# Why Nigeria Must Strengthen its Local Pharmaceutical Manufacturing Capacity

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**Abstract**
*With over 115 registered pharmaceutical manufacturers, Nigeria still depends on other countries for the supply of active pharmaceutical ingredients and excipients. Significant attention has not been paid to the local production of raw materials, pharmaceutical dosage formulations, or processing equipment, which has resulted in a decline in the country's pharmaceutical manufacturing capacity. Owing to the overall importance of the pharmaceutical industry, it is, therefore, essential to pay close attention to developmental issues affecting this sector. In this commentary, we explore why Nigeria must boost its local pharmaceutical manufacturing capacity.*

**Keywords:** Nigeria, Pharmaceutical Industry, Local, Manufacturing, Production, Importation

## Introduction

The opportunity for national or local manufacturing of high-quality, cost-effective pharmaceuticals to satisfy public needs has been argued and explored for years. In developing countries, evidence has revealed that the pharmaceutical sector plays an important role in the overall health of its citizens [1], and Nigeria is no exception. According to a report commissioned by the International Federation of Pharmaceutical Manufacturers and Associations (IFPMA), the pharmaceutical sector continues to contribute to the global economy in all regions. Between 2006 and 2012, the pharmaceutical industry's share of global GDP value added climbed by an average of 6% every year, hitting $437 billion in 2012 [2]. Owing to its importance in the overall welfare of the economy, it is, therefore, essential to pay close attention to developmental issues affecting this sector. The recent COVID-19 pandemic uncovered several shortcomings and lapses affecting Nigeria's pharmaceutical manufacturing capacity as it necessitated the need for local solutions to solve local problems. The pandemic resulted in severe drug shortages and medicines insecurity in the country as drug importation was significantly reduced [3]. It also amplified the urgent need to boost local pharmaceutical manufacturing capacity. Here, we explore why this is necessary.

As described by the Pharmaceutical Manufacturers Group of the Manufacturers Association of Nigeria (PMG-MAN), the Nigerian pharmaceutical industry has the capacity to be a giant in the manufacturing, distribution, and sale of pharmaceutical products in Sub-Saharan Africa [4]. Despite her large population and vast natural resources, Nigeria suffers from a high burden of diseases, hunger, and poverty. The Nigerian health sector was ranked 187th out of 191 members by the World Health Organization (WHO) in 2000 [5]. This poor rating of the sector was due to several factors tied to poverty, high prevalence of diseases, malnutrition, etc. Another factor that stands out is the apparent lack of standardized equipment and machinery for the production, distribution, and storage of pharmaceuticals [5]. As a result, only a few pharmaceutical firms in Nigeria were able to participate in international tenders for the supply of anti-malaria, anti-TB, anti-retroviral, and other pharmaceuticals [5]. With over 115 registered pharmaceutical manufacturers [6], Nigeria still relies on imported finished pharmaceutical dosage forms such as suspensions, syrups, tablets, creams, ointments, suppositories, powders, capsules, and parenteral products. These are imported by either multinational drug companies, the government, or wealthy indigenous private entrepreneurs [7]. Significant attention has not been paid to the local production of raw materials, pharmaceutical dosage formulations, or processing equipment. Due to the lack of domestic production of key inputs such as Active Pharmaceutical Ingredients (APIs) and excipients, the country is forced to rely on India and China for supply. This causes a hike in prices and foreign exchange difficulties [7]. According to the Pharmaceutical Society of Nigeria (PSN), over the last few years, Nigeria has struggled with a lack of foreign exchange, which has contributed to a 200% rise in the cost of imported drugs [8]. Interestingly, over the past two decades, the Nigerian pharmaceutical industry has invested more than NGN400 billion (USD 969 million) in boosting its infrastructure in order to obtain the WHO prequalification required for foreign competition. Many pharmaceutical firms now export to other African countries [9]. Despite these investments and big steps, the sector still faces multifaceted challenges.

Most inputs used by the Nigerian pharmaceutical industry are imported due to a lack of a functional petrochemical industry [9]. Between 2014 and 2018, the cost of importation of these inputs rose by over 100 percent owing to the weakness of the naira and rising logistics costs [9]. Pharmaceutical manufacturers, like manufacturers in other industries, are faced with increasing manufacturing costs. Energy alone accounts for 40% of overall expenditure. Today, many industries no longer rely on energy distribution providers for electricity because they operate on gas or diesel daily [9]. The

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above-named challenges have all been a setback to the Nigerian pharmaceutical manufacturing sector and have led to an overall decline in its manufacturing capacity. A possible implication is that pharmaceutical manufacturers will further rely on drug importation in a bid to avoid excessive production costs incurred from unfavorable policies, huge taxes, and unreliable infrastructure of the country. The lack of sufficient demand for locally manufactured drugs due to cheaper imports from China and India would result in poor manufacturing capacity and will have a detrimental impact on previous investments in the industry. In contrast to the Nigerian pharmaceutical sector, the Indian pharmaceutical industry is thriving due to considerably lower manufacturing costs than in the United States and Europe [10]. As a result, the Indian pharmaceutical industry caters for more than half of the global demand for various vaccines, 40% of the demand for generics in the United States, and 25% of all drugs in the United Kingdom [10].

During the recent COVID-19 pandemic, it was painfully clear that Nigeria relies greatly on imported APIs and equipment needed for local drug manufacturing. This dependency is particularly worrisome given the possibility of any unforeseen event that can disrupt importations- like the COVID-19 pandemic. The reliance on foreign countries may result in severe medicine insecurity and drug shortages. At the time of writing, India has just been struck with another wave of COVID-19 with an overwhelming surge in the number of recently reported cases [11]. There are concerns that flight restrictions could result in drug shortages and an unprecedented rise in the costs of pharmaceutical products since over 70% of APIs and finished drug products are imported from India [9]. Another concern is that this may create an opportunity for falsified medicines to enter into the legitimate drug supply chain as unscrupulous business elements may capitalize on scarcity. Recall that a great percentage of local pharmaceutical manufacturers purchase APIs and formulate them into finished pharmaceutical dosage forms [7]; this implies that the country is limited to purchasing pharmaceutical products and repackaging them for use. At this point, Nigeria must reflect on lessons learned from the last 10 years, India, and the COVID-19 pandemic to intensify efforts targeted at strengthening our local pharmaceutical manufacturing capacity.

## Conclusion

The pharmaceutical sector cannot survive in a country without an enabling environment. Strengthening the country's local pharmaceutical manufacturing capacity will take decades of investment, dedication, advocacy, and coordinated efforts by the government and private stakeholders. To strengthen the Nigerian pharmaceutical manufacturing capacity, the government, regulators, policymakers, pharma companies, and other relevant stakeholders must address the political, socio-economic, financial, and regulatory barriers such as high taxes, high energy costs, poor infrastructure, insecurity, poor funding, and unfavorable policy changes.

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