



PHARMACEUTICAL SOCIETY
OF NIGERIA

JEWEL CITY 2023

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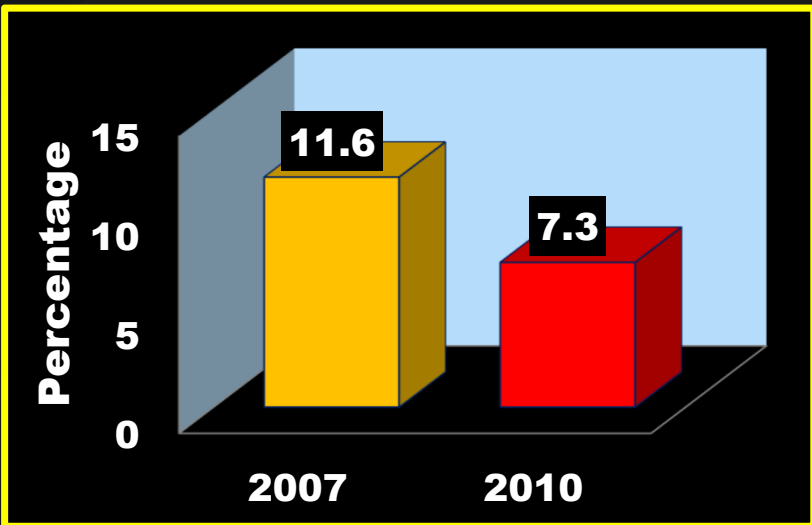
NIGERIAN AIR FORCE

TOPIC

PHARMACEUTICAL MANUFACTURING IN NIGERIA: CAPABILITIES CHALLENGES AND PROSPECTS

INTRODUCTION

INTRODUCTION



Value of Pharmaceutical Manufacturing in Germany in 2007 and 2010

❖ **Local pharmaceutical production is a critical requirement for the attainment of medicine security in any nation**

❖ **Germany's difficulty in enforcing regulatory compliance to promote good manufacturing practices and quality control, led to a drop in global market access revenue from US\$4.2 billion in 2007 to US\$ 1.78 billion in 2010**

✓ **The value of pharma manufacturing dropped from 11.6 per cent in 2007 to 7.3 per cent in 2010**

✓ **Annual pharmaceutical revenue to GDP loss of over US\$31.7 billion as of 2010**

INTRODUCTION (CONT)

❖ **German Government enacted the Pharmaceutical Market Restructuring Act in 2011 in order to keep the German market attractive for pharmaceutical manufacturers**

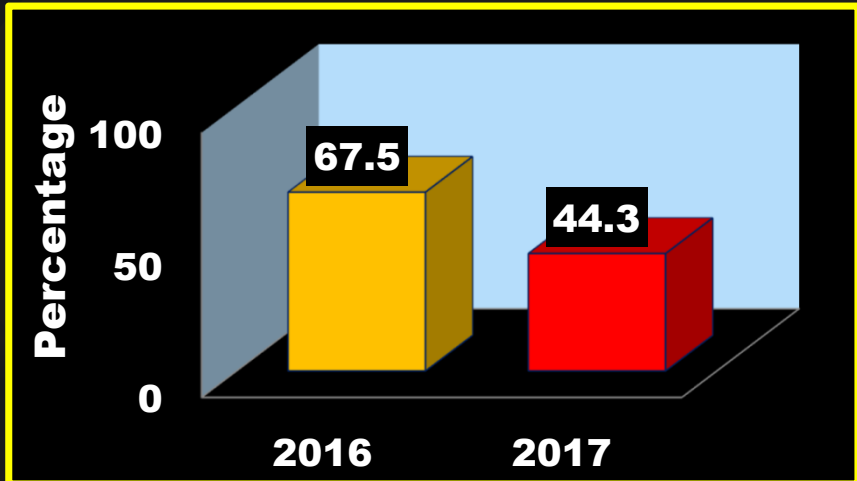
✓ **Increased pharmaceutical manufacturing outputs**

✓ **2021, Germany ranked amongst the top countries in pharmaceutical manufacturing with a total revenue of over 56.9 billion euros and an annual revenue growth of 5.1 per cent**

✓ **Currently, Germany's share of the total global pharma revenue stands at 5.9 per cent**

Hence, Germany through the PMRA improved pharmaceutical manufacturing and market evaluation, which aided the economy and medicine security in the country

INTRODUCTION (CONT)



GDP Contribution of Pharma Whole and Retail Trade in Germany in 2016 and 2017

❖ **Egypt's pharma manufacturing was impeded by limited access to raw materials, investment in R&D and lack of competitiveness in 2016**

✓ **Led to a drastic drop in global market value by 22 per cent**

✓ **The contribution of pharmaceutical wholesale and retail trade to GDP dropped from 67.5 per cent in 2016 to about 44.3 per cent in 2017**

INTRODUCTION (CONT)



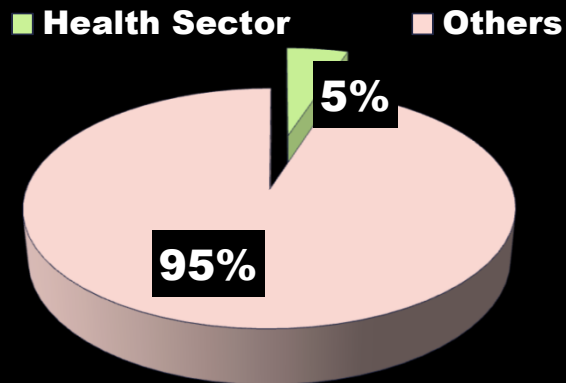
EDA Logo

Source: www.googleimage.com

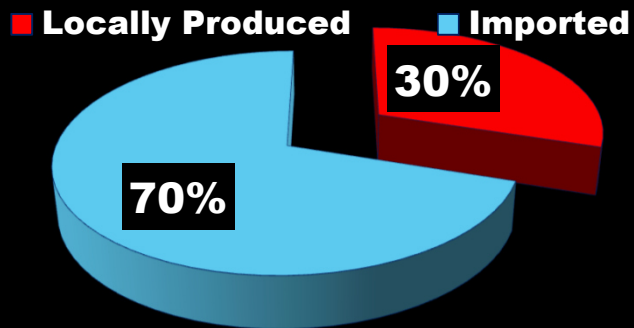
- ❖ **The Egyptian Government liberalized the pharmaceutical industry in 2019 through the establishment of the Egyptian Drug Authority**
- ❖ **Major objective is to drive competitiveness in the sector as well as to ensure safety and quality of pharmaceuticals**
 - ✓ **Led to a sharp growth in pharmaceutical manufacturing**
 - ✓ **The market size was US\$3.0 billion in 2022 and is expected to grow to more than 7 per cent during between 2022 and 2027**

Hence, the ability of the Government to prioritize local pharma manufacturing through EDA improved its market value and enhanced medicine security in Egypt.

INTRODUCTION (CONT)



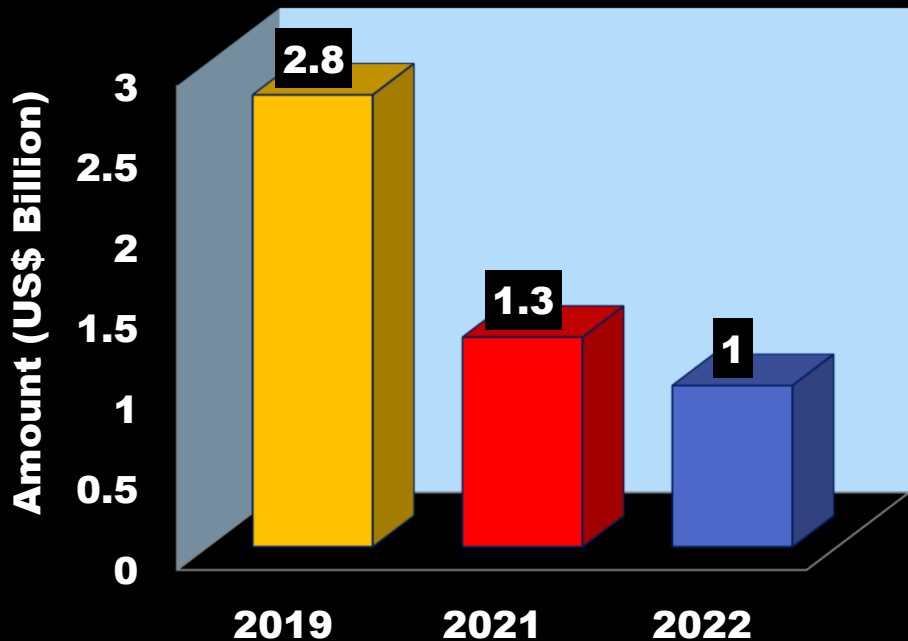
Graph on spending on Healthcare



Locally produced and Imported Drugs in Nigeria

- ❖ In Nigeria, poor investment in the healthcare system (Less than 5% of GDP) and varying economic challenges have inhibited the country's ability to leverage pharma manufacturing
- ❖ Heavy reliance on drug importation with an average of N800 billion spent annually
- ❖ In 2005, the FGN adopted the National Drug Policy aimed at achieving a target of 70 per cent for local manufacturing of medicines
- ❖ Despite this, after about 20 years, only 30 per cent of the country's drug needs are met leaving out 70 per cent in the hands of importers

INTRODUCTION (CONT)



Graph on Pharma Imports

- ❖ There are about 120 local pharmaceutical manufacturers taking care of the drug needs of less than 40 per cent of the country's population.
- ❖ India has about 3000 pharma manuf sites
- ❖ Nigeria's pharma imports dropped a second time to \$1 billion in 2022 from \$1.3 billion in 2021 and 2.8 billion in 2019
- ❖ Pharm import is on a gradual decline which is inimical to achieving medicine security in Nigeria considering our capacity of only 30 per cent local manufacture

If this situation is not addressed, Nigeria will continue to spend huge sums on drug imports which is detrimental to its economy and medicines security

PURPOSE

**To suggest collective actions required to
enhance local pharma manufacture
in Nigeria**

AIM

To share my thoughts on pharmaceutical manufacturing in Nigeria with a view to making recommendations

SCOPE

❖ **Overview of Current Capabilities of Local Pharmaceutical Manufacturing**

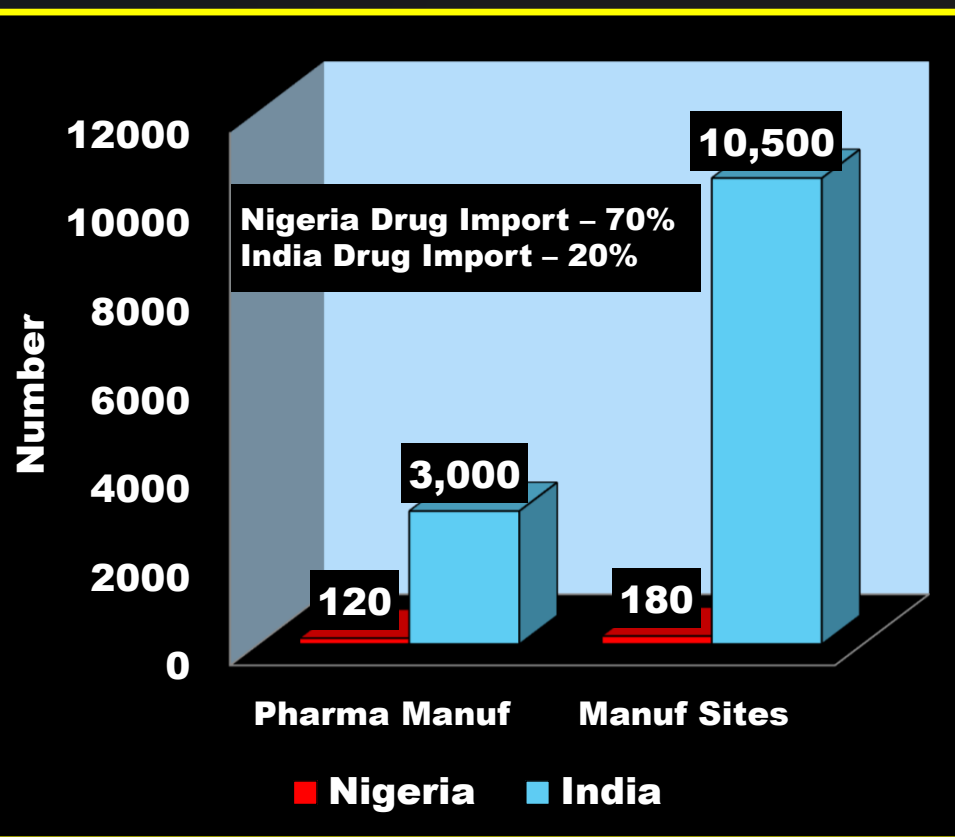
❖ **Challenges Associated with Local Pharmaceutical Manufacturing in Nigeria**

❖ **Prospects of Pharmaceutical Manufacturing in Nigeria**

❖ **Where we Need to be Collectively Headed**

**OVERVIEW OF CURRENT CAPABILITIES
OF LOCAL PHARMACEUTICAL
MANUFACTURING
IN NIGERIA**

OVERVIEW OF CURRENT CAPABILITIES OF PHARMACEUTICAL MANUFACTURING IN NIGERIA (CONT)



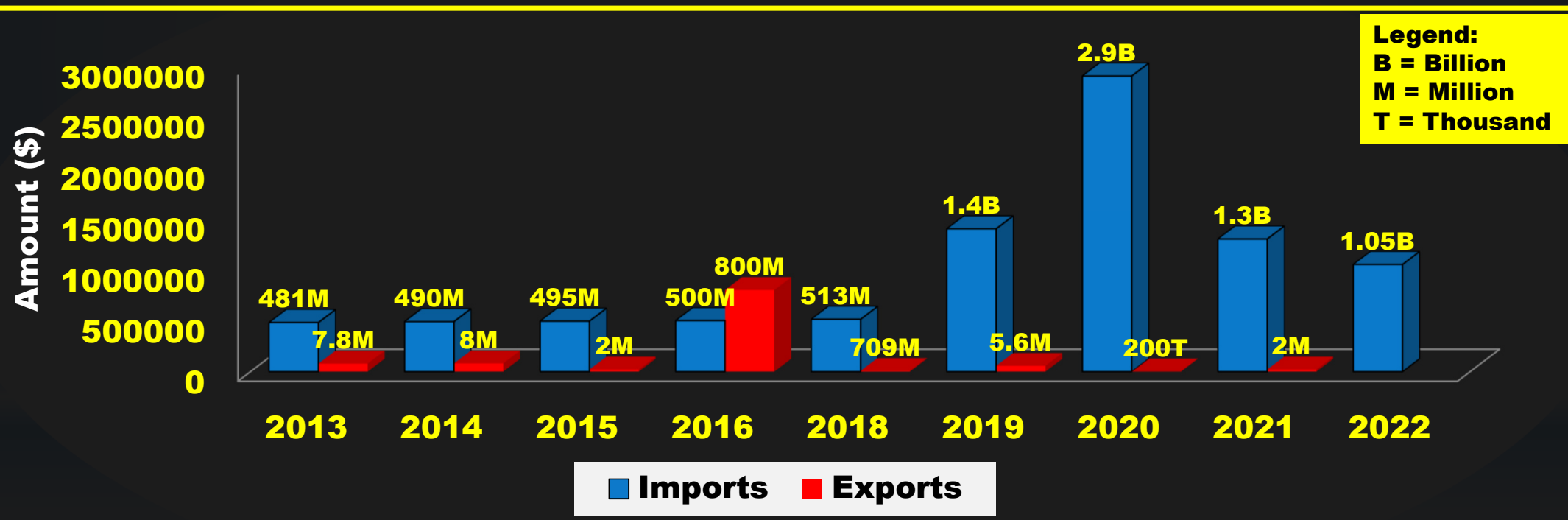
Comparison between Nigeria and India Pharma Sector

Nigeria imports 98 per cent of API needed for local production and about 25 per cent of excipients and packaging materials (Fatokun, 2020)

- ❖ **China and India import only 5 per cent and 20 per cent drugs respectively while Nigeria imports 70 per cent**
- ❖ **Imports including raw materials and finished products, have been growing by an average of 13% since 2014 (Asoko, 2019)**

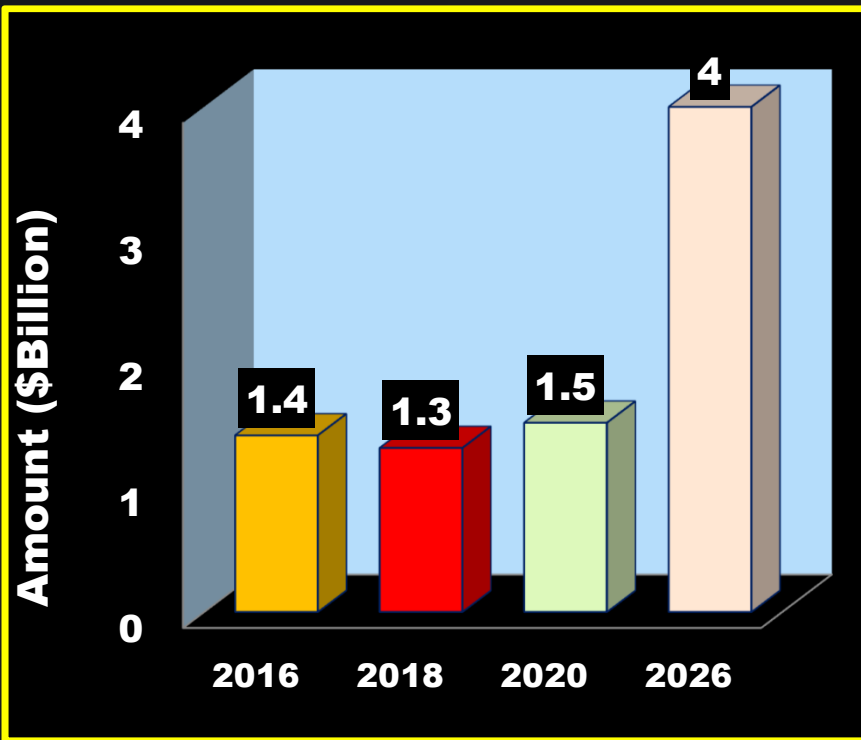
OVERVIEW OF CURRENT CAPABILITIES OF PHARMACEUTICAL MANUFACTURING IN NIGERIA (CONT)

IMPORTATION AND EXPORTATION OF PHARMACEUTICAL PRODUCTS IN NIGERIA BETWEEN 2013 AND 2022



Source: UN, 2023

OVERVIEW OF CURRENT CAPABILITIES OF PHARMACEUTICAL MANUFACTURING IN NIGERIA (CONT)



Pharmacy Sector Monetary Worth from 2016 to 2026

Source: Oxford Business Gp, 2023

- ❖ **Out of over 120 pharma manufacturers operating in Nigeria, only 4 have obtained the WHO GMP certification (Ojelu, 2023).**
- ❖ **Only one company produces API in Nigeria**
- ❖ **Only one has WHO prequalification (Dispersible Zinc tab)**
- ❖ **This has constrained the ability of manufacturers to participate in international tenders and the export market**

OVERVIEW OF CURRENT CAPABILITIES OF PHARMACEUTICAL MANUFACTURING IN NIGERIA (CONT)

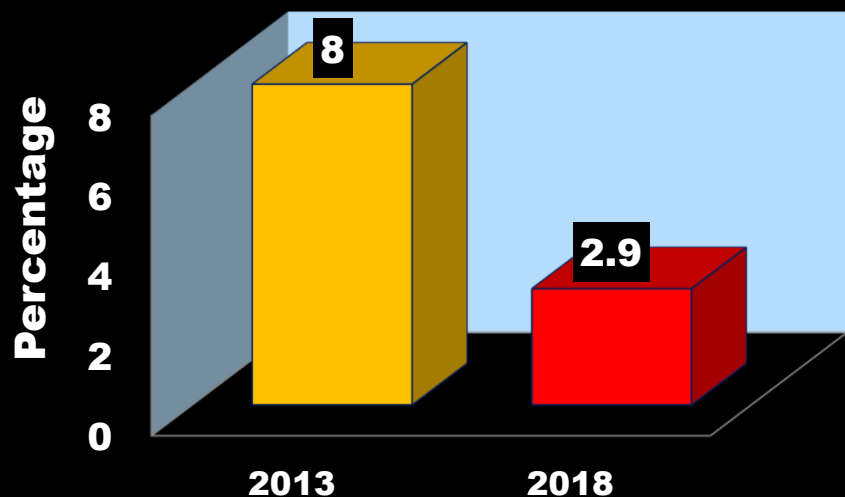


Chart Showing Growth Rate of the Pharma Sector in Nigeria between 2013 and 2018

Growth rate of the sector declined from 8 per cent in 2013 to less than 3 per cent in 2018 despite aggregate 20 per cent price increase (Lagos Bus School, 2019)

Thus, the local manufacturing sector is not growing at the desired rate and with the current harsh economic environment, attainment of medicine security through indigenous pharma manufacturing could be difficult

**CHALLENGES ASSOCIATED WITH LOCAL
PHARMACEUTICAL MANUFACTURING
IN NIGERIA**

CHALLENGES ASSOCIATED WITH LOCAL PHARMACEUTICAL MANUFACTURING IN NIGERIA

❖ **Energy**

❖ **Infrastructure**

❖ **Financing**

CHALLENGES ASSOCIATED WITH LOCAL PHARMACEUTICAL MANUFACTURING IN NIGERIA (CONT)

ENERGY

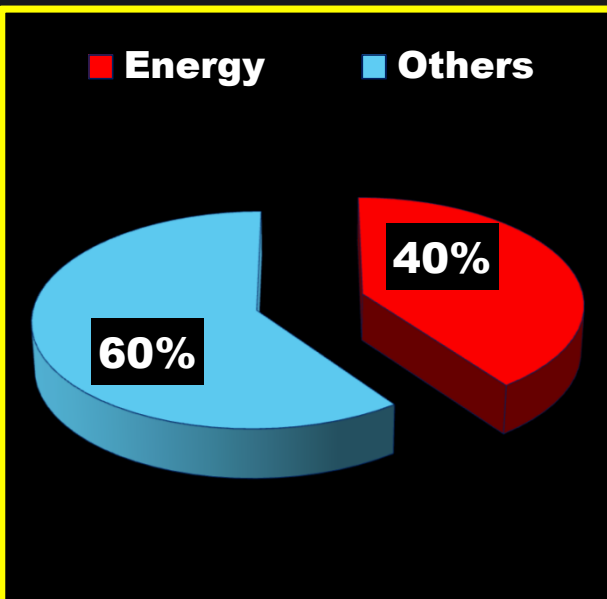


Chart Showing Product Cost

- ❖ **43 per cent of Nigerians and businesses do not have access to reliable public electricity - an annual economic loss of US\$ 26.2b (World Bank, 2021)**
- ❖ **Nigeria ranked 171 out of 190 countries on access to public electricity supply**

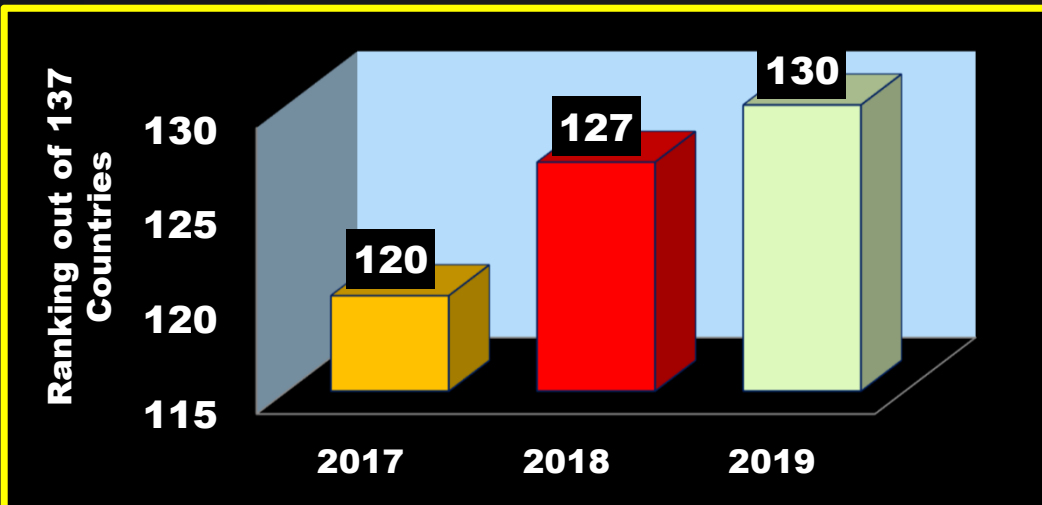
Nigerian pharma sector spends over N250 million monthly on power generation, this amounts to about N3 billion annually (Obinna, 2023)

The cost of energy accounts for as high as 40 per cent of the overall production cost (Econ Summit Gp, 2022)

Therefore, exorbitant cost of energy is a critical factor impinging on local pharmaceutical manufacturing capacity in Nigeria

CHALLENGES ASSOCIATED WITH LOCAL PHARMACEUTICAL MANUFACTURING IN NIGERIA (CONT)

INFRASTRUCTURE



Ranking of Transportation Infrastructure in Nigeria

Source: World Bank, 2022

❖ Nigeria's transport infrastructure ranking declined from 120 to 127 and 130 out of 137 countries in 2017, 2018 and 2019 respectively

❖ As at 2019, the national transport infrastructure deficit required about N3 trillion to resolve (Salau, 2019)

❖ This has a significant impact on drug distribution thereby hindering medicine security

Consequently, the huge infrastructural deficit has far reaching negative effect on the capacity of the pharmaceutical sector to attain medicine security in Nigeria

CHALLENGES ASSOCIATED WITH LOCAL PHARMACEUTICAL MANUFACTURING IN NIGERIA (CONT)

FINANCING



Logos of Commercial Banks

Source: www.googleimage.com

❖ **Access to affordable financing options for small and medium-sized enterprises promote local manufacturing and entrepreneurship (Kilani, 2023)**

❖ **Access to capital is poor as our commercial banks are not designed to fund start-ups**

✓ **Multiple tax regimes**

✓ **High interest rate**

✓ **Poor access to foreign exchange**

CHALLENGES ASSOCIATED WITH LOCAL PHARMACEUTICAL MANUFACTURING IN NIGERIA (CONT)

FINANCING



Source: www.googleimage.com

- ❖ In Egypt, the Government directly funds and invests in local manufacturing.
 - ✓ There are 8 state owned pharma companies
 - ✓ Established a 45 acres Mega pharma city in 2021 with 160 manufacturing lines and producing 150 medicines (Gomaa, 2021).
 - ✓ Invested \$80 million on manufacture of pharmaceutical raw materials
- ❖ The investment increased the size of the pharma sector to \$6.3 b and reduced imports to 15 per cent

Therefore, lack of direct Government funding and poor access to capital are significant limiting factors to local pharma manufacturing in Nigeria

PROSPECTS OF PHARMACEUTICAL MANUFACTURING IN NIGERIA

PROSPECTS OF PHARMACEUTICAL MANUFACTURING **IN NIGERIA**

❖ **Growing Population and Pharma Market**

❖ **National Health Insurance Act 2022**

❖ **Shortage of Generics**

PROSPECTS OF PHARMACEUTICAL MANUFACTURING IN NIGERIA

GROWING POPULATION AND PHARMA MARKET

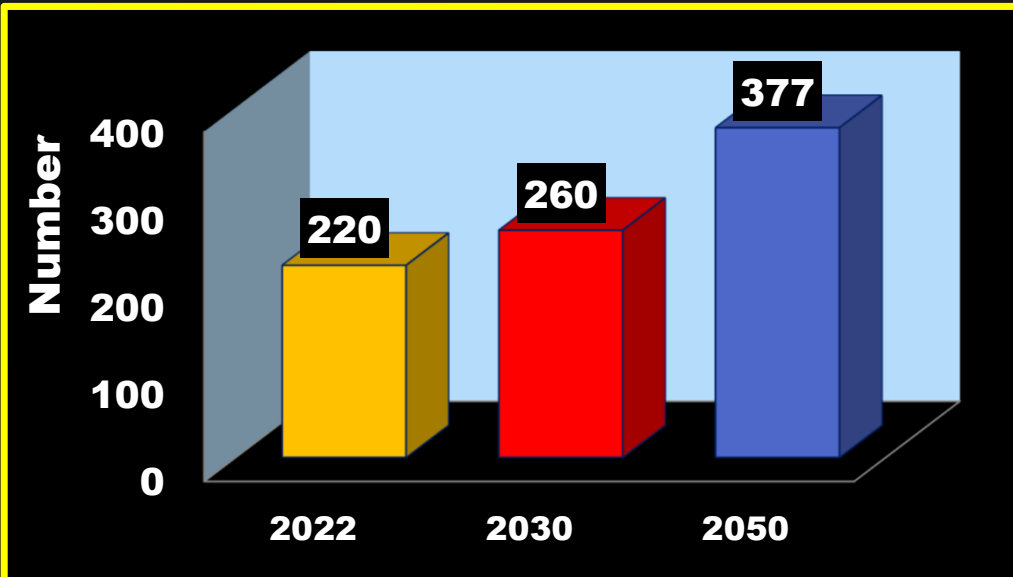


Chart Showing Population Growth from 2022 and 2050

❖ **By 2050, it is projected that the population will grow to over 377 million people and 260 million in 2030 compared to 220 million in 2022**

❖ **Nigeria's growing middle-class accounts for about 23 per cent of the population and is estimated to have a combined buying power in excess of US\$28 billion (Abijoe, 2023)**

If Nigeria were to increase their local share of production from the current 15 per cent to about 40 per cent, Nigeria's trade balance could improve by up to \$200 million annually

PROSPECTS OF PHARMACEUTICAL MANUFACTURING IN NIGERIA

NATIONAL HEALTH INSURANCE ACT 2022



NHIA Logo

- ❖ **The National Health Insurance Act mandates health insurance for workers and all Nigerians**
- ❖ **NHIS achieved only a coverage of 5 per cent of Nigerians (Formal sector) with 70 per cent still financing healthcare through out-of-pocket expenditure (Alawode, 2021)**
- ❖ **The Act which has made health insurance mandatory for all Nigerians could see a significant increase in drug utilization in a few years**

Over the next few years, there will be significant changes in the way medicines are used leading to increased access to essential medicines which could stimulate local production

PROSPECTS OF PHARMACEUTICAL MANUFACTURING IN NIGERIA

SHORTAGE OF GENERICS



Image Showing Israeli Teva Company

Source: www.googleimage.com

- ❖ **Globally, drug Manufacturers are abandoning cheap generics**
- ❖ **As generics manufacturers compete to win sales contracts with the big negotiators of such purchases, their profits sink**
- ❖ **The FDA listed 137 drugs in shortage as of June 2023, including many essential medicines made by few companies (Arthur, 2023)**
- ✓ **Israeli generics giant Teva, which has a portfolio of 3,600 medicines, announced in May 2023 it was shifting to brand-name drugs and high-value generics**

PROSPECTS OF PHARMACEUTICAL MANUFACTURING IN NIGERIA

SHORTAGE OF GENERICS



Akorn Building



Lannett Co., Building

Source: www.googleimage.com

✓ Akorn, which made 75 common generics, went bankrupt and shut down in February 2023

✓ Lannett Co., with about 120 generics, announced a reorganization amid declining revenue

❖ The average net price of generic drugs fell by more than 50 per cent between 2016 and 2022

❖ There is the extreme shortage of some oncology drugs such as methotrexate and cisplatin (Arthur, 2023)

Thus, the solution to the underlying weakness of the generic drug industry is local drug manufacture

**WHERE WE NEED TO BE COLLECTIVELY HEADED TO
ENHANCE LOCAL PHARMA MANUFACTURING
CAPACITY IN NIGERIA**

**WHERE WE NEED TO BE COLLECTIVELY HEADED TO ENHANCE
LOCAL PHARMA MANUFACTURING CAPACITY IN NIGERIA**

❖ Pull Resources Together to Form Mega Companies (Consortiums)

❖ Government Robust Intervention

❖ Pooled Procurement

WHERE WE NEED TO BE COLLECTIVELY HEADED TO ENHANCE LOCAL PHARMA MANUFACTURING CAPACITY IN NIGERIA

PULL RESOURCES TOGETHER TO FORM MEGA COMPANIES (CONSORTIUMS)

- ❖ **The cost per unit of production for pharmaceutical manufacturers in Africa is 60% higher than in countries such as India and China (Econ Summit Gp, 2022)**
- ❖ **Top 10 local manufacturers in Nigeria control less than 25 per cent of industry revenue**
- ❖ **This is because majority of indigenous manufacturers focus on production of generic drugs and not R&D due to high cost**

Pulling resources together will address the weak financial base and enhance the potential to meet WHO pre-qualification criteria

WHERE WE NEED TO BE COLLECTIVELY HEADED TO ENHANCE LOCAL PHARMA MANUFACTURING CAPACITY IN NIGERIA

GOVERNMENT ROBUST INTERVENTION

- ❖ **Governments' support to pharmaceutical industries could be through PPP models**
- ❖ **A single-digit interest rate and a smooth transition to a possible 30 to 50 per cent increased capacity of local manufacturing**
- ❖ **Local manufacturing should be a national issue and therefore should not simply appear on the agenda of individual ministries**

Thus, there is need for high level advocacy and government engagements to rightly place local pharma manufacture as a national priority in order to ensure medicine security

WHERE WE NEED TO BE COLLECTIVELY HEADED TO ENHANCE LOCAL PHARMA MANUFACTURING CAPACITY IN NIGERIA

POOLED PROCUREMENT

- ❖ **This is a demand-driven process which would aid national manufacturers in market-shaping, as most of them import APIs that have an expiry date**
- ❖ **Pooled procurement in Sudan increased scale of procurement from \$3 m in 2010 to \$67 m in 2017 (Pamela et al, 2021)**
- ❖ **Pooled procurement requires adjustments to the public procurement legislation, which in most countries mandates the government to buy products and services at the lowest available price**

A pooled procurement mechanism will encourage leading global generic pharma manufacturers to build plants in Nigeria or partner with local companies to manufacture generic products

CONCLUSION

RECOMMENDATIONS

- ❖ **It is recommended that the PSN should encourage:**
 - ✓ **Local pharma companies to pull resources together to form mega companies through consortiums**
 - ✓ **Continued advocacy and engagement of the Government towards investment in the local pharma industry**
 - ✓ **Pooled procurement should be considered as a means of reducing local production cost**

**THANK YOU FOR YOUR
RAPT ATTENTION**

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