



Wheat Sector Report

Golnvest 2023

Executive Summary: Global Trade & Production

In 2020, wheat was the world's **64th most traded product**, with a total trade of \$51.4B. During this time, **exports of wheat grew by 10.9%**, Trade in Wheat represent 0.31% of total world trade

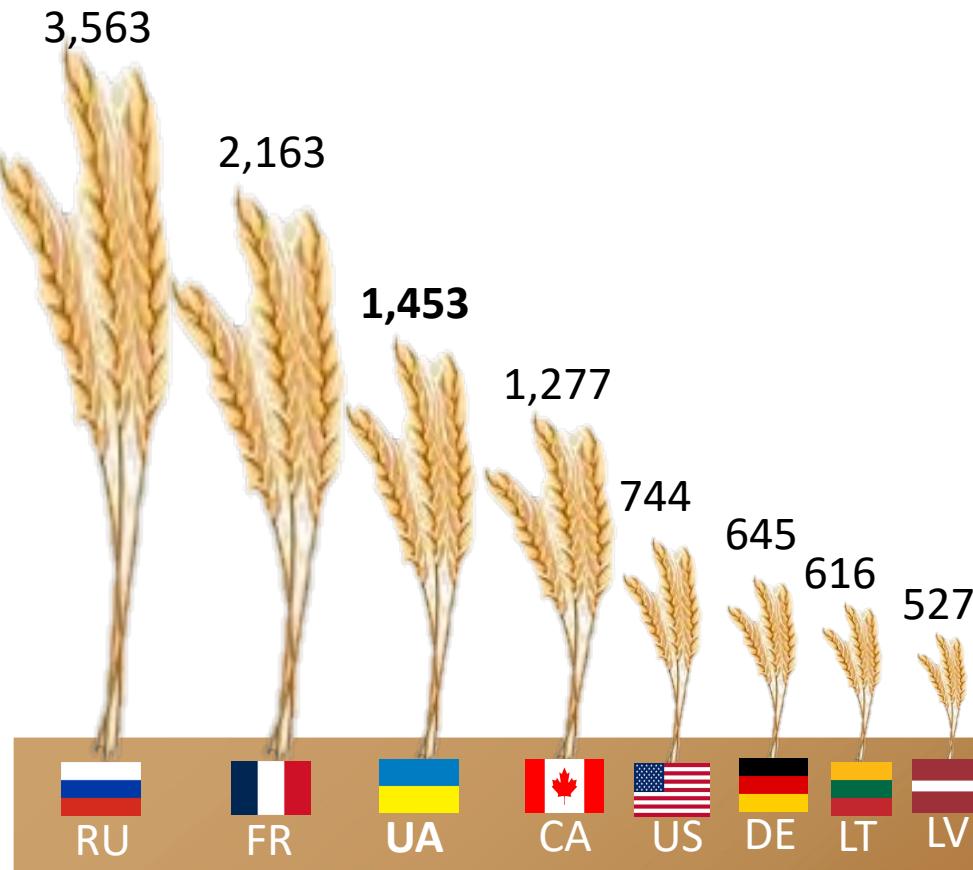
Disruption due to conflict

One of the most significant shockwaves to be felt outside of Ukraine since the Russian invasion isn't in Europe, but in Africa. The continent's biggest sources of wheat are Russia, France and Ukraine. Russia and Ukraine produce a quarter of the world's wheat and the dispute between them has triggered massive market disruptions throughout the world. Some low- and lower-middle-income nations import more than 40% of some critical staples from Ukraine, putting them at risk of short-term supply disruptions. Food prices are already rising as a result of greater energy costs. As the crisis continues, expenses and trade restrictions are expected to rise much more.

TOP NET IMPORTER
(2020)
Egypt - \$5.2B

TOP NET EXPORTER
(2020)
Russia - \$9.99B

Value of wheat imports into Africa by 2020 by exporting country (million USD)



Executive Summary: Nigeria, Gombe and the Local Opportunity

Local consumption of wheat is huge and growing fast in Nigeria. It is an important staple crop consumed in different forms along with its by products. This sector presents significant investment opportunities with support from the government committed to substituting imports with locally produced wheat.

The Nigerian population is estimated to increase by 400m towards the end of 2050. This in turn, requires an increase in wheat production to many folds

Nigeria produced **55 thousands** tons of wheat in the year 2020 and still has **13m** hectares of land available for agriculture

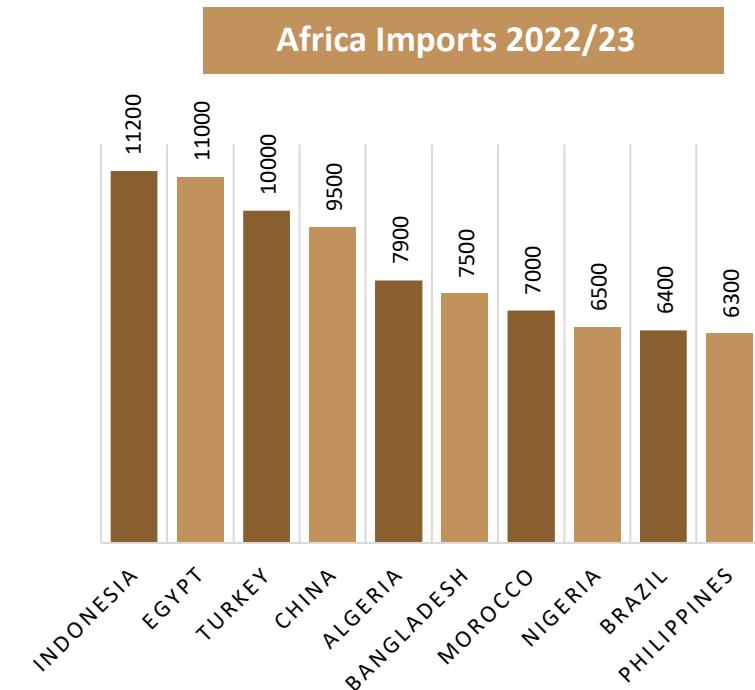
The world bank has ranked Nigeria at the **7th** place in terms of agriculture and farming in African countries.

Today, wheat is grown on more land area than any other commercial crop and continues to be the most important food grain source for humans

Nigeria is Africa's **third** largest wheat consumer, with 4.1 MMT to rise by 38% between 2018 and 2028.

Since consumed in 2018, and this figure is expected to rise by 38% between 2018 and 2028, wheat production in Nigeria has seen an annual average growth rate of **11.83%**

Gombe is the 6th LARGEST wheat producer in Nigeria and scored the **No 1 in doing business in the country**



Nigeria is the **8th largest importer of wheat in the world and the 5th in Africa** with an annual import Growth Rate projected at 4.84% presenting an opportunity for domestic production.





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Introduction & Global Market Assessment

Wheat Sector Overview

Trade restrictions in reaction to the COVID19 epidemic have had a significant negative impact on food security throughout the world, notably for cereals like wheat. At the start of the COVID-19 epidemic, there was panic buying globally, as fears grew that supply chains would struggle to operate in the new climate. Wheat prices are projected to climb in many regions of the world due to limited supply as a result of export limitations imposed by major grain exporting countries.

Between 2019 and 2020, the European Union produced more than 154.5 million metric tons of wheat, accounting for over one-fifth of global wheat production with France, Germany, and the United Kingdom leading in the past 10 years. UK produced 16.22MMT in 2019 at an estimated £2.44b followed by China – 133MMT and USA ranking 5th with 51.6 MMT. In 2013, the top destinations for US wheat exports were China, Brazil, Japan, and Nigeria. **Nigeria has remained one of the top 10 wheat export destinations with an average spend of \$323m between 2016 and 2020.**



Wheat Sector Overview

In 2020 the top importers of Wheat were Egypt (\$5.2B), China (\$3.47B), Turkey (\$2.44B), **Nigeria (\$2.15B)**, and Indonesia (\$2.08B).

Trade restrictions in reaction to the COVID19 epidemic had a significant negative impact on food security throughout the world, notably for cereals like wheat. At the start of the COVID-19 epidemic, there was panic buying globally, as fears grew that supply chains would struggle to operate in the new climate. Wheat prices are projected to climb in many regions of the world due to limited supply as a result of export limitations imposed by major grain exporting countries.

11.6%

765.8 to 761MMT

215.9 to 219m ha

CAGR of 4.5%

67.6 kg/yr.

Average tariff for wheat in 2018 making it the 322nd lowest tariff using the HS4 product classification.

Worldwide wheat output in 2019 and output in 2020 went down by 0.63%

Area harvested under wheat grew by 1.5% on the other hand between 2019 -2020

Expected growth of the wheat market between the forecast period of 2022 – 2027

Global per capita food use of wheat

Wheat Sector Overview



Between 2021/22, worldwide wheat production was around 778.6 MMT. In comparison to the previous year, this was an increase of nearly 3.73 MMT. By 2021, global wheat reserves reached around 294 MMT.

\$160.66 Billion

Global market size of wheat flour in year 2020

2nd

In the United States wheat is the second most important grain cultivated followed by only corn.

4.43 MMT

The wheat consumption Market rose in comparison to 2020-21

13.89 MMT

European Union topped the list of top 10 producers of wheat in the world 2021-2022

787.47 MMT

The global consumption of wheat for the year 2021-22

\$160.66 to \$210.77

Projected global wheat flour market increase from 2021 to 2028

3.95%

Compounded annual growth rate for the period of 2021-2028

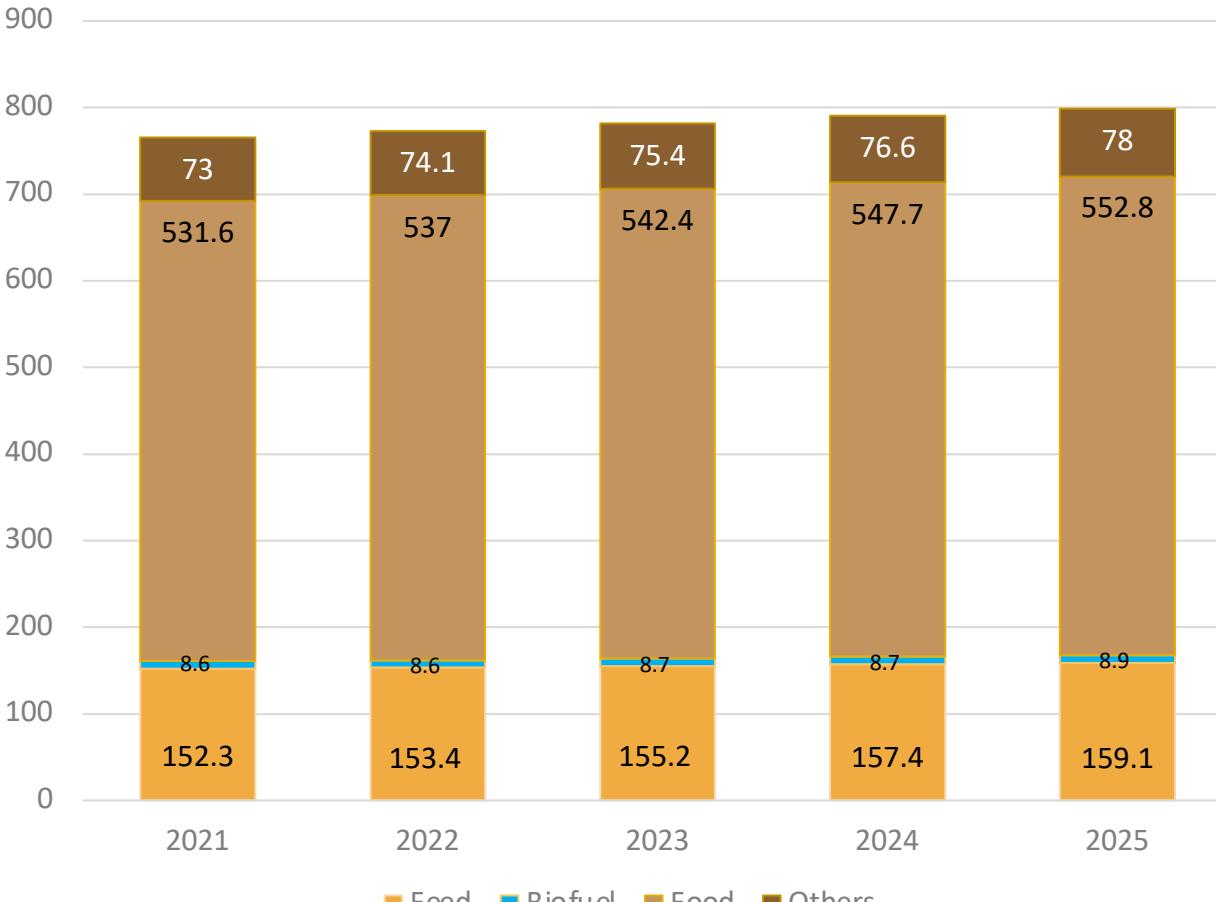
4.43 MMT

Increasing demand for fiber rich food has increased the requirement for whole wheat flour globally

61.15%

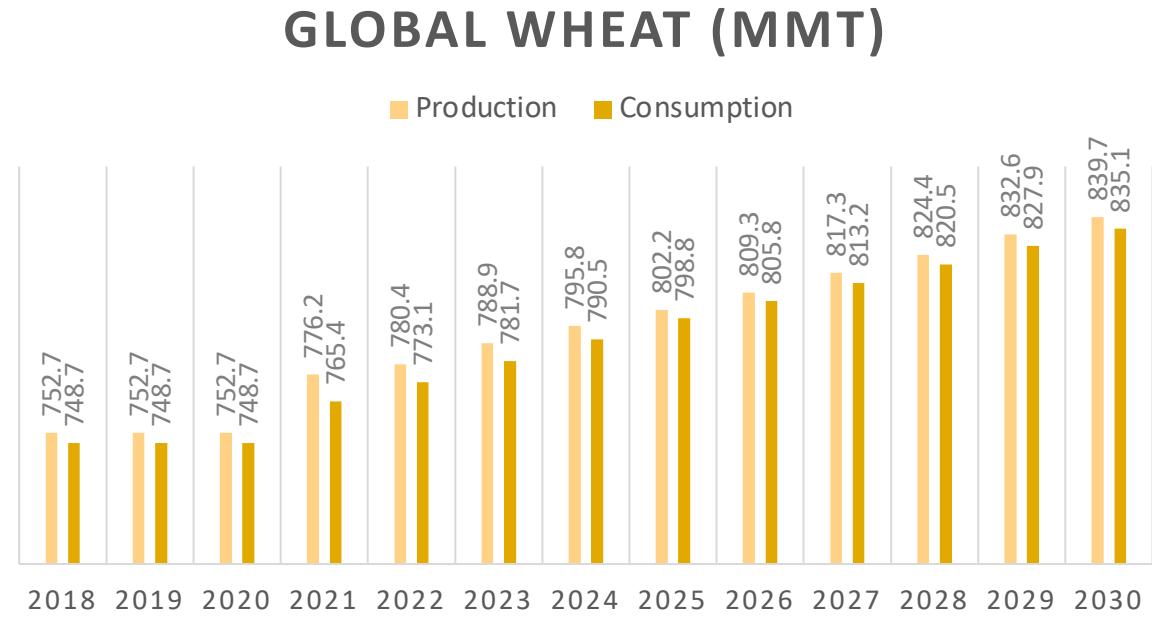
Share of global wheat flour in 2020

Global Production & Consumption of Wheat



CONSUMPTION BY USES OF WHEAT (MMT)

The wheat market is projected to record a CAGR of 4.5% during the forecast period, 2022-2027



Global Trade

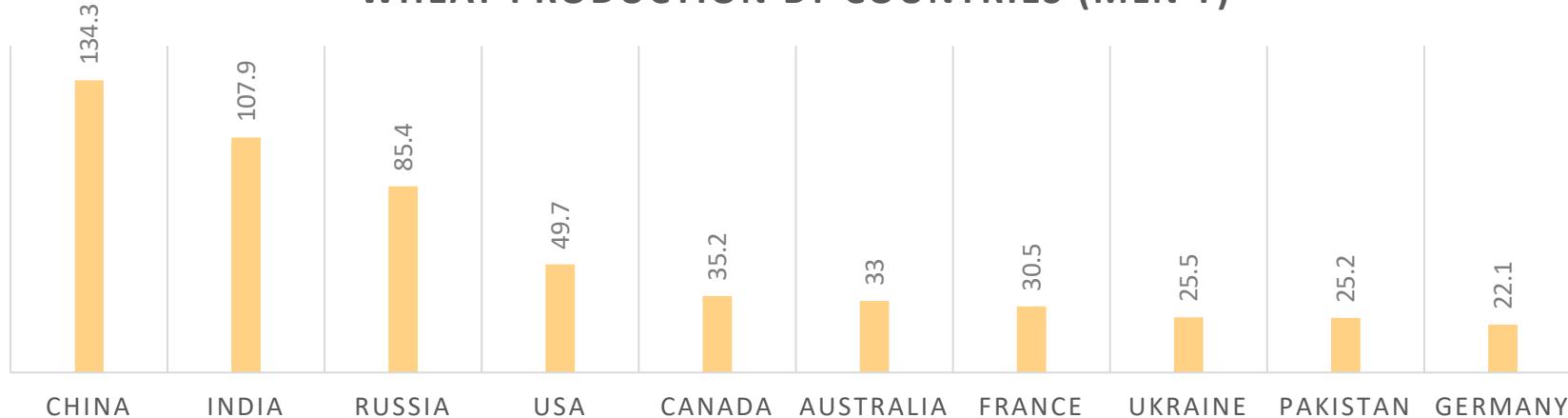
Top 5 Wheat exporting countries worldwide during 2020-21

Rank	Countries	Volume (Mln T)
1	Russia	39.5
2	European Union	27.5
3	Canada	27
4	US	27
5	Australia	19.5

Top 5 wheat importing countries in 2020/21 (mln t)

Rank	Countries	Volume (Mln T)
1	Egypt	13.0
2	Indonesia	10.5
3	China	10.5
4	Turkey	8.2
5	Philippines	6.8

WHEAT PRODUCTION BY COUNTRIES (MLN T)





Nigerian Market Assessment

Nigerian Market Assessment

Nigeria produced 36,943 metric tons of wheat in 2020. This figure is 38.4% lower than the 60,000MT recorded in 2016, data from the Ministry of Agriculture show however, Government's priority is to increase local production of wheat and reduce imports by 50%.

The yield of Wheat in Nigeria ranges between 2000 - 4900 Kg/Ha with standard deviation and mean of 852 - 1181 Kg/Ha and 2670- 4856 Kg/Ha respectively

Political will to increase wheat production through the Agricultural Transformation Agenda and In December 2020, released 49 high-yielding new crop varieties for farmers including three Durum wheat varieties namely LACRI-WHIT 12D and LACRI- WHIT 13D. Durum wheat is used to make noodles, biscuits, and confectionary because it has less gluten, a kind of protein.

Presence of institutes involved in crop genetics to ensure the availability of improved crop varieties.

Export Processing zones to facilitate investments in industrial and exporting activities.

Nigeria is expected to increase its wheat import by 300MMT by 2022/23

	2021/22	2022/23	Y-Y Change	Reason
Afghanistan	3,200	3,400	200	Tight beginning stocks and greater available supplies from Kazakhstan, a key supplier.
Algeria	7,800	7,900	100	Continued demand for durum and milling wheat.
Kenya	2,000	2,200	200	Growth in demand from hospitality and tourist sectors outpaces production increase, necessitating higher imports.
Morocco	5,200	7,000	1,800	Smallest crop since 2007/08 leads to strong growth in import demand.
Nigeria	6,200	6,500	300	Economic recovery following the pandemic, and relatively affordable bread prices.
South Africa	1,650	1,650	0	Greater domestic supplies and marginal growth in consumption reduce necessity of higher wheat imports.

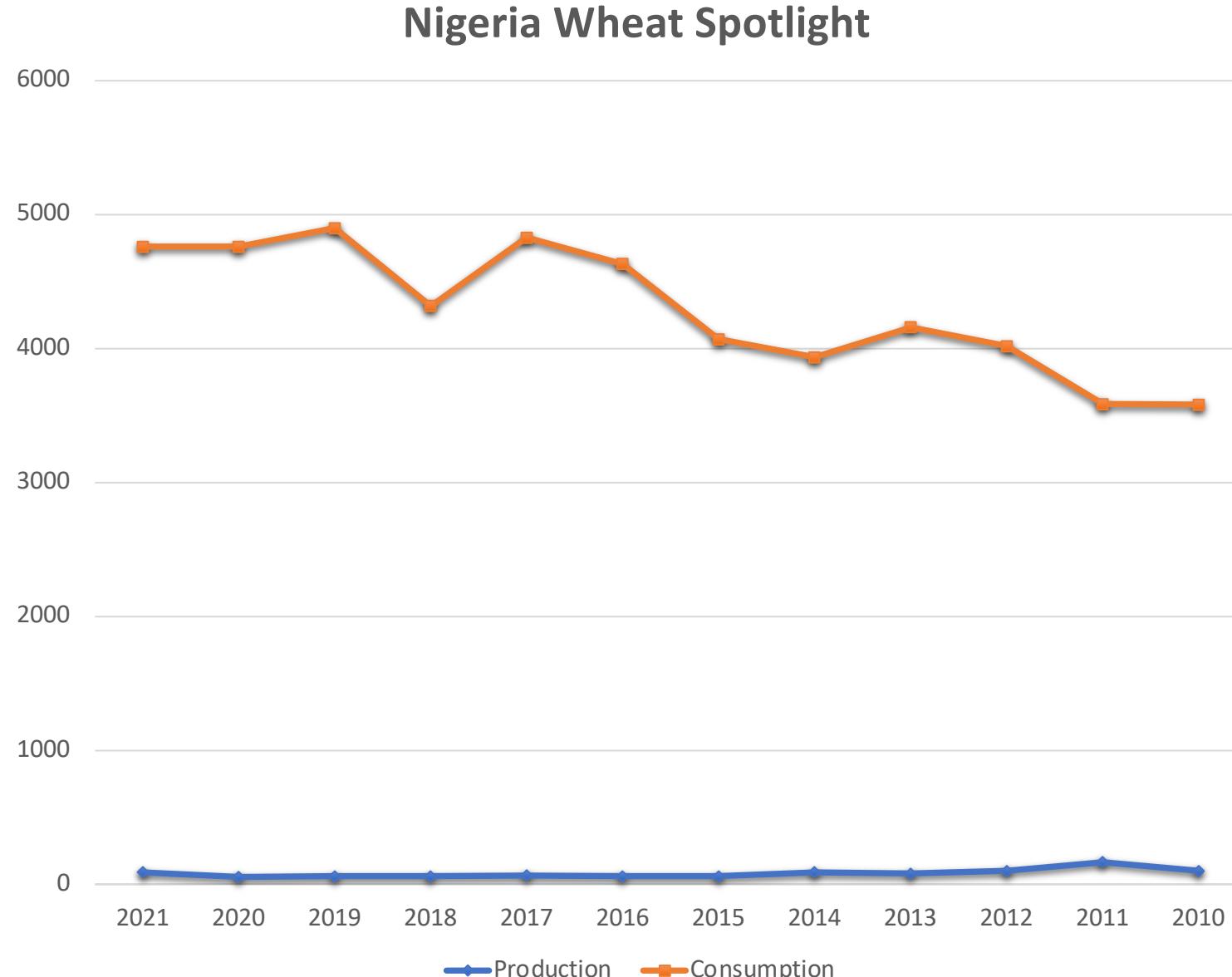
Attractive Features Of The Wheat Sub-sector

Millers have spent more money from exporting nations. Cost of shipping rose by 33% from a total freight bill of N21.6 trillion in 2019 to N28.8 trillion in 2020.

The Central Bank of Nigeria launched a Wheat Intervention programme to contribute around 2,000 metric tons of seeds to the nation's national seed pool and potentially add 750,000 metric tons of wheat to national output yearly.

Hard wheat (*Triticum durum*) is the most accessible variety in Nigeria unlike winter wheat, is developed for tropical climates. Due to its heat tolerance, it can be cultivated in most northern states, although the yield is low at around 1MT/ha.

Nigerian Market Assessment

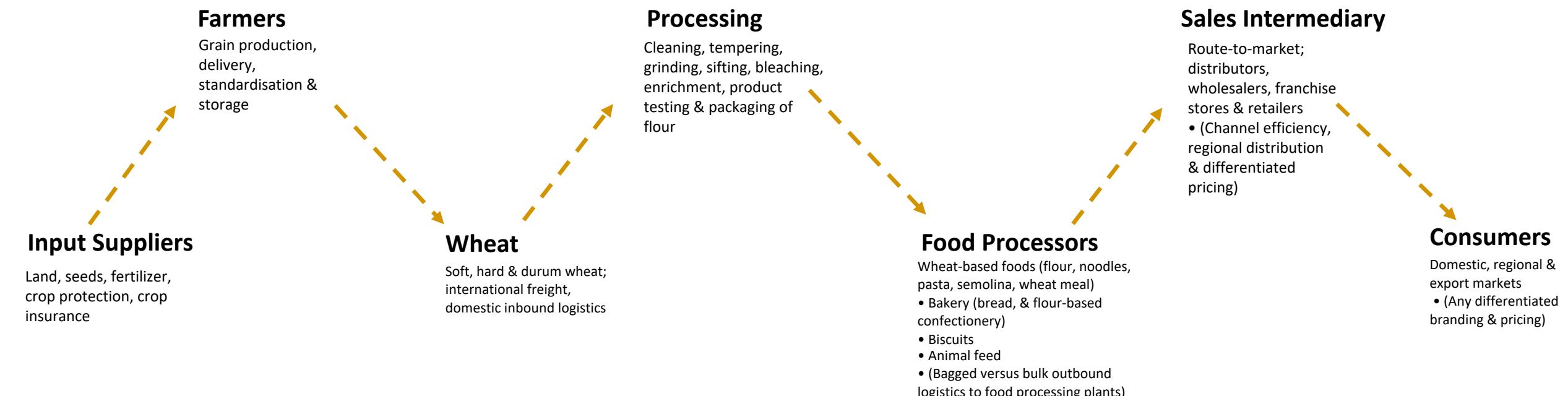


Output due to low yields, insufficient irrigation facilities, a lack of easy market for goods, and a lack of appropriate high yield seed types has **kept local production at around 1% of domestic need**.

A 500g sliced bread cost N418.65 in January 2022, reflecting a **28% rise year over year**. From N306.74 in January 2021 to N383.51 in January 2022, the price of **500g unsliced bread increased by 25%**.

The price of wheat flour pre-packaged golden penny 2kg, which was N757.97 in January 2021, **increased by 29% to N974.87** in January 2022.

The wheat market value chain



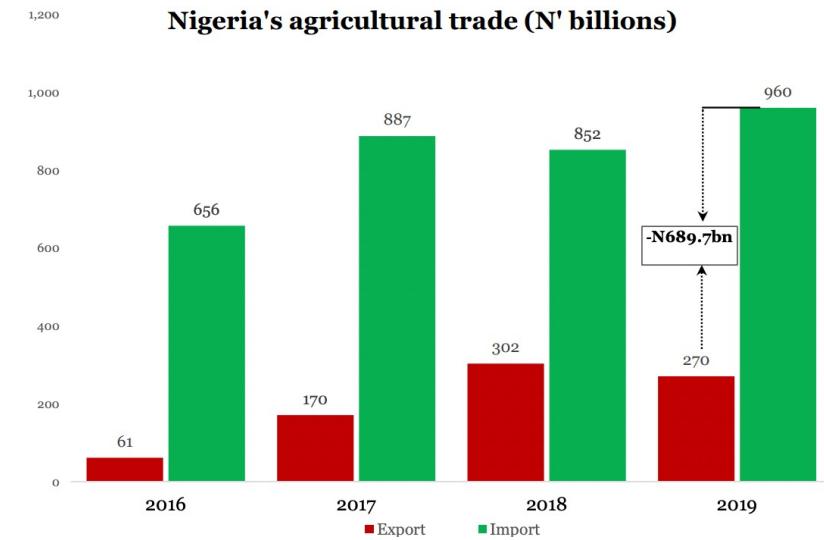
Nigerian Wheat Value Chain Analysis

Research and inputs		Production			Post-harvest and storage				Processing and value addition			Marketing, sales and distribution		Key constraint
Research & Development	Demand	Input access	Mechanisation	Extension services	Aggregation	Access to equipment	Transport	Storage	Quality harvest	Installed capacity	Finance	Demand	Finance	
Low investment in research; for every \$100 agricultural output, Nigeria spends \$0.94 on research.	Limited mechanization due increase in mechanisation costs.				Lack of aggregation; differences in seed varieties, moisture content etc. make paddy too inconsistent for processing.				Absence of harvested wheat locally – Nigeria produces ~5% of the country's requirements.					
Underfunded demand for high quality inputs as farmers are unable to afford.	3 high-yielding new Durum wheat varieties introduced to farmers in 2020. Subsidises for improved varieties & agro-chemicals unavailable. Adaptability to climate is very low.				Limited investment in irrigation infrastructure in the wheat producing states has affected farmers from having enough ready-to-use land and water sources.				Cottage mills' processing technology is old and inadequate , limiting the quality of the processed wheat.					
Insecurity has affected the Lake Chad Research Institute responsible for developing, enhancing, and multiplying better wheat seeds and providing extension services.	Lack of Good Agronomic Practice (GAP) due to limited extension services (1 per 1500 farmers); and poor training.				Lack of aggregation; Despite the availability of improved variety, farmers plant and replant available wheat seeds they have had for over five years, resulting in a decline in crop quality.				Extremely limited milling availability. Nigeria has reportedly less than 20 wheat mills that are fully functional.					
	Lack of Irrigation facilities wheat farming is dependent on irrigation, but most of the dams used are no longer working optimally, and tube wells for irrigation are mostly beyond the reach of resource-poor farmers.													

Nigeria Trade Deficit

- Exports In 2020, Nigeria exported **\$16.5k** in Wheat, making it the 91st largest exporter of Wheat in the world. At the same year, Wheat was the 557th most exported product in Nigeria. The main destination of exports from Nigeria were **Niger (\$14.9k), Belgium (\$1.42k), Netherlands (\$84), South Africa (\$53), and Canada (\$37)**.
- Imports In 2020 Nigeria Imported **\$2.15B** in wheat becoming 4th largest importer of wheat in the world. At the same year Wheat was the 3rd most imported product in Nigeria. Nigeria imports wheat primarily from **Russia (\$556M), Lithuania (\$502M), United States (\$312M), Canada (\$242M) and Latvia (\$192M)**.
- Looking at the above stats Nigeria has the wheat trade deficit of **\$2.14 billion in 2020**

Importer	Exporter
Russia (\$556M)	Niger (\$14.9K)
Lithuania (\$502M)	Belgium(\$1.42)
United States (\$312M)	Netherlands(\$84)
Canada (\$242M)	South Africa(\$53)
Latvia (\$192M)	Canda(\$37)



In four years (2016–2019), Nigeria's cumulative agricultural imports between 2016 and 2019 stood at **\$8.06 billion**, almost **four times higher** than the agricultural export of **\$2.00 billion** within the same period.

Year on year wheat production and consumption growth

Wheat production

Crops	5-Yr Avg (2016-20) (1000 MT)	2020/21 (1000 MT)	2021/22 (1000 MT)	% change 2021-22/Avg
<u>Corn</u>	11,614	12,400	12,745	9
<u>Sorghum</u>	6,894	6,590	6,725	-3
<u>Rice</u>	4,952	5,148	5,255	6
<u>Peanut</u>	4,395	4,231	4,228	-4
<u>Millet</u>	1,757	1,905	1,922	9
<u>Palm Oil</u>	1,112	1,275	1,400	23
<u>Soybean</u>	1,017	1,106	1,117	9
Wheat	60	55	90	54

Wheat consumption

Market Year	Domestic Consumption (1000MT)	Growth Rate
2020	5550	13.27%
2021	5850	5.41%
2022	6000	2.56%

Key Players in the sector



Dangote Flour Mills Plc

Dangote Flour Mills Plc is located in Lagos, Nigeria, and is part of the Grain and Oilseed Milling Industry. The mill was incorporated in 2003. DANGOTE FLOUR MILLS PLC generates **\$299.83 million in sales (USD)**. The revenue as per dun & bradstreet is **\$299.83 Million**

Honey-Well

Honeywell Flour Mills Plc (HFMP) is a major flour milling company in Nigeria and was initially registered as Gateway Honeywell Flour Mills Limited in 1985. However, in June 1995, a change in the company's ownership structure led to a change of name to Honeywell Flour Mills Limited (HFML). The revenue of the company for the financial Year 31 March 2021 was **\$264 Million**.

Northern Nigerian Flour Mills Limited

Northern Nigeria Flour Mills Plc is a milling company in Nigeria which mills wheat and other grains and sells its products under the Golden Penny brand name. Products produced by Northern Nigeria Flour Mills Plc include wheat flour, **semovita, wheat offal, masafLOUR, germ flour, masavita and corn offal**. Revenue **13.58Bn(Nira)**

Govt policies supporting Wheat in Nigeria



Flour millers favour imports, indicating that local wheat has a higher protein content, lower moisture, and lower gluten. Despite Nigerian millers' preference the government (commencing in 2017) is aiming to reduce wheat imports by 50 percent.



To reduce imports, the government is requiring millers to purchase local wheat at a fixed price of \$400 per metric ton.



The Central Bank of Nigeria CBN says it has expended 42 billion naira in financing the cultivation of 132,799 hectares of land for wheat production for 2021/2022 dry season.

Initiatives of Federal govt to support wheat



The Federal Government extended the COVID-19 survival fund. The scheme, under the Federal Government's Micro Small and Medium Enterprises Survival Fund, was part of the Nigerian Economic Sustainability Plan, designed to support small business operators, who were more vulnerable to the effect of COVID-19.



The Federal Government said it is hoping to harvest 10,000 tons of wheat from its 2,500 hectares of pilot wheat farms in Jigawa and eight other states.



The dry season wheat-growing plan is part of a larger attempt to close the country's wheat output gap and minimize importation.



The federal government aided wheat growers. The funding comes from the Central Bank of Nigeria's Anchor Borrower's Programme (ABP), which allows farmers to cultivate land in the state for the dry season of 2021/2022.

Steps to Reduce Wheat import

01

The Central Bank of Nigeria (CBN) has concluded plans to reduce importation of wheat by 60 per cent under its import substitution programme. Under this programme (CBN) has joined hands with **Wheat Farmer Association of Nigeria** (WFAN) and has assisted 15 states to boost wheat cultivation. This intervention in wheat production is going to engage 150,000 farmers to cultivate the commodity and reduce 60% importation of wheat thereby saving the country \$2 billion.

02

The Flour Millers Association of Nigeria (FMAN) has taken an active role in giving technical support to the farmers and increasing the supply of high-yielding heat tolerant wheat seeds. As the baking quality of Nigerian wheat improves, yields rise, and prices come closer to import levels.

03

FMAN has joined hands with **Wheat Farmers Association of Nigeria** (WFAN) in a vision of sustainability improving the probability of wheat farmers, desires to work collaboratively with all stakeholders in the value chain.

04

The **National Agriculture Land Development Authority** (NALDA) has collaborated with Gombe State govt, started dry season wheat cultivation on 200 hectares of land in Papa and Dogon Ruwa areas of Nafada and Kaltungo Local Government.

05

Federal Government has supported **2,463 farmers** in Gombe State to cultivate wheat. The support came through Central Bank of Nigeria (CBN)'s Anchor Borrower's Programme (ABP), which enables farmers to cultivate the land for the period 2021/2022 dry season farming in the state.



Govt Initiative

Establishment of Special Agro-Industrial Processing Zones

The Federal government is establishing Special Agro-Industrial Processing Zones to concentrate agro processing activities

- The SAPZs are aimed at boosting productivity, integrating production and enhancing the processing and exporting of select commodities.

Development of Railway Infrastructure

As part of its plans to aid the free flow of goods, the Government is in constructing rail lines across the country

- Once complete, these would serve as an alternative to road transport and enhance the distribution of goods and commodities within the country.

Development of Road Infrastructure

In addition to its development of Railway infrastructure, the Federal government is also investing in the rehabilitation and construction of roads linking numerous parts of the country

- A key example is the ongoing rehabilitation of the Lagos Badagry expressway which serves as a key component of the West African Trade Routes

Enhancement of Ports Infrastructure

In addition to the six existing seaports, the government has commenced the development of additional ports in Akwa Ibom and Lagos to enhance its maritime capabilities

- The Nigerian Ports Authority has also signed a MOU with the Royal Port of Antwerp to enhance

Various Agro-Finance Scheme in Nigeria

One of the most prominent issues affecting local farmers is poor access to cheap sources of funds for farming inputs and equipment, especially in the Northern region of the country where food production thrives.

The CBN noted in August 2014 that the FGN had disbursed about N237 billion (US\$1.2 billion) for agriculture-related projects, under various agro-funding schemes. These Schemes are:-



Commercial Agriculture Credit Scheme (CACS)



Agricultural Credit Guarantee Scheme Fund (ACGSF)



Nigeria Incentive-based Risk-sharing System for Agricultural Lending (NIRSAL)



Agricultural Credit Support Scheme (ACSS).



Trade Agreement and Market Access

AFCFTA

Nigeria signed the **African Continental Free Trade Area Agreement** in July 2019.

AGOA

On May 18, 2000, the U.S. Congress passed the African Growth and Opportunity Act.

The act establishes a preferential trade agreement between the U.S. and Nigeria.

GSTP

The Global System of Trade Preferences among Developing Countries agreement establishing the Global System of Trade Preferences (GSTP) among Developing countries was signed on 13th April 1988 at Belgrade.

ECOWAS

The Economic Community of West African States was established with the main goal of promote economic cooperation among member states in order to raise living standards and promote economic development.

Value chain challenges

Resource Shortage: Over the past years, Nigeria has dealt with very low yields per hectare due to shortages in the supply of inputs such as seedlings and fertilisers as well as inadequate irrigation and harvesting systems, which hinders productivity and yield rates.

Insufficient supply to meet population growth and food demand: With a population of roughly 200 million people, Nigeria's agricultural productivity is insufficient to meet the food demanded of its growing population thus increasing the demand and supply gap in Nigeria.

Absence of value addition and supply-chain linkages: Nigeria focuses mostly on food production, thus neglecting the processing and manufacturing segment of the value chain. The chain reaction that arises from shortages of resources, lack of financing for small-scale farmers and inefficient transport systems, exacerbates the development of food production along the value and supply chain.

Outdated system of agriculture: Outdated methods of agriculture such as the use of hoes and cutlasses reduce efficiency as these methods are costly and time consuming. Nigeria's failure to adopt advanced mechanised systems has reduced the quality of its agricultural products.

A scenic landscape featuring a yellow house with a red-tiled roof and a chimney, situated in a valley. The house is surrounded by lush green trees and bushes. In the background, a range of mountains is visible under a cloudy sky. The foreground is filled with greenery and some yellow flowers.

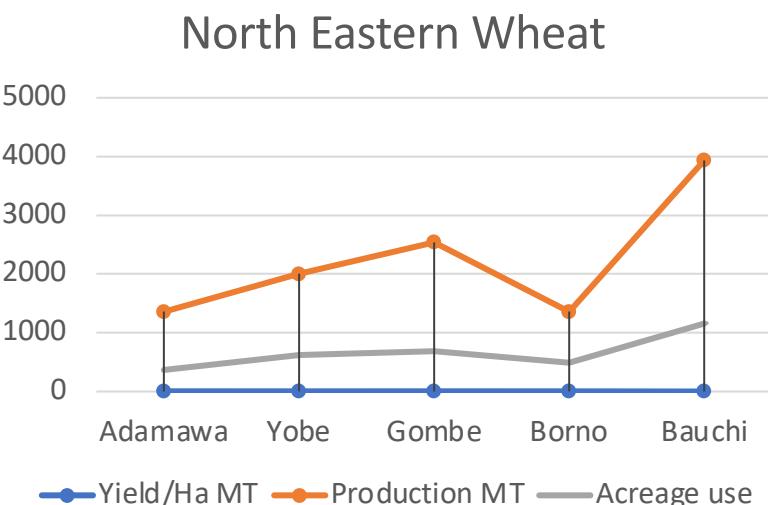
Why
Gombe ?

Executive Summary

Gombe is one of the northeastern states in Nigeria. Which spreads over an area of **20,265 km** square and made up of 11 local govt areas. It is located between between latitude 9 30" and 12 30" north and longitude 8 45" and 11 45" east. It shares boundaries with **Yobe** in the north, **Borno** State in the east, **Adamawa** and **Taraba** in the south and **Bauchi** in the west.

Total Population	1,770,834
	Male
	1,701,389
	Female

- **Date of Creation:** 1st October 1996
- **Geopolitical Zone:** Northeast Nigeria
- **Slogan:** Jewel in the Savannah



Gombe is the **second largest producer of wheat** in the North East



Gombe is central to the North East and a natural access point to the north East

IGR Growth 2019 – 2020 -**25.5%**
Total Revenue growth – **33.54%**

Gombe State has been **ranked number one** by a survey on the Ease of Doing Business (EoDB) in Nigeria, according to a report by the Presidential Enabling Business Environment Council (PEBEC). Gombe State was ranked number one with an overall **average score of 7.69**, out of a maximum score of 10

Facts Related to Wheat - Gombe



Due to the state's commitment in empowering youth, The National Agricultural Lands Development Authority (NALDA), acquired 200 hectares of land to engage 400 youths in Gombe state for wheat production.



The state government launched the GOMBE AGRICULTURAL TRANSFORMATION – PROJECT (GATRAP), a 10-year initiative to facilitate a gigantic revolution of the Gombe state agriculture sector, by offering thorough multifaceted solutions to tackle various challenges in the state's agric. sector.



Central Bank of Nigeria (CBN)'s Anchor Borrowers' Programme (ABP), enabled farmers to cultivate over 2,463 hectares of land with improved seedlings made available for the 2021/2022 dry season farming in the state.



Wheat Farmers Association of Nigeria (WFAN) in Gombe had over 19,000 registered members cultivating wheat in the state.

Nigeria has one of the highest levels of consumption in Africa, with an expected consumption increase of 35% between 2018 & 2028. However, output levels are low, with just c.2% of consumption met by local suppliers. Inconsistent supplies of high yielding seeds appropriate for the Nigerian environment, as well as limited access to mechanized equipment and contemporary agricultural practices, are key factors of low output levels.

Factors Supporting Growth of the Sector in Gombe

Gombe State is the second-largest producer of wheat in the North East

01

Wheat Farmers Association of Nigeria (WFAN) in Gombe had over 19,000 registered members. This provides an opportunity for contract farming and agribusiness services. In addition, advanced training and implements were provided to help 2,000 farmers in the State.

02

Gombe State government and National Agricultural Land Development Authority, NALDA partnered to demonstrate the opportunities in wheat production by supporting 2400 youths to produce wheat on 200ha of land acquired by NALDA.

03

CBN purchased 13,000 metric tons of heat resistant (with a short gestation time) seeds with an expected yield increase of 18% (1.3mt/ha) in 2021. They multiplied them in Jos, Plateau State and ready and available to farmers.

04

Crown Flour Mill Limited (CFM), launched a N300 million (US \$750,000) 10-year wheat seed trial project aimed at setting up community seed enterprises for Nigerian farmers to increase their production and address the development gap in the wheat value chain.

Investment Opportunities in Gombe

IRRIGATION

Opportunity

Wheat is produced in Nigeria entirely under irrigation within latitudes 10 to 14 grade N where night temperatures during most of the growing period (November-March) range from 10-15° C.

Business Model

Agribusiness Service Provision.

Provision of irrigation system solutions; potential off-takers of such solutions include big millers in the nation who use out-grower plans to provide resources to rural farmers.

SEED DEVELOPMENT & PRODUCTION

Opportunity

Low levels of output (90MT) with high levels of consumption (4,760MT) (2021). Due to the inconsistency of certified high-yielding wheat seed types, a major contributing element is the usage of foundation seeds for production.

Business Model

Agribusiness Service Provision, Seed Production

Improving output by giving high-quality inputs to smallholder farmers in exchange for first refusal on the grains produced, which can be sold locally or abroad.

PRODUCTION

Opportunity

According to the NBS, Nigeria imported durum wheat worth N1.29 trillion in 2021. This is due to poor output levels. Low productivity was also attributed to a lack of availability to high-quality inputs by local farmers.

Business Model

Agribusiness Service Provision, Crop Production

Increasing output by giving high-quality inputs to smallholder farmers in exchange for first refusal on harvested grains, which can be sold locally or internationally.

Estimated Opportunity Size

IRRIGATION

US\$85.3 Mn
Estimated opportunity size

SEED

US\$148.7 Mn
Estimated opportunity size

PRODUCTION

US\$69.7 Mn
Estimated opportunity size

Gombe: Production

The total acreage predicted for the 13 states was 11,820 Hectares. The state-wise breakup can be seen in the following figure:

Estimated Area (Ha) by Satellite Mapping and Production in (Kg) Crop Estimate by NBS						
SN	State	Acreage (Satellite Mapping)	Yield/HA in kg (Crop cut)	Yield/HA in MT (crop cut)	Production (Kg)	Production (MT)
1	Kano	2,326	2,800	2.8	6,512,800	6,512.8
2	Jigawa	2,091	2,800	2.8	5,854,800	5,854.8
3	Kebbi	1,340	3,300	3.3	4,422,000	4,422.0
4	Bauchi	1,157	3,400	3.4	3,933,800	3,933.8
5	Kaduna	1,140	2,700	2.7	3,078,000	3,078.0
6	Gombe	687	3,700	3.7	2,541,900	2,541.9
7	Yobe	626	3,200	3.2	2,003,200	2,003.2
8	Katsina	509	3,600	3.6	1,832,400	1,832.4
9	Plateau	505	3,800	3.8	1,919,000	1,919.0
10	Sokoto	393	3,200	3.2	1,257,600	1,257.6
11	Zamfara	192	3,500	3.5	672,000	672.0
12	Borno	487	3,200	3.2	1,558,400	1,558.4
13	Adamawa	367	3,700	3.7	1,357,900	1,357.9
Total		11,820	3125.53	3.1	36,943,800	36,943.8

Gombe state has the **2nd Highest Wheat Production Output per hectare** in the country.

Gombe: Wheat Farm Facts

Number of Wheat Farm where a crop cut yield survey was conducted per State

SN	State	Number of Wheat Farm Covered
1	Adamawa	60
2	Bauchi	55
3	Gombe	60
4	Jigawa	60
5	Kaduna	60
6	Kano	60
7	Katsina	60
8	Kebbi	65
9	Plateau	59
10	Sokoto	60
11	Yobe	60
12	Zamfara	55
National		714

Average of the wheat Farm size covered for crop cut survey per State

SN	State	Average Farm Size in square metre	Average Farm Size in Hectares
1	Adamawa	6,464.81	0.65
2	Bauchi	3,437.73	0.34
3	Gombe	2,236.17	0.22
4	Jigawa	2,864.31	0.29
5	Kaduna	2,224.20	0.22
6	Kano	3,339.50	0.33
7	Katsina	2,683.03	0.27
8	Kebbi	6,132.34	0.61
9	Plateau	1,723.20	0.17
10	Sokoto	6,688.11	0.67
11	Yobe	3,172.35	0.32
12	Zamfara	4,267.33	0.43
National		3,787.67	0.38

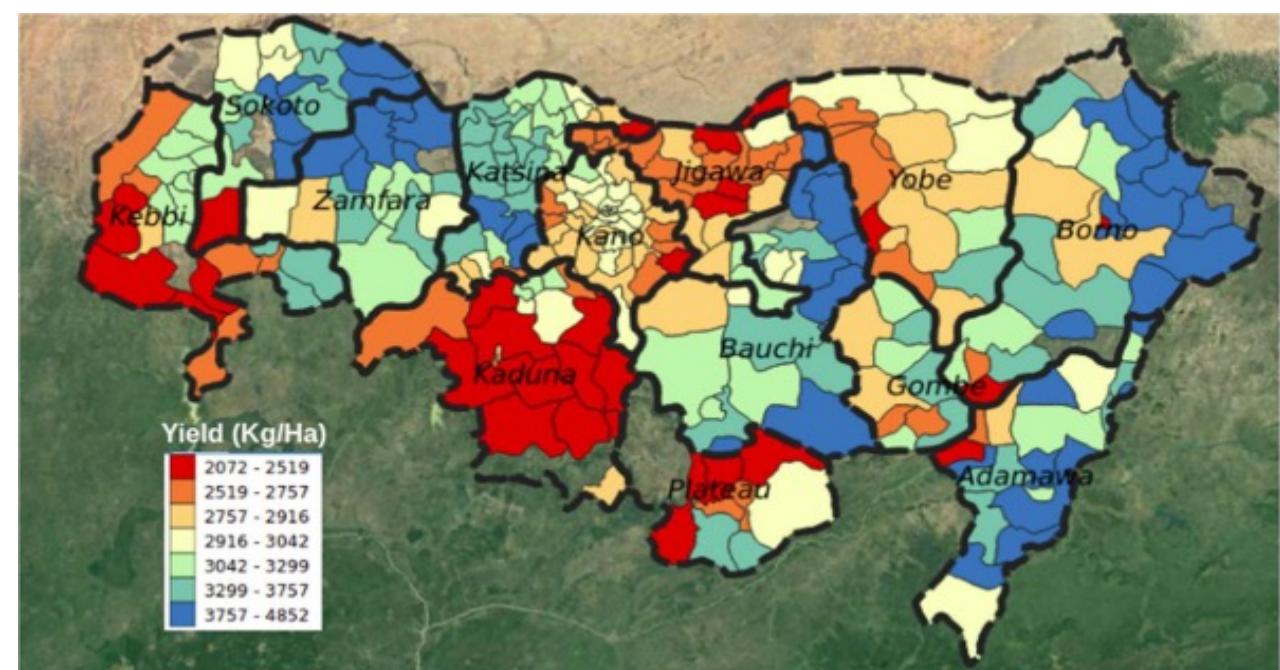
GOMBE: YIELD ESTIMATION

Yield distribution of LGAs at 13 State levels. Date of prediction [Feb-Mar 2021]

Aggregated Yield Mean of State [Predicted & Actual]

State	Predicted (Kg/Ha)	Actual (Kg/Ha)
Adamawa	3,606	-
Bauchi	3,518	3,431
Borno	3755	-
Gombe	3,033	3,770
Jigawa	2,734	2,878
Kaduna	2,265	2,810
Kano	2,879	2,803
Katsina	3,294	3,632
Kebbi	2,821	3,182
Plateau	3,022	3,864
Sokoto	3,462	3,192
Yobe	2,789	3,087
Zamfara	3,608	3,500

The yield of Wheat in Nigeria ranges between **2000 - 4900 Kg/Ha** with a standard deviation and mean of **852 - 1181 Kg/Ha** and **2670- 4856 Kg/Ha** respectively following a normal distribution curve over the area which shows that the yield has been very well distributed across LGAs in 13 states.



University Skill/Graduate output/R&D Institute

University	Founded	Address	Course Offered Agriculture	Students
Gombe State University of Science and Technology	2017	Kumo, Gombe Nigeria	N/A	Graduated in 2018/19 - 3, 958
Federal University, Kashere	2011	Kashere, Gombe Nigeria	Bachelor's - 4 Master's - 3	N/A
Federal College of Horticultural Technology	2002	Dadin Kowa, Gombe State	Bachelor's - 5	Agriculture & Related Disciplines - 193
Ahmadu Bello University (ABU) Zaria	1962	Zaria, Nigeria	Bachelor's - 4 Master's - 9 R&D - 4	N/A

Investment Opportunities



Opportunity 1 – Input Supply & Production

Reasons to Invest

- As Nigeria's principal wheat producing system, there is a **high demand for irrigation solutions**.
- A **90% consumption-to-import ratio**, and dependency on Nigeria for grains by nations like Mali, Chad, and Niger.
- A specialized wheat grain merchandiser is not present in Gombe state
- Investors could invest in existing seed companies in Gombe to produce wheat seed
- There are various research centers in Nigeria dedicated to improving wheat seed production.
- The most effective way to stimulate wheat production is through irrigation.

US\$69.7mn
Estimated opportunity size



Key Players in Nigeria



Gombe's Commitment

- Concessions for certified wheat seed production companies.
- Land for wheat production at a discounted rate or none depending on investment size.
- Loan facilitation for companies and farmers interested in production and input supply.

Proposed Business Model(s)

Agribusiness Service Provision - Responsible for hand-holding farmers to adopt Good Agricultural Practices, engage in farming as a business, generate income, and link into lucrative markets.

Seed Production – Production of certified high yielding wheat seedlings appropriate for the Nigerian climate.

Opportunity 2 – Post Harvest Storage

Reasons to Invest

- Investment in accessible government-owned silos on a concession basis.
- Due to a lack of storage facilities, large post-harvest losses and poor grain quality have occurred.
- Wheat farmers prefer to sell their limited output to more attractive markets in Sahel countries like Niger, Chad, Mali, and Burkina Faso as well as to NGOs.

Key Players in Nigeria



Gombe's Commitment

- Readiness to partner with private companies to lease Gombe state government owned storage facilities dedicated towards the storage of grains.

Proposed Business Model (s)

- Building private storage facilities in order to set up computerized warehouse receipt systems for wheat grain storage.
- Investing in available government-owned silos on concession.

Opportunity 3 – Processing

Reasons to Invest

- Nigerian pasta consumption is growing, accounting for about 15% of wheat flour usage, up from virtually zero in 1999.
- Nigeria produced 36,943 metric tons of wheat in 2020. This figure is 38.4% lower than the 60,000MT recorded in 2016
- The CBN launched a Wheat Intervention programme to add 750,000MT of wheat to national output yearly.
- The price of wheat flour pre-packaged golden penny 2kg, increased by 29% in January 2022.
- The biscuit market is led, by three big manufacturers controlling 73% of the market: OK Foods, Yale Foods, and Pladis Nigeria.

Key Players in Nigeria



Gombe's Commitment

Gombe state Agro-Industrial park.

- The CBN continues to support companies through different interventions ,which enables companies to cultivate land for dry season farming.
- The Federal govt is supporting the Gombe farmers with the availability seed palliative.

Proposed Business Model (s)

- Setting up wheat processing mills in Gombe
- Setting up Biscuit production factories to cater to the young population, who are major consumers of flour-based biscuit products account for 44% of Nigeria's population



More Information

Pasta Consumption:

Nigerian pasta consumption is growing, accounting for about 15 percent of wheat flour usage, up from virtually zero in 1999.

Flour Mills of Nigeria pioneered pasta production in 1999; since then, it expanded pasta production capacity from 40,000 MT (1999) to 350,000 MT today.

- There is an opportunity for Automation of the farming process through invest in Wheat on a large-scale basis.
- The government recently changed the National Agricultural Seed Council Act to encourage commercial seed companies to set up shop in Nigeria.
- The landscape of highly innovative start-ups run by young entrepreneurs doing wonderful things across the agricultural value chains.
- These agripreneurs are showing that the youth are ready for the challenge.

Nigeria Milling Industry Structure (Flour Usage)

12%
Biscuit

7%
Noodles

81%
Bread

Bread Flour Consumption by Region

16%
South East

17%
Middle East

37%
North

30%
South West

More Information

CURRENT SITUATION 1

Ukraine & Russia War

Due to the war between Russia and Ukraine the prices of the wheat in Africa has gone 60% up.

INVESTMENT OPPORTUNITY

- If the production of wheat is increased by investing in latest technological advancement, the wheat production can go up many folds and further reduce Nigeria's reliance on the import of wheat.

CURRENT SITUATION 2

Shortage of High Quality Seeds

The domestic seed of wheat has not been able to give better crop quality and quantity due to the shortage of high quality of seed in Gombe.

INVESTMENT OPPORTUNITY

- A healthy investment opportunity lies in High quality of wheat due to the factors like seed maturity, yield, irrigation etc.

CURRENT SITUATION 3

Youth Employment

Lack of agricultural activity in the state is hampering the potential youth in Gombe from the employment.

INVESTMENT OPPORTUNITY

- Investment in diversified agricultural sectors will create employment for the youth of Gombe and especially acquisition of wheat farm will create more employment.

Muhammadu Buhari Agro Industrial Zone

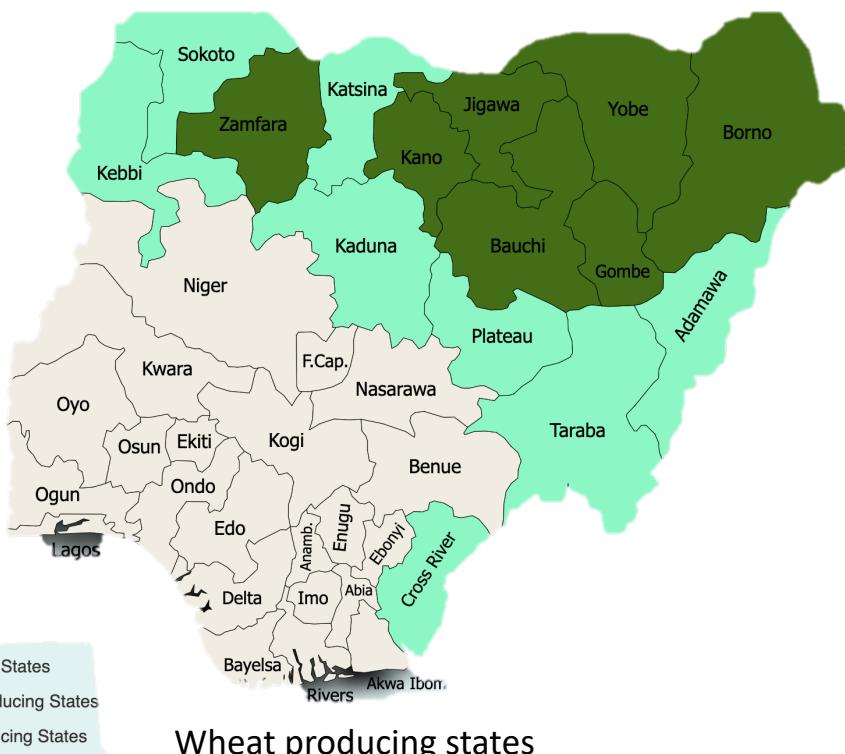
Operating Cost & Location Analysis



Wheat Producing Area in Nigeria

Upstream Supply Chain

- Local wheat grains are either sold within Nigeria or exported to neighboring countries such as Niger, Chad, Mali and Burkina Faso.
- Imported wheat is primarily sourced by large millers from Russia, Canada, USA and Australia while some large millers have entered into out-grower schemes with local farmers for the supply of locally produced wheat.



Downstream Supply Chain

Comprises transporting flour from the production site to the companies' own distribution centres or major distributors.

For artisanal producers of flour-based products, flour is packaged and distributed in bags of various sizes, the most popular size being the 50kg bag.

Other wheat-based products, such as pasta, semolina and noodles, are sold in standard packages through major distributors and wholesalers.

Cost Drivers – In Country Logistics

Rail transport cost has significantly reduced over the years creating an enabling environment for distribution and supply

Top Wheat Producers	Kano		Jigawa		Borno		Zamfara	
Processing destination	Low	High	Low	High	Low	High	Low	High
Lagos	1,383	1,672	1,567	1,897	2,064	2,497	1,511	1,828
PH, Rivers	1,478	1,789	1,831	2,217	2,319	2,806	1,542	1,867
Aba	1,478	1,789	1,714	2,072	2,200	2,661	1,625	1,967
Onitsha	1,250	1,511	1,453	2,061	1,692	2,047	1,347	1,631
Jos	725	878	1,000	1,211	1,333	1,614	911	1,103

RAIL TRANSPORT PRICES IN NIGERIA



Road transport

- ▀ Haulage prices in Nigeria vary according to the weight of products, shipping distance, and to some degree, the security and infrastructural conditions of origin, routes and destinations of shipments.
- ▀ The cheapest road haulage distance between top producing and processing/export region is between Kano and Jos where Jos Flour Mills is situated

Rail transport

- ▀ Total of 85,816 tons of volume of goods/cargo traveled via the rail system in Q2 2018 as against 79,750 recorded in Q1 2018 and 18,212 in Q2 2017 respectively, representing 371.21% growth YoY and 7.61% growth QoQ
- ▀ Over the last 6 years, the cost of rail transport in Nigeria has declined by 55.8%, indicating an increasingly favorable transport environment that can be leveraged by agricultural producers to transport their products across the country

Cost Drivers - Import & Export Logistics

Freight rate estimate for grains of \$20,000 in a 20ft and 40ft container

Mode	Port of Departure	Port of Entry	20ft	40ft
Sea	Novorossiysk, Russia	Apapa, Lagos	\$4,706 - \$5,201	\$4,882 - \$5,395
	Vancouver, Canada		\$4,706 - \$5,201	\$4,882 - \$5,395
	Houston, United States		\$3,146 - \$3,477	\$3,838 - \$4,242
	Houston, United States		\$3,146 - \$3,477	\$3,838 - \$4,242

Road transport estimate for grains of \$20,000 in a 20ft and 40ft container

Mode	Location of Departure	Port of Entry	20ft	40ft
Road	Kano	Mali	\$1,696 - \$1,875	\$2,610 - \$2,884
	Jigawa		\$1,696 - \$1,875	\$1,740 - \$1,923
	Borno		\$1,168 - \$1,291	\$1,797 - \$1,987
	Zamfara		\$969 - \$1,072	\$1,491 - \$1,648



Applicable Incentives And Key Regulatory Agencies

Players Analysis

Flour Mills of Nigeria, the world's second largest flour miller, is Nigeria's largest flour miller with capacity of 8,000MT/day

Players	Flour mills of Nigeria	Olam Nigeria limited	Dangote flour mills	Honeywell flour mill
Incorporated	1960	1989	1999	1983
Product/Services	Flour, animal feed, fertiliser distribution, pasta, macaroni and Bagco (packaging)	Animal feed, pasta, noodles, biscuits, grains	Flour, macaroni, semolina, spaghetti, wheat meal	Flour, semolina, wheat meal, noodles and pasta
Location	Lagos	Lagos	Lagos	Lagos
Capacity	8,000 MT/Day	6,140 MT/Day	7,300 MT/Day	2,610 MT/Day
Revenue	\$855M	N/A	\$299.83M	\$77M
Employees	7,420	3,000	2,087	880
Input sourcing	Local and Imports	Local and Imports	Local and Imports	Local and Imports
Markets	Local and Internationals	Local and Internationals	Local	Local

Case Study - Other Successful Investments

The wheat processing space has witnessed several notable investment deals from 2004 till date

Players	Crown Flour Mills Nigeria Limited	Dangote Industries Limited	Tiger Brand Limited	Olam International Limited	Actis LLP
Year	2019	2015	2012	2010	2004
Target Name	Dangote Flour Mills	Dangote Flour Mills	Dangote Flour Mills	Crown Flour Mills Nigeria Limited	UAC of Nigeria PLC
Deal Size (USD'Mn)	361	79	506	108	25
Target's Products	Flour, semolina and wheat meal	Flour, semolina and wheat meal	Flour, semolina and wheat meal	Flour and wheat meal	Livestock feeds
Transaction Type	Acquisition of Equity Stake				

Regulatory & Government Agencies

KEY REGULATORY AGENCIES

National Agency for Food and Drug Administration and Control (NAFDAC)



Established in 1993 with the mandate to regulate and control quality standards of foods, drugs, and chemicals imported or locally manufactured and distributed in Nigeria.

The Standards Organisation of Nigeria (SON)



A statutory body with a mandate to monitor product quality and to produce and periodically review standards relating to products, measurements and material processes.

Federal Ministry of Agriculture and Rural Development (FMARD)



A Ministry of the Nigerian government that regulates agricultural research, agriculture and natural resources, forestry and veterinary research all over Nigeria.

National Agricultural Seed Council (NASC)



Established in 2007, NASC is charged with the overall development and regulation of the national seed industry.

The National Fertilizer Technical Committee (NFTC)

The National Fertilizer Technical Committee

Established in 1983 by the Federal Ministry of Agriculture and Water Resources (FMAWR) as an internal mechanism to regulate fertiliser standards in Nigeria.

Applicable Taxes & Incentive

The government has put into place various tax incentives to encourage businesses in the Nigerian agricultural landscape

Company Income Tax (30%)

Levied on profits of companies accruing in, derived from or received in Nigeria.

95% capital allowance in year qualifying expenditure is incurred.

Pioneer status applicable

Indefinite carrying forward of unutilised capital allowance.

Exemption from payment of minimum tax.

Value Added Tax (VAT) 5%

Consumption tax paid when goods are purchased and services rendered.

Exemption on implements purchased for agricultural purposes, locally produced veterinary medicine agricultural & farming machinery and transportation equipment.

Import and Export Duties (30%-35%)

Payable on goods imported into or exported from Nigeria.

Tariff based incentives on Agro-allied, agro-processing and agricultural commodities & 0% import duty on agriculture equipment and machinery.

Capital Gain Tax (10%)

Payable on capital gains accruing to companies or individuals making chargeable disposal of asset.

Rollover relief: Deferment of payment of capital gains tax when disposal proceeds are used for the purchase of land and agricultural machinery of the same class within 12 months of disposal of the old asset.

Case Study – Success Study

Olam, which began operations in Nigeria in 2010, has grown its operating capacity by 258% over the space of nine years

Highlights

2011

Green field wheat mill in Ghana with a capacity of 500 MT/day

6,140 MT/day

Current wheat milling capacity after the acquisition

2010

Commenced operations with the acquisition of Crown Flour Mills in Nigeria

US\$275 million

Investment in Amber Foods Limited in 2016

2,380 MT/day

2010 Initial wheat milling capacity

2015

Green field wheat mill in Cameroon with a capacity of 500 MT/day

Company Profile

-  Olam International, started in 1989 in Nigeria by its India-born CEO Sonny George Varghese
-  Olam Nigeria Ltd is a Singapore-based subsidiary of Olam International. The firm has evolved into a worldwide supply-chain manager with platforms for agricultural production, processing, financing, and commodity trading.
-  It is now one of the largest millers in Sub-Saharan Africa, having facilities in Nigeria, Ghana, Senegal, and Cameroon, after acquiring Amber Foods Limited to expand its wheat milling activities.
-  The company credits its success to expanding its African footprint while also establishing large operations that allow it to pass cost savings on to customers.

Case Study

Case Study	Background	Links
Prevalence of respiratory symptoms among wheat flour mill workers in Ibadan, Nigeria	<p>While investigations into occupational health problems of various groups of workers have been conducted in Nigeria, so far, very little attention has been paid to the health status of workers in the grain industry. The prevalence of respiratory symptoms among wheat flour mill workers and control groups in a medium size industrial setting in Nigeria was studied.</p>	Prevalence of respiratory symptoms among wheat flour mill workers in Ibadan, Nigeria - PubMed (nih.gov)
Gender Roles and Relations in the Wheat Production of Nigeria: Strengthening the Participation of Women	<p>Activities in this study are implemented in two ways: the first is in enterprises in which women are leading and acknowledged with a focus on value addition; the second is in enterprises that are usually believed to be led by men despite significant contributions from women with a focus on wheat farming.</p>	https://mel.cgiar.org/reporting/download/hash/OwIMG0hD

THANK YOU