X-raying the Nigerian palm oil sector
Palm oil is of strategic importance as it is used in the production of more than half of the products sold in supermarkets globally.

Nigeria is the largest consumer of palm oil in Africa with a population of 197 million people (World Bank, 2018). The nation consumed approximately 3 million MT of fats and oils in 2018, with palm oil accounting for 44.7% or 1.34 million MT. In the same period, production stood at 1.02 million MT resulting to supply shortfall of 0.32 million MT (excluding possible impact of palm oil exports).

In the early 1960s, Nigeria was the world’s largest palm oil producer with global market share of 43%. Today, it is the 5th largest producer with less than 2% of total global market production of 74.08 million MT. In 1966, Malaysia and Indonesia surpassed Nigeria as the world’s largest palm oil producers. Since then, both countries combined produce approximately 80% of total global output, with Indonesia alone responsible for over half i.e. 53.3% of global output. According to the Central Bank of Nigeria (CBN), if Nigeria had maintained its market dominance in the palm oil industry, the country would have been earning approximately $20 billion annually from cultivation and processing of palm oil as at today.

To meet the supply gap of palm oil, the country had to depend on importation over the years. However, in 2015, the CBN published a list of 41 items, including palm oil, as ineligible for forex through the Nigerian interbank market to encourage local production and manage foreign reserves. Also, duty charge of 35% was applied on crude palm oil (CPO). While this seems good in government’s effort at promoting local production of Crude palm oil, it has impact on local manufacturers of refined vegetable oil and this include:

- Increase in cost of local production of refined vegetable oil;
- Non-availability of enough palm oil for further refining by local manufacturers thereby resulting to idle capacity utilization; and
- Non-competitiveness in prices of locally produced refined vegetable oil due to the activities of smugglers of refined vegetable oil into the country.

There is scope for a thorough review of the entire value chain of palm oil with a view to guaranteeing the survival of local manufacturers of refined vegetable oil as well as prepare the country to take advantage of access to larger Africa market available through Africa Continental Free Trade Agreement (AfCFTA) and ECOWAS Trade Liberalisation Scheme (ETLS).

**Executive summary**

**Overview**

Palm oil is not strange to West Africa. In the region, Côte d’Ivoire, Ghana, Nigeria and Sierra Leone are major producers of both palm oil and palm kernel oil (PKO).

In 1965, the World Bank injected nearly US$2bn into over 45 projects in Southeast Asia, Africa, and parts of Latin America to support the growth of the palm oil industry. Indonesia received US$618.8 million, which was the highest funding. Nigeria received the second highest funding of US$451.5 million followed by Malaysia with US$383.5 million in project funding.

From 1975 to 2009, Nigeria remained the second largest recipient of funding from the apex bank for palm oil investments with six projects. However, only one project survived while the rest went bankrupt.

Today, Nigeria is the fifth largest palm oil producing country, with 1.5% or 1.03 million metric tonnes of the world’s total output, according to the United States Department of Agriculture (USDA).

**Top palm-oil producing countries, millions (metric tonnes) 2018**

<table>
<thead>
<tr>
<th>Country</th>
<th>Metric Tonnes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indonesia</td>
<td>39.5</td>
</tr>
<tr>
<td>Malaysia</td>
<td>19.7</td>
</tr>
<tr>
<td>Thailand</td>
<td>2.7</td>
</tr>
<tr>
<td>Colombia</td>
<td>1.6</td>
</tr>
<tr>
<td>Nigeria</td>
<td>1.03</td>
</tr>
</tbody>
</table>

Source: USDA, PwC analysis
From being one of the leading exporters of crude palm oil in the 1960s, Nigeria is now a net importer. In a bid to close the supply gap and encourage local investment, the Federal Government included Refined Palm Oil (RPO) as one of the items that importers are restricted from accessing foreign exchange at the interbank market. Also, an increased duty charge of 35% on CPO was introduced.

In addition to the above policy measures, the CBN launched a series of intervention schemes which include the Anchor Borrowers programme. The programme is designed to provide single-digit interest rate on loans to farmers through the Deposit Money Banks and other participating Financial Institutions.

For the palm oil sector, the interest on the loan facility is at 9% per annum. In 2019, the Federal Government of Nigeria also mandated CBN to support corporate bodies and individuals that are engaged in production of ten (10) specified agricultural commodities. Palm oil was listed among the ten (10) commodities.

**Palm oil in Africa: Insights**

Despite Nigeria being the largest producer of palm oil in Africa, Benin was the largest exporter of the commodity from Africa in 2018, with Nigeria confined to the sixth position on the list of palm oil exporting countries in Africa.

Palm oil exports were somewhat depressed in 2018 due to glut in oil production and supply. The glut stemmed from improved weather conditions, significant oil extraction from high-yield seedlings in Indonesia and Malaysia, and the decision by India, the second largest consumer, to raise import tariffs on palm oil to the highest level in over a decade.

**Largest exporters of palm oil in Africa ('000 MT), 2018**

<table>
<thead>
<tr>
<th>Country</th>
<th>Value ('000 MT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benin</td>
<td>460</td>
</tr>
<tr>
<td>Cote d’Ivoire</td>
<td>200</td>
</tr>
<tr>
<td>Ghana</td>
<td>100</td>
</tr>
<tr>
<td>Kenya</td>
<td>60</td>
</tr>
<tr>
<td>Togo</td>
<td>20</td>
</tr>
<tr>
<td>Nigeria</td>
<td>18</td>
</tr>
<tr>
<td>South Africa</td>
<td>15</td>
</tr>
<tr>
<td>Egypt</td>
<td>5</td>
</tr>
<tr>
<td>Congo DRC</td>
<td>1</td>
</tr>
</tbody>
</table>

**Palm oil exports ('000 MT), Global 2018**

Source: USDA, PwC analysis
Outlook for palm oil prices remains dampened in 2019 with World Bank forecasting downward trend in the commodity price from US$639/MT in 2018 to US$623/MT. Prices are expected to pick up subsequently in 2020 and it is anticipated to continue to grow and reach US$900 by 2026.

In Nigeria, illegal cross-border inflows of CPO and other by-products have resulted in drop in prices with adverse impact on local producers and refiners.

![Palm oil commodity prices, annual (US$/MT)](image)

Source: World Bank, PwC analysis

### Demand for palm oil outweighs supply in Africa's most populous country

In the last five years (2014 – 2018), Nigeria consumed 6.6 million MT of CPO. Out of the total consumption, local production represented 75% or 4.93 million MT thereby causing reliance on importation for the shortfall of 25% or 1.67 million MT. We estimated average official imports of CPO into the country in 2018 at 350,000 MT or US$223.65 million. Over a five-year period (2014 – 2018), we estimated the official imports of CPO at 1.7 million MT or US$1.28 billion.

In 2017, it was reported that over 400,000 metric tonnes valued at over US$300.4 million was smuggled into the country via neighbouring borders, thereby leading to loss in revenues to the government in the form of import duties. In addition, producers of refined palm oil are not allowed to access foreign exchange through Central Bank of Nigeria (CBN) official window for importation of CPO. All these factors have negatively impacted production activities through increased cost of production as well as idle capacity arising from stock out of CPO for production in some instances.
The ECOWAS Trade Liberalisation Scheme (ETLS), introduced in 1979, is a mechanism through which the Economic Community for West African States (ECOWAS) aims to establish Free Trade Area within the West Africa sub-region.

The ETLS seeks to deepen the status of the region as a free trade area and fast-track the establishment of a customs union by ensuring the free movement of originating goods across the territories of member states, without being subjected to any form of barriers.

However, not all originating goods from member countries are covered under ETLS. To qualify, originating goods must fall into one of the three categories of goods as follows:

<table>
<thead>
<tr>
<th>Category</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unprocessed goods</td>
<td>These are livestock, fish, plant or mineral products and raw materials that have not undergone any industrial transformation</td>
</tr>
<tr>
<td>Traditional handicraft products</td>
<td>Goods in this category include: wooden cooking utensils, basket works, fancy goods, small cabinet work, mats, carpets, lace embroidery, bed linen, footwear, headgear, prepared feathers, etc.</td>
</tr>
<tr>
<td>Industrial products</td>
<td>These include both the processed and semi-processed products originating from ECOWAS member countries.</td>
</tr>
</tbody>
</table>

To qualify for the ETLS, goods must originate in member states of ECOWAS. This means that such goods must be produced or sourced from any of the sixteen-member countries of the ECOWAS region.

Palm oil is listed as one of the approved products for trade under the ETLS.

Despite the existence of the ETLS, effective implementation and adherence to, as well as full compliance of the Scheme, including the Free Trade Area (FTA) and Common External Tariff (CET) components, has not been fully achieved. Hence, the continued illegal cross-border inflows of imported palm oil into Nigeria and the ECOWAS region.

**The Africa Continental Free Trade Agreement (AfCFTA)**

Under the Africa Continental Free Trade Agreement (AfCFTA), the broad objective is to create a single continental market for goods and services. This is in addition to enhancing free movement of business persons and investments thereby, paving way for accelerating the establishment of the Continental Customs Union. Additionally, the AfCFTA is expected to enhance competitiveness at the industry and enterprise level among member countries through exploitation of opportunities of scale for production, continental market accessibility and better reallocation of resources.

**Impact of ETLS and AfCFTA**

With Nigeria’s endorsement of the AfCFTA and membership of the ETLS, Nigerian businesses will have direct access to market their products to over one billion people on the continent of Africa. Therefore, the country must be prepared to take advantage of the humongous market opportunities. Conversely, the country is now exposed to intra-African competition from businesses in the countries with comparative advantage.

Competitively, Nigeria is not well positioned in the export market for palm oil. This is because the country’s palm oil industry is dominated by smallholder farmers, who mostly rely on rudimentary facilities and methods in the cultivation and harvesting processes, which leads to significant losses or wastages. This accounts for the supply-demand gap of palm oil in the country. For instance, it is reported that processing of palm oil by smallholders takes 6 to 10 days, as opposed to the processing time of 2 to 4 days for mechanized farmers. Due to the longer processing time, the palm oil yield or output is reduced by approximately 42%. In some cases, this also impacts the quality of palm oil produced in the country, thus limiting the versatility of its usage especially in the industrial processes.

Nigeria accounts for 65% of the GDP of West Africa. Despite this, non-oil exports from the country was 17.7% of total exports in 2018, with agriculture exports accounting for just 1.6% of total exports. Though Nigeria is the largest producer of palm oil in Africa, Benin Republic was the highest exporter of palm oil in Africa in 2018. Benin Republic export was almost twenty-five (25) times that of Nigeria thus, confining the country to a distant sixth position with a paltry volume of 18,000 MT in the same year.
Structure of the Palm oil industry in Nigeria

Production

The Nigerian palm oil industry is very fragmented and dominated by numerous small-scale farm holders, which account for over 80% of local production, while established plantations account for less than 20% of the total market. However, the two largest producers—Okomu and Presco—individually hold a sizeable market share, in terms of value, compared to small-scale farmers.

Local farmers produce roughly 80% of the total production, while using approximately 1.6 million hectares of land. The dominance of small farm holders in the palm oil market has resulted in low output compared to the country’s production potential. This is because local farmers’ manual harvesting techniques are outdated, which often results in significant wastages during the harvesting process.

In Nigeria, lack of investment in palm oil extraction technology and technical incompetence/inadequate training have resulted in poor management of palm oil plantations over the years, causing some of them to cease operations. Despite this, there has been renewed interest in Nigeria’s palm oil market with the entrant of major food manufacturers via backward integration strategies into the upstream and midstream segments.

For instance, in 2018, PZ Wilmar, a joint venture between PZ Cussons International UK and Wilmar International Ltd Singapore invested over $650 million in palm oil plantations and processing facilities. The company also planted almost 26,500 hectares of palm oil in Cross river state and installed a 65-ton per hour palm oil mill, which translates to estimated annual capacity of ~40,000 tons. Also, in 2019, Dufil Prima, manufacturers of Indomie noodles and Power oil, finalized acquisition of 17,954 hectares of land in Edo State and a 1,040-hectare palm oil farm in Abia State.

Unofficial trade reports identify Benin and Cote D’Ivoire as sources of palm oil exports into Nigeria.

Largest exporters of palm oil in Africa ('000 MT), 2018

- Benin: 460
- Cote d’Ivoire: 200
- Ghana: 100
- Togo: 60
- Nigeria: 18
- South Africa: 15
- Egypt: 5
- Congo DRC: 1

Source: USDA, PwC analysis
Consumption

With a population of 197 million people, Nigeria consumes roughly 3 million MT of fats and oils annually with palm oil accounting for approximately 45% of total consumption in 2018. Nigeria is the largest consumer of palm oil in Africa with 1.34 million metric tonnes in 2018.

The large and rapidly growing population continues to be a major driver of demand. In 2018, approximately 240,000 metric tons of palm oil consumed in Nigeria is used for non-food industrial purposes, while 1.1 million metric tonnes is used for food consumption related purposes.

Source: World Bank, PwC analysis

Palm oil production vs consumption in Nigeria (‘000MT) 2018

Source: World Bank, PwC analysis

Domestic consumption in Nigeria (‘000 MT) 2018

Source: World Bank, PwC analysis
Sustainability issues and the Nigerian palm oil industry

Nigeria being the fifth largest producer of palm oil in the world, needs to take the issue of sustainability in the palm oil industry very seriously. There is need to make progress in the production of sustainable palm oil in the country.

The country’s large and rapidly growing population will continue to be a major driver of demand and so the implementation of sustainable practices in the industry is important. In recent years, there has been increase in demand for palm oil in the country, with 90% of the demand coming from food related sources like household consumption and industrial use for food processing (e.g. noodles, margarines and biscuits).

During the processing of palm oil, three major waste streams are generated: solid, liquid and gaseous waste.

The solid wastes are generated from threshing, pressing and kernel cracking which are usually burnt thus, causing atmospheric pollution in the affected areas.

Apart from the air pollution generated because of the burning of waste, the soil and water quality are also negatively impacted because of the discharge of Palm Oil Mill Effluents (POME) into the soil. This affects the pH level of the soil thus making the soil more acidic and unsuitable for cultivation of crops. In addition, during the rainy season, the POME becomes a breeding ground for insects and mosquitoes and when discharged into the waterways, it makes the waterways slimy thereby reducing water quality for everyday use and affecting the lives of aquatic organisms.

Challenges impacting the Palm oil industry in Nigeria

Upstream

- Low quality seedlings.
- High cost of rental charges on land for plantation.
- High interest rate on borrowed funds due to the long-term capital outlay for investment in plantations notwithstanding the 9% interest rate offered by the CBN.
- Farm management: lack of expertise.
- Farming techniques: crude and outdated farming techniques.
- Poor/inadequate storage facilities and post-harvest losses.
- Road transportation issues due to poor road networks/infrastructure.

Mid-stream

- Raw materials i.e. low quality input from the upstream segment.
- Epileptic power supply from the national grid.
- Dilapidated infrastructure e.g. poor road networks.
- Inadequate funding.
- Improper processing facilities/substandard mills.

Downstream

- Smuggling.
- Counterfeit products.

Conclusion

There is need for the development and execution of a comprehensive palm oil policy that will drive the growth and development of the sector going forward. In addition, there is need for significant investment in research & development (R&D) activities. According to industry stakeholders, there is underfunding of research by the government in the agricultural sector, which is the largest contributor to the country’s GDP and a strategic component of the ERGP.

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