

**HARNESSING THE POTENTIALS OF OIL PALM INVESTMENTS TO ALLEVIATE  
THE RISK OF THE DWINDLING NIGERIAN ECONOMY.  
A CASE OF SOUTHEAST**

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**ABSTRACT:**

Oil palm (*Elaeis guineensis*) is an indigenous tropical rainforest crop with little savannah belt. Great potentials exist for increasing the production, productivity and investment level of oil palm in Nigeria and globally. It is one of the best agricultural investments because great benefits are obtained from every part of it and it is most important food and economic oil crops in Nigeria and the world at large as wealth is generated from every part of the plant. The present economic downturn of the country due to policy diversion from agriculture to crude oil, the long - term rate of returns to investment and land tenure problems led to this study to ascertain the potentials of oil palm investments. An exploratory research design was adopted and secondary data was obtained from the review of literature of oil palm investments as to harness the potentials to alleviate the risk of the dwindling economy. This could be achieved through income diversification by bringing oil palm investment to the centre stage through investing in the planting of hybrid tenera which have been proven to mature early and produces more than the existing Dura and Pisifera species providing more foods, raw materials, income and employment generation and other uses including research and development for a sustainable and stable economy. Policies must be made by government to favour oil palm investment through expansion of secure land acquisition, distribution of tenera hybrid at a subsidized rate to investors and involve partnership with producers and other agencies.

**Keywords:** Oil Palm, Investments, Hybrid Tenera, Potentials, Risk, Economy, Nigeria

**JEL Classification Code:** F63, H54, N50, O47, Q16.

**1. INTRODUCTION:**

The high demand for oil palm, the main source of biofuel, food for human and livestock consumption as well as in the pharmaceutical industries has risen dramatically and led to the rapid expansion of its cultivation in many oil palms producing areas for its economic values especially in many countries like Malaysia, Indonesia among others. Oil Palm is of the family *Arecaceae*. It is of two species, *Elaeis guineensis* and *Elaeis oleifera*. *Elaeis guineensis*, also referred to as the African oil palm, is a perennial crop of high commercial value that is indigenous to Nigeria which has spread through the wild and semi wild groves of tropical and subtropical West Africa; South of Senegal to Angola and Zaire (World Rain-Forest Movement (WRM), 2010). The other specie, *Elaeis oleifera*, is native of tropical areas of Central

and South America and has also grown wild in Nigeria, though with relatively lower yield (Abiodon, 2017). Oil palm is a crop that originated in the tropical rain forest of West Africa and later spread to South America and Asia in the 16th and 17th century respectively according to Oil World (2013). It is one of the most productive oil crops and its products (palm oil) ranks high in the list of the world's leading agricultural commodities.

Several empirical pieces of evidences point to the fact that oil palm has the highest oil content with the highest potential yield per unit area as compared to other oil crops (Soyebo, Farinde and Dionco-Adetayo, 2005). Phitthayaphinant, Nissapa and Unjan, (2013) noted that oil palm provides an average yield of 3,622kg/ha of palm oil, which is ten times more than the yield from the same measure of soybean and five times more than rapeseed given evidence of its economic sustainability.

Nigeria had increased growth in oil palm production between 1961 and 1965 as it accounted for 43 percent of the world's oil palm production but in recent time however, reports show that out of 14.4million tones of world oil palm production, Nigeria only accounted for 1.015 million tones at a growth rate of 1.64 percent placing it as the fifth oil palm producer globally as at 2018 (Agric Econs Division, NIFOR 2020; USDA, 2020: World Bank, 2019). The increase in the world production is as a result of improved investment in oil palm plantation in other nations because of its economic value to their GDP and GNP. The case of Nigerian system is different as a result of its predominated wild groove which possesses a risk that presented a less than 2.3 percent in output as at 2009 according to Partnership in Niger Delta (PIND), (2011).

As a result of its economic importance and sustainability, the Federal Government of Nigeria in 1939 established the Nigerian Institute for oil palm research with the mandate to oversee and carry out detailed research on oil palm. The outcome of innovation through research and development (R&D) brought the genetically modified hybrid tenera that can radically increase productivity and shorten the long - term rate of returns to investment that aggregates to the GDP from agricultural sector. This was neglected by policy diversion away from agriculture to petroleum in the early '70s accompanied by low investment in agriculture and the inability of investors to take advantage of the product due to dearth of information. After the discovery of petroleum in Nigeria, 2 million hectares of oil palm plantation was left to grow wild without care and maintenance leading to rapid decline in production (African Center for Economic Transformation (ACET), 2014). Despite the challenges, Oluwole, Attama, Onuigbo and Atabo (2021) opined that agriculture (oil palm production) can be a panacea to the Nigerian economy and can further be expanded and sustained with income made from investment in oil palm production and agriculture in general, as the mono revenue base has placed a very big risk to the economy both in terms of foreign exchange, foreign reserve and employment generation (Ayodele and Mathew, 2010). The present economic downturn fueled by a destabilized mono revenue structure has called for other means of income diversification with oil palm and other agricultural cash crops at the centre stage. This provided enough reasons for diversification to other sources and the situation has called for a research that will recommend "a bring-back" oil palm enterprise to alleviate the risk of the dwindling economy. This is in the same opinion with Dr. Okonkwo, Kalu and Dr. Nwosu, (2021) that the need for diversification of the Nigerian economy cannot be over emphasized. Therefore, the unstable nature of the country was of utmost concern and a great challenge that led to this study knowing fully well that oil palm has the potentials to revamp the sector if fully harnessed. This is in line with the speech delivered by President Muhammadu Buhari on October 1, 2021, that agricultural sector remains the key to the country's economic diversification (Adesina, 2021).

However, the lingering policy on sustainable agriculture has not reflected significantly on increased oil palm production in Nigeria. The agricultural sector is still highly threatened by serious neglect especially in oil palm production. Despite the policies of oil palm planting scheme in Nigeria with 3000ha of the wild groove in 1938, only a marginal increase of 350,000 stands in recent times has contributed to a less than 1.64 percent of the world total output in 2018 (Agric Econs division, NIFOR, 2020; USDA, 2020: World Bank, 2019). Though the crop is known for its high yield per hectare especially with the recent improved varieties but Nigerians seem not to have keyed into that. Evidence of high yielding oil palm fruits such as

hybrid tenera, produced by the Nigerian Institute for Oil Palm Research (NIFOR) Benin has the potential to boost the output for export. The breed is made available to smallholder oil palm farmers at a subsidized rate but farmers output and productivity per hectare are still on the decline due to dearth of information (Ehirim, Rahji, Oguoma and Onyeagocha, (2017). In Nigeria, the tenera hybrid oil palm specie, produced and distributed by the Nigerian Institute for Oil Palm Research (NIFOR) for cultivation that matures at three years is asserted to have a potential yield of 20-25tonnes of fresh fruit bunch (ffb) per ha per year with an average annual palm oil yield of 3.5 tonnes per ha, evidence from NIFOR, (1985). This is in tandem with the Partnership in Niger Delta (PIND), (2011) that oil palm farmers prefer tenera hybrid, a crossbreed between Dura and Pisifera, because it can yield 30 percent more oil than the equivalent fruit weight of Dura and Pisifera. The early maturity period equally removes the fear of long rate of returns to investment and overcome the doubt of land tenure system due to early yield. The other economic importance of the crop as a measure to alleviate and revamp the economy is unimaginable as it is used in various ways such as: Palm oil is described as a “Miracle Oil” due to its diversity of uses for both food and non-food products (Prof. Rao and Dr. Madhavi, (2015): it is used in the manufacturing and pharmaceutical industries, serves as lubricants for machinery and traditionally for soaps and detergents and candles among others. This study then seeks to ascertain the potentials of oil palm investment to the benefits of the economy.

## **2. CONCEPTUAL LITERATURE:**

### **2.1 CONCEPT OF OIL PALM INVESTMENT:**

Investment is a contribution of something such as time, energy, or effort to an activity, project, or undertaking, in the expectation of a benefit by Encarta dictionary. Oil palm investment is no doubt different from other investments such as agricultural investment. Oil palm investment is an important aspect agricultural investment as to enhance growth, productivity, eradicate poverty and hunger and the key to promoting long-term development in the sector for future benefits (FAO, 2016). Investment in oil palm sector is the addition of capital stocks such as establishment of the plantation estates, planting improved seeds such as the hybrid tenera, building, and machinery, among others that generate future benefits. An investment in the hybrid tenera specie of oil palm has the potentials to add to the contributions from agricultural sector which aggregates to the overall growth (GDP) to stabilize the economy and improved food security in developing countries like Nigeria, if well harnessed. This is in line with the recommendation of Kur and Ogbonna, (2019) that the Nigerian government should harness, develop and stabilize her macro economy to stop being pushed away.

### **2.2 THEORETICAL LITERATURE:**

This study was an empirical review of literature on oil palm investment, its benefits and contributions to the economy on and before the invention of crude oil and the present situation of the economy. Investment is the change in fixed inputs used in a production process (Zepade, 2016). It can be the decision to purchase capital stock or bonds that already exist in the stock market. According to John, M. Keynes and Irving Fisher, both argued that investments are made until the present value of expected future revenues, at the margin, is equal to the opportunity cost of capital. Among other investment theories the Accelerator Theory of Investment was suitable for this as any increase in the rate of returns (income) of a firm will require a proportionate increase in its capital stock. This means that any increase or addition in capital stock such as an increase in new capital in form of real estate, machinery, liquid asset, oil palm seedlings, oil palm plantation, and new area of land and inventories that is meant to generate more income to the oil palm business is a real investment (Jhingan, 2010).

### **2.3 EMPIRICAL LITERATURE:**

The credit to oil palm as a crop of multiple value underscores its economic importance. Oil palm is no doubt, one of the best agricultural investments because wealth is generated from almost every part of the plant (Nairaland, 2016). There is nothing in palm tree that is not useful, ranging from the fruit, the palm

frond down to the roots and by products, everything is used for one thing or the other that brings benefit to man. Oil palm plantation is one of the most useful investments in the world (Darlington, 2016) and its cultivation serves as part of the way of life –indeed it is part of their culture for millions of Nigerians (WRM, 2010). Investing in oil palm is one of the most effective ways to reduce hunger and poverty, particularly in rural areas and enhances their welfare which has a significant effect on government. The benefits from oil palm are enormous as it is established to bringing socio-economic development into very remote rural dwellers as equally observed by Bukat, Akpoko and Makarau, (2021) in Irish potato production. Empirical evidence shows that the largest share of investment in agriculture comes from farmers, exceeding the amount invested by governments and domestic corporations by a ratio of more than three to one (FAO, 2012).

### 3. METHODOLOGY:

The study adopted an exploratory research design and used secondary data was obtained from publications of the Nigerian Institute for oil Palm Research (NIFOR) bulletin, annual reports, in-house reviews, journals, articles, workshops, conferences, seminars, internet, FAO data etc. The study focused on Southeast Nigeria because it is tropical forest zone where the crop strives well. Southeast Nigeria is one of the six geopolitical zones in the country with 99.9% population of Igbo tribe comprising five states, namely; Abia, Anambra, Ebonyi, Enugu and Imo (National Bureau of Statistics (NBS), 2014). Southeast is known as a tropical rainforest climate zone which shaped the cultural value of Igboland which the annual rainfall ranges between 1500-2000mm per year (online, 2009).The area has an estimated landmass of 16000square miles (40000km<sup>2</sup>) on an elevation range of 0 ft (0m) to 3300ft (1000m) (National Bureau of Statistics (NBS), 2014). The area comprises civil servants, bankers, transporters, religious groups; Christianity and traditionalist, business men and women, farmers who involve in agricultural practices such as crop and animal husbandry. The major crops planted are; beans, sesame, cashew nuts, cassava, cocoa beans, groundnuts, gum arabic, kolanut, maize (corn), melon, millet, palm kernels, palm oil, plantains, rice, rubber, sorghum, soybeans and yams (online, 2015). It is pertinent to note thatagriculture used to be the principal foreign exchange earner of Nigeria in which oil palm was the mainstay of the economy as the country was self-sufficient in food before the Nigerian civil war and diversion of interest to crude oil (Dr. Okonkwo, Kalu and Dr. Nwosu, 2021). The abundance of oil palm groves throughout the forest zone of southeast is attributed to adequate weather condition favourable for oil palm production and early domestication.

### 4. RESULTS AND DISCUSSION

**Table 1: Global and Nigeria’s Palm Oil Production from 2010-2019 (000’MMT)**

Year	World Output	Growth Rate (%)	Nigeria’s Output	Growth Rate (%)
2010	49.21	NA	0.971	NA
2011	53.57	8.14	0.97	0.00
2012	56.38	4.98	0.97	0.00
2013	59.3	4.92	0.97	0.00
2014	61.75	3.97	0.97	0.00
2015	58.88	-4.87	0.97	0.00
2016	65.27	9.79	0.97	0.00
2017	70.46	7.36	0.97	0.00
2018	73.9	4.65	1.015	1.64
2019	75.69	2.36	1.015	0.00

Source: Agric Econs Division, NIFOR (adopted from USDA, 2020)

**Oil Palm Production Trend:** In the 1870s, British administrators took the plant to Malaysia and the country later surpassed Nigeria as the largest producer and exporter in 1934 but lately Indonesia as the lead (Agric Econs division, NIFOR, 2020; USDA, 2020). Generally, agriculture suffered a setback as it was relegated because of the crude oil boom. The discovery of petroleum in the late ‘50s and its exploitation and export in the early ‘70s changed the economic situation of Nigeria in favour of crude oil as the major

source of revenue to the economy according to Nwauwa and Ezealaji, (2011). According to report, Nigeria annual oil palm consumption increases from 1,042 in 2006/2007 to 1,301(000'MT) in 2009/10 opined by World Bank, (2019). It stood at 1410(000'MT) in 2014 with a slight decline of 1320(000'MT) in 2015, 1240(000'MT) in 2016, 1290(000'MT) in 2017 and had a marginal increase of 1340(000'MT) in 2018 (World Bank, 2019). Nigerian oil palm production increases marginally from 780(000'MT) in 2003, to 790(000'MT) in 2004, 800(000'MT) in 2005, 810(000'MT) in 2006, 820(000'MT) in 2007 and stood still at 840(000'MT) in 2008 till 2009, then increases from 971(000'MT) in 2010, till 2017 with a slight increase of 1015(000'MT) in 2018 at a growth rate 1.64 percent globally to the present as seen in table 1, (Gupta and Abiodun, 2013; World Bank, 2019 ), thus placing Nigeria as the fifth producer of palm oil globally (Solidaridad. 2020). The marginal increase was as a result of efforts to promote sustainable oil palm production in West Africa by increasing efficiency and productivity through investing in the hybrid tenera specie according to Solidaridad. (2020). Comparatively, the consumption by Nigerians is higher than the Nigeria world oil palm production at 1015(000'MT) in the present (World Bank, 2019). Palm oil accounted for 1.5% of the national agricultural GDP in 2006 (International Food Policy Research Institute (IFPRI), 2010).

**Table 2: Top Exporters of Palm Oil Globally in 2018 (000'MT)**

Rank	Country	Export Volume
1	Indonesia	29110
2	Malaysia	18000
3	Guatemala	810
4	Columbia	770
5	Papua New Guinea	520

Source: Agric Econs Division, NIFOR (Adopted from USDA, 2019)

Table 2 shows the current exporters of palm oil globally as Nigeria lost her foremost place in oil export to countries like Zaire among others and regained it only temporarily in 1964-1965 due to the period of civil war outbreak and the diversion of policy to crude oil. Iloeje (2001) ascertained that Nigeria's exports of palm oil rose steadily to a peak of 566,400 tons with a value of over ₦80million in 2004, but fell very abruptly to a minimum of 164,950 tons worth only ₦20.6million in 2004. In the year, 2010, Indonesia and Malaysia with 45% and 39% contribution to world supplies took over the market from Nigeria though Nigeria showed a marginal increase in her production between 2005 and 2008 (Bello, Bello, Essien, and Saidu, (2015); Food and Agricultural Organization Statistics, (FAOSTAT), (2012). The world major key exporters of palm oil are both Indonesia and Malaysia with 28000 and 19000 metric tons in the year, 2012, Indonesia having the lead with 29110(000'MT) in 2018 (Agric Econs division, NIFOR, 2020; USDA, 2020). This is as a result of massive oil palm investment in the country as compared to Nigeria. Nigeria's leading position in palm oil export was dashed in the 1980's, it rose marginally between 2003 and 2005 and thereafter, became a net importer of the product. . Indonesia and Malaysia accounted for over 85% of the total worldwide oil production and are presently increasing their plantation acreage to meet the rising demand credit to the investment in the high yielding variety of hybrid tenera.

**Table 3: Major Importers of Palm Oil Globally in 2018 (000'MT)**

Rank	Country	Import Volume
1	India	9750
2	EU-27	7300
3	China	7200
4	Pakistan	3350
5	Bangladesh	1700

Source: Agric Econs Division, NIFOR (Adopted from USDA, 2019)

Table3 shows the world major importers of palm oil in 2018 were India with 9750(000'MT), EU-27 with 7300(000'MT), China with 7200(000'MT), Pakistan with 3350(000'MT) and Bangladesh with 1700(000'MT), having international valued as estimated at USD 31.5 billion (Agric Econs division,

NIFOR, 2020; USDA, 2020). Nigeria has led in net importation in West Africa despite her abundant wild oil palm vegetation. According to report, Nigeria annual oil palm consumption increases from 1,042 in 2006/2007 to 1,301(000'MT) in 2009/10 and with a population increase of 197 million people was 1.3400(000'MT) in 2018 with 3000(000'MT) for both fats as oil opined by World Bank, (2019). Official figures from the oil palm sector show an estimated supply gap of about 0.3million metric tons as at 2018, therefore posing a very precarious situation to the manufacturing industries and other sector that largely depend on crude palm oil (CPO) as a major source of raw materials (Adekoya, 2015). According to USDA-Afrinvest, (2019) who opined that southeast and some other states in the Niger Delta accounts for the Nigerian oil palm production and export that contributes to the external reserve of agricultural GDP from palm oil and palm kernel of 15% to 20% of the total export but with a downturn of 1.5% or 1.03 million MT in production. Behrooz and Benjamin, (2013) opined that despite the bottleneck, Nigeria oil palm has untapped potentials to increase her palm oil and palm kernel production through improved techniques by the addition of capital stock such as the hybrid tenera specie and marketing. A good oil palm plantation is capable of producing thousands of tons of palm oil in a year as seen in countries like Malaysia and Indonesia that massively invests on the genetically modified hybrid tenera which could be replicated in Nigeria to balance the unstable nature of the country.

## **5. CONCLUSION AND RECOMMENDATIONS**

### **5.1 CONCLUSION:**

It is imperative from the evidence that the social, cultural, biological, economical, nutritional and medicinal properties of oil palm, when given special consideration in the investment will further increase productivity and boost the economy both in local and foreign earnings thereby reducing the issue of dependency on the mono revenue. This is the reason for carrying out the research to ascertain the potentials of oil palm to alleviate the risk of the dwindling economy if well harnessed. Empirical evidence has shown that investment in oil palm using hybrid tenera specie will open up avenues for market -based incentives for sustainable oil palm. The industry will not only provide foods, income and employment generation but also attracts both direct and foreign investments. Cultivation of oil palm serves as a means of livelihood for many rural families and indeed the farming culture of millions of people in the country (NIFOR, 2012). For millions of Nigerians, oil palm cultivation is part of the way of life –indeed it is part of their culture as a result of its enormous benefits (WRM, 2010). The reference to oil palm as a crop of multiple values underscores its economic importance. The establishment of oil palm plantations will equally add to the overall GDP of the country and making positive impacts on the income, livelihood and the standard of living of the people. Increase in productivity will increase output and increase in investment in oil palm in improving farming practices will sustain the land and increase the rate of returns capable of making the farming households live above the poverty line. This will be achieved through the investment of the hybrid tenera to revamp the sector and boost the output that will aggregate to the GDP as to stabilize the economy. Above all, oil palm sub-sector is one of the effective avenues that has a productive potential that can diversify and sustain the economy, alleviate poverty, bring food security and reduce the risk poised on the dwindling mono – economy.

### **5.2 RECOMMENDATIONS:**

A good oil palm plantation is capable of producing thousands of tons of palm oil in a year that can be sold for millions of Naira in the local market or exported to overseas and sell for foreign currency. Therefore, a good number of oil palm plantations should be established using hybrid tenera that can radically increase output within a short period. It has the potentials of providing enough raw materials for industries, employment generation and earnings to boost and balance the unstable economy. The government should give maximum attention to the industry again as it was the mainstay of the economy and still proves to be if properly harnessed with the exotic certified hybrid tenera, bringing back the country from the current fifth position to its initial first position. This should be actualized in the area of favourable policies that will

accommodate oil palm like favourable land tenure policy. The government should encourage and mandate more production of the hybrid tenera by the Nigerian Institute for Oil Palm Research (NIFOR) at a subsidized rate to investors for affordability and accessibility to boost output. Awareness of the product should be created by the extension agents through research institutes to prospective investors in the cultivation of hybrid species using adequate management practices as dearth of information is an impediment to potential investors.

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