	0	0	0
Total Supply (1000 MT)	7662	7662	7337	7502	0	7732
MY Exports (1000 MT)	0	0	0	0	0	0
TY Exports (1000 MT)	0	0	0	0	0	0
Consumption and Residual (1000 MT)	6850	6850	6700	6770	0	6650
Ending Stocks (1000 MT)	812	812	637	732	0	1082
Total Distribution (1000 MT)	7662	7662	7337	7502	0	7732
Yield (Rough) (MT/HA)	2.2857	2.2857	2.3077	2.1561	0	2.3684

(1000 HA) ,(1000 MT) ,(MT/HA)  
 MY = Marketing Year, begins with the month listed at the top of each column  
 TY = Trade Year, which for Rice, Milled begins in January for all countries. TY 2021/2022 = January 2022 - December 2022

## PRODUCTION

In recent years, the GON and several state governments have promoted increased rice production. MY 2021/22 rice rough production is projected at 9 million metric tons (MMT), a 20 percent increase compared to the previous year. Nigerian farmers are increasingly moving from a singular seasonal rice farming to multiple seasons. Dry season farming thrives better than wet season because production variables can easily be controlled unlike wet season where flood or protracted drought can wreak havoc on production. The prospects of multiple cropping rice seasons are contributing to increased national production. Rice is a national crop; it can be grown anywhere in the country. The crop grows well both in upland and lowland regions.

The CBN and Rice Farmers Association of Nigeria (RFAN) are targeting one million hectares of land for 2021/22 planting season. This is a massive improvement from 221,450 ha cultivated in 2020/21 planting season. This will be facilitated under the CBN led ABP where farmers in collaboration with cooperatives will supply paddy directly to identified millers.

MY2021/22 area harvested is forecast to increase by 17 percent to 3.8 million hectares (MH) compared to 3.25 million hectares (MH) recorded the previous years by USDA. Yield in MY2021/22 is forecast to increase to about 2.4 tons per hectare from the estimated 2.3 tons per hectare reported in MY 2020/21 by USDA. The major drivers include the presence of medium-to-large scale and financially stable integrated rice farming/milling operations in the private sector that continue to support many rice farmers with funds and inputs under out-grower arrangements. Amid increasing production costs and lowering demand, out-grower programs provide opportunities for smallholder farmers. Attractive prices

of Nigerian rice in the Sahel region are spurring Nigerian rice farmers and millers to increase production for informal exports to neighboring countries.

Development partners operating in Nigeria such as the International Institute for Tropical Agriculture (IITA), Feed the Future Nigeria Integrated Agriculture Activity of United States Agency for International Development (USAID), the International Crops Research Institute for the Semi-Arid Tropics and Catholic Relief Services (CRS), and others have recently intensified support for many vulnerable relocated farmers in the crisis-ridden areas. The support includes improving rice farming practices by provision of improved rice seeds and seedlings, as well as developing best rice farming practices. The GON has also prioritized providing improved seeds as key to increasing rice production. The government has continued to increase support to the country's seed development and regulatory agency (NASC) and to engage more internationally reputable seed companies for quality seeds through NASC.

Lagos State Government, the commercial center with a population of about 22 million people, is setting up a 32 metric tons/hour new rice processing mill in Imota. The mill will start operating around July 2021 and will be the largest mill in Nigeria. Lagos has no land to cultivate rice but will depend on paddy from neighboring states to fulfil the mill's paddy requirement.

## **CONSUMPTION**

MY 2021/22 rice consumption is projected to reach 6.6 million metric tons (MMT), a 1.5 percent decrease from last year. Market sources indicate that the drop in consumption would largely originate from increasing prices amid lowering consumer purchasing power, job losses, and declining household incomes. These factors are already causing more Nigerian households to reduce their rice consumption and shift to foods that are more affordable such as millet, sorghum, yam, cassava, plantain, and other less expensive staples grown within their communities. Declining household incomes caused by COVID-19 lockdown restrictions across the country are having a larger impact on rice consumption by low-income households. Nigerian consumers prefer long grain parboiled rice, which is widely consumed by the middle class in cities across the country. In Nigeria, rice consumption is high during festive seasons and ceremonies.

## **TRADE**

### ***Imports***

FAS Lagos projects MY2021/22 imports to reach 2 million metric tons (MMT) compared to USDA's 1.8 million metric tons (MMT) projection for last year. As it stands, Nigerian rice consumers still prefer parboiled long grain rice from Thailand and India, which continues to enter the Nigerian market through grey channels (unofficial routes) and are freely sold in the dominant traditional open-air markets and street/corner shops. The recent hike in electricity tariff and petrol (gasoline), both required to run production plants and facilities, are expected to increase milling costs and hike local rice prices even beyond the prices of imported parboiled rice.

Imported rice faces a 10 percent duty and an additional 60 percent levy totaling 70 percent tariff. The GON indicates that rice is not banned for imports. However, importers are prohibited to ship rice to any Nigerian port irrespective of the source of foreign exchange. This translates to a technical ban.

Currently, there is a bill at the House of Representative calling for an outright ban on rice import is being proposed.

On December 16, 2020, Nigeria opened its border with Benin. This action will increase the amount of rice imports through cross-border trading. The government's decision to close its border with Benin did not stop the grey channel (unofficial route) rice trade.

## **POLICY**

Nigeria continues to pursue a rice self-sufficiency policy. On several occasions and at different local and international fora, GON representatives continue to express the success of ABP, the forex ban on rice imports, and last year's border closure in achieving self-sufficiency.

Nigeria will need to produce about 12 million tons of paddy to meet domestic demand. The GON needs to continue to improve on extension services for the smallholder farmers. In early March 2021, the Agriculture Minister highlighted the recruitment of 75,000 extension agents. This will greatly help improve rice productivity as the benefits of several national rice programs have not materialized – especially after World Bank financing stopped on several projects.

In January 2021, the Japanese International Cooperation Agency (JICA) announced that it was providing agricultural inputs to 1,500 smallholder rice farmers in Kwara, Nasarawa, Niger, Bauchi, Taraba, Kaduna, Kano, Jigawa, and Kebbi states for dry season cultivation. Additionally, JICA plans to also provide inputs to 1,000 smallholder farmers in 10 states namely – Borno, Gombe, Kogi, Benue, Ebonyi, Edo, Ekiti, Ogun, Taraba, and Oyo for wet season plantings. Furthermore, JICA pledges to support smallholder farmers and extension service providers through capacity building efforts and infrastructure projects. According to the Government of Nigeria, these efforts are contributing to the 7 million tons production capacity that the country needs to reach rice self-sufficiency.

Reaching rice self-sufficiency is prompting the government to partner with diverse stakeholders. In early March 2021, the GON highlighted its partnership with local and Chinese investors on irrigation farming to enhance rice production in Kano state. The Ministry of Agriculture indicated that Kano state has release the operation of 21 dams to a local company to support rice irrigation farming.

## SORGHUM

### Production, Supply and Distribution Table

Sorghum Market Year Begins	2019/2020		2020/2021		2021/2022	
	Oct 2019		Oct 2020		Oct 2021	
Nigeria	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested (1000 HA)	5900	5900	5900	5600	0	5700
Beginning Stocks (1000 MT)	152	152	117	117	0	181
Production (1000 MT)	6665	6665	6900	6570	0	6800
MY Imports (1000 MT)	0	0	0	0	0	0
TY Imports (1000 MT)	0	0	0	0	0	0
TY Imp. from U.S. (1000 MT)	0	0	0	0	0	0
Total Supply (1000 MT)	6817	6817	7017	6687	0	6981
MY Exports (1000 MT)	50	50	50	50	0	50
TY Exports (1000 MT)	50	50	50	50	0	50
Feed and Residual (1000 MT)	150	150	150	150	0	200
FSI Consumption (1000 MT)	6500	6500	6700	6306	0	6500
Total Consumption (1000 MT)	6650	6650	6850	6456	0	6700
Ending Stocks (1000 MT)	117	117	117	181	0	231
Total Distribution (1000 MT)	6817	6817	7017	6687	0	6981
Yield (MT/HA)	1.1297	1.1297	1.1695	1.1732	0	1.193
(1000 HA) ,(1000 MT) ,(MT/HA)						
MY = Marketing Year, begins with the month listed at the top of each column						
TY = Trade Year, which for Sorghum begins in October for all countries. TY 2021/2022 = October 2021 - September 2022						

### PRODUCTION

In recent years, smallholder farmers have witnessed increased profitability in sorghum production. FAS Lagos forecasts Nigeria's sorghum production in MY 2021/22 (October-September) at 6.8 million metric tons (MMT), down slightly from the last marketing year. Post forecasts MY2021/22 area harvested at approximately 5.7 million hectares (MH) compared to 5.9 million hectares (MH) forecast USDA official figure recorded the previous year. MY2021/22 yield per hectare is forecast at roughly 1.19 tons; a marginal increase compared to last year forecast of roughly 1.17 tons for MY2020/21.

The guinea sorghum is the most widely cultivated and adaptable grain which is common in Nigeria's savannas ecological zone. The crop is most important in the Northern Guinea and the Sudan Savanna ecologies where the soils are light and sandy, where minimum land preparation through tiling is required. The seeds are planted in old furrows by farmers in such areas. In heavier soils such as in the Southern Guinea Savanna ecology, proper land preparation is necessary.

Over the years, the private sector has increased its collaborations with GON agencies, agricultural research institutes, and reputable seed companies to develop improved seeds. Two new drought-resistant and nutritionally high varieties have been developed and are being introduced to farmers. The yields of these high varieties are about double the local varieties and mature at short duration, which allow farmers adapt better to climate change.

Despite increased private sector participation, industry sources indicated expected productivity this marketing year would not be realized. Sorghum is not a focus product for GON's low-interest ABP funds, which help farmers reduce input costs. Sorghum production is in a precarious position because the government banned fertilizer imports in early September 2020. With the fertilizer import restriction

policy, more farmers are expected to plant sorghum without using fertilizers. This is expected to threaten potential yields and curb production prospects in MY2021/22.

## **CONSUMPTION**

FAS Lagos forecasts Nigeria's total sorghum consumption (including FSI) in MY 2021/22 at 6.7 million metric tons (MMT), a drop by 2 percent compared to approximately 6.8 million metric tons (MMT) recorded the previous year by USDA. The decline is due to increasing sorghum prices and supply. Sorghum prices reached their highest levels in July 2020 and have continued to increase significantly in the past few months, supported by the effects of COVID-19 pandemic and strong domestic demand.

Sorghum is widely consumed by most households, especially in the north, and is widely used by various industries. Industrial end users are predominantly companies producing beverages, cereals, and confectionery: a small percentage of the grain is also used for animal feeds. Industrial demand for sorghum by beverage, cereal, and confectionery producers is the major driver in the sorghum market. Industrial sorghum users are increasingly utilizing the less expensive sorghum-based intermediate products to lower costs. Poultry feed manufacturers have also overcome the challenge of high tannin in sorghum feeds and can blend some quantities with corn to reduce costs. Moving forward, analysts forecast increases in production and consumption figures in the years following the pandemic.

Processing of sorghum entails applying suitable grain, milling, and malting procedures, which maintain its nutritional value and improve marketability of end products. The process goes through primary processing which involves cleaning, dehulling (decorticating), pounding, and milling. Next comes the secondary processing, which involves turning material into food, i.e., cooking, blending, fermentation and roasting. Both traditional and industrial processing methods are employed, which may involve the partial or complete separation and/or modification of the three major structures of the cereal grain, i.e., the germ, the starch-containing endosperm, and the protective pericarp (or testa).

## **TRADE**

Nigeria does not import sorghum but imposes a five percent tariff on sorghum imports (HS Code: 100700). Post forecasts MY2021/22 exports to remain flat at 50,000 tons (MT). Currency devaluation results in competitive prices of Nigeria's sorghum in the Sahel region (especially, to Niger and Chad) where the sorghum is also a widely consumed staple.

In January 2021, a local exporter suspended plans to export sorghum to the United Kingdom due to COVID-19 disruptions. The company had made contacts with potential buyers of the beverage making cereal. China and other major sorghum importing countries are looking at ways to diversify their sorghum sources. China is looking towards meeting its import demand from other producers such as Nigeria, which is the world's second largest producer of sorghum.

Currently, Nigeria has access to export forage sorghum to China. This agreement was finalized in 2020 by Nigeria's Agricultural Quarantine Service (NAQS) and China's General Administration of Customs. Additionally, the deal will lead to China establishing five sorghum plantations in different zones across Nigeria – to export to China. Discovering export market opportunities for Nigeria sorghum would increase production and income for smallholder farmers.

**Attachments:**

No Attachments