

Contributions of Oil Palm Nucleus Estates to Economic Development: Situating the Presco Plc And Okomu Oil Palm Company's Experiences in Nigeria

Adade, Baa Famous

Cambridge Assessment International Education Programme, Word of Faith Schools, G.R.A., Benin City, Nigeria

fb_adade@yahoo.com

ABSTRACT

This study focuses on the contributions of Presco Plc and Okomu Oil Palm Company Plc to the economic development of Nigeria. Secondary data used were sourced from the Annual Reports and Accounts of both companies spanning ten years, 2010 to 2019. The data were analyzed using descriptive statistics such as mean, percentages, frequency tables and graphs. The results showed that both companies generate about 50,000 jobs annually. The value of wealth created through the efforts of the companies and employees averages ₦10 billion per annum and serves as sources of income to individuals, government and other stakeholders. Both companies exported goods worth over ₦30 billion thereby helping to generate foreign exchange for Nigeria. Presco and Okomu Oil Plc have also assisted in the provision of rural infrastructure worth over ₦20 billion to their host communities. However, there were reported externalities associated with the companies' operations – loss of natural forest, conflict between the companies and host communities as well as loss of biodiversity. Nonetheless, the companies have adopted best practices in line with Roundtable on Sustainable Palm Oil (RSPO) principles to mitigate negative effects of their operations. It is recommended that government should continue to provide greater enabling environment for nucleus oil palm industry to thrive through Central Bank of Nigeria guaranteed loans. Secondly, Presco and Okomu Oil should continue to operate responsibly in a way that externalities associated with their activities do not exceed the benefits accruing from their companies to the nation and host communities.

Key word: Contribution, Oil Palm, Nucleus Estates, Economic Development, Nigeria

1 Introduction

Oil palm is grown under small holdings and plantations in Nigeria. PIND (1) estimates that 117,625 hectares are under small holdings while plantation estates occupy 96,465 hectares and the area of oil palm under wild grove is about 2,3000,000 hectares. Oil palm plantation is a form of commercial farming where oil palms are grown for profit. Large parcels of land are needed and oil palm nucleus estates (or plantation agriculture) are usually located in the rainforest experiencing tropical climate with high annual temperature and receiving high annual rainfall. In addition to higher oil yields per tree, processing in large plantation mills gives greater extraction efficiency, better quality oil, and lower processing costs resulting from planned full-capacity operation than what is obtainable under a peasant smallholder system.

A number of large oil palm plantations exist in Nigeria and they include Okitipupa Oil Palm Plc, Okomu Oil Plc, Presco Plc, Obasanjo Farms, Siat Nigeria (formerly Rison Palm), PZ-Wilmar and Adapalms.

DOI: 10.14738/aivp.91.9270

Publication Date: 20th January, 2021

URL: <http://dx.doi.org/10.14738/aivp.91.9270>

Existing plantations are expanding while new ones are being established in recent years. This is partly due to the growing demand for palm oil as the most versatile of all vegetable oils. Palm oil and palm kernel, which are the main products derived from oil palm, can be processed to form a wide range of products with different melting points, consistencies and characteristics. Two of the leading oil palm nucleus estates quoted in the Nigerian Stock Exchange are Okomu Oil PLC and Presco PLC. The former has oil palm nucleus estates at Udo and two other locations in Edo State while the latter has plantations at Obaretin, Ologbo and Upper Sakponba in Edo State as well as Cowan estate at Ajagbodudu in Delta State.

Generally, plantation agriculture is known to have diverse impacts on the economy and environment of producing countries. The palm oil industry has the ability to earn foreign currency, provide jobs and income all year round and therefore accelerate GDP growth (2). According to the Vegetable and Edible Oil Producers of Nigeria (VEOPAN) cited in PIND (1), palm oil production provides jobs for at least 1.8 million Nigerians. About 6.2 million hectares of palm oil can create enough jobs to help approximately 6 million people to get out of poverty (3). Commenting on the potential of the oil palm industry, Ayodele (4) opined that the Nigerian palm oil industry provides an enlightening example of how the palm oil industry can reduce poverty and provide sustainable economic growth for African nations. Palm oil is also an alternative source to fossil fuels, and a major driver of economic growth and development (5). Some authors (6) agreed that palm oil has the potential to replace fossil fuels and reduce greenhouse gas emissions; it is cheaper than other biofuels and can reduce emissions by 41% as compared with fossil fuels. Oil palm plantations may also be a more efficient carbon sink than first-degree rainforests. The establishment of large-scale oil palm plantations and processing units is an important economic activity that could influence the rate of land development in a region. Sheil (5) and Budidarsono(7) observed that oil palm estates can speed up the development of infrastructure (e.g. the construction of roads to open up less accessible areas, and the provision of health and educational facilities) and stimulates the growth of the local economy through income spending by the plantation workers and the expenses of the company.

Aside from the positive impact, plantation agriculture has some externalities (negative effect) associated with it. For instance, large scale conversion of tropical forests to oil palm plantations has a devastating impact on a huge number of plant and animal species. World Wildlife Fund (8) and Friends of the Earth (9) observed that oil palm production leads to an increase in human wildlife conflict as populations of large animals are squeezed into increasingly isolated fragments of natural habitats.

There are also social impacts – land grabs, loss of livelihoods and social conflicts and human rights violations on plantations which have been widely documented in oil palm producing countries. Rist (10) stated that conflicts between communities and companies in Indonesia have resulted almost entirely from lack of transparency, the absence of free, prior, and informed consent and unequal benefit sharing, and have been exacerbated by the absence of clear land rights. Etim (11) and Ojo (12) reported that land grab was carried out in Cross River State in Nigeria by PZ-Wilmar for the development of large oil palm estates without environmental impact assessment and informed consent of local communities resulting in social conflict between youths and local leaders on the one hand and between local communities and the agro-firm. There were also claims that the conversion of their forested land to oil palm plantations robs rural dwellers of the benefits derivable from the forest resources. Other externalities observed to be associated with large oil palm plantations included health hazards arising from water pollution due to overuse of fertilizers and pesticides on plantations. This affects the quality of drinking water as well as respiratory problems due to uncontrolled bush burning for plantation expansion.

For policy makers in West Africa, the promise of increased economic growth and job for their people may outweigh the environmental costs. This implies that oil palm plantation could be promoted despite the cost to the environment. The Economist (13) opined that oil palm companies should grow oil palm but cherish the environment. This means oil palm companies should just seek to strike this balance between benefits derivable from oil palm plantation and negative impacts on the environment, though empirical evidence is lacking on how nucleus estates are achieving this.

A number of researches have been done on the role of the plantation agriculture on economic development. However, there are little or no empirical studies on the role of specific oil palm nucleus estates. Such studies are necessary to situate their positive and negative impacts. It is against this backdrop that this study focuses on examining the contribution of Presco and Okomu Oil Palm Nucleus Estates to the rural and economic development of Nigeria. The specific objectives of the study include: to determine the total area cultivated and estimate the value added resulting from the production and sale of the companies' products; to estimate the employment generation capacity and resulting income from the operations of the two companies; to identify the community development projects and estimated value of such projects; to estimate the foreign exchange generated through export; and describe the externalities associated the companies' operations and how they are being mitigated.

2 Methodology

The study is on Presco Oil Palm Company and Okomu Oil in Nigeria. The study focuses on both companies because they are major leaders in the oil palm industry in West Africa. Presco's parent company, Siat, for instance, has plantations in four countries of Africa – Nigeria, Ghana, Cote D'Ivoire, and Gabon. In Nigeria, the company operates in two states: Edo and Delta with a combined oil palm plantation hectarage of 23,470 as of 2019. Okomu is one of the top ten companies with the highest turnover in Nigeria (14). It has oil palm as well as rubber estates in Edo State.

The study uses secondary data obtained from the companies' annual reports from 2010 to 2019. The period under review was purposively chosen to reflect the post-initial public offer (IPO) of Presco and the various Agricultural Transformation Agenda of past governments in Nigeria.

The data were analyzed using descriptive statistics such as mean, frequency table and graphs. A sensitivity analysis was also carried out to estimate the impact of the oil palm nucleus estates. This was based on the assumption of the companies' expansion or entrance of similar companies into the palm oil business through the provision of the right enabling environment. Two scenarios were created and the associated effects were estimated. Firstly, having 20% of the estimated total area cultivated under oil palm in Nigeria converted to estates of Presco's status by 2040. Secondly, that we have additional five nucleus estates of Presco and Okomu Oil's status over the next 20 years. The economic impacts in terms of employment generation, annual output and value added as well as community development projects and externalities were then estimated.

3 Results And Discussions

3.1 Profile of the Companies

The profiles of Presco and Okomu Oil are presented in Table 1. Okomu was established and incorporated several years ahead of Presco, and both companies were publicly quoted in the Nigerian Stock Exchange in 1990 and 2002 respectively. They grow oil palm principally under plantation agriculture and also have processing mills. Okomu diversified into rubber cultivation over two years

ago while Presco's diversification into rubber cultivation took place only few years ago, with none of the trees under tapping. Okomu and Presco have a combined area of 32,926 hectares of mature oil palm under cultivation as at December, 2019. The issued fully paid share capital of Presco and Okomu Oil in 2019 were 1 billion valued at ₦ 500 million and 953.910 million valued at ₦ 476.956 million respectively. The total shareholders of both companies were 25,336 (Presco: 9194; Okomu Oil: 16,142). The proportion of shareholdings of Nigerians in Presco is 49% as against 37.31% in Okomu Oil, the remainder being owned by foreign investors. The ratios of Nigerians to foreigners on the Boards of Presco and Okomu Oil are 7 to 5 and 4 to 7 respectively. This means that there are more Nigerians on the Board of Presco than Okomu Oil. The combined total assets and gross earnings of both companies as at 2019 are ₦71,483,368,000 (Presco : ₦ 27,887,576,000; Okomu Oil: ₦43,595,792,000) and ₦38,587,271,000 (Presco: ₦ 19,720,000,000; Okomu Oil: ₦ 18,867,271,000) respectively. The combined value of the biological assets of both companies as at 2019 was ₦ 23,092,277,000 and represents 32.3 % of their total assets.

Table 1: Profile of PRESCO and Okomu Oil

Variable	PRESCO	Okomu Oil
Principal Business as at 2019	Development of oil palm plantation, palm oil milling, palm kernel processing and vegetable oil refining. The products of the company are refined bleached and deoderised palm oil, palm olein, palm stearin, palm fatty acid distillate, palm oil (crude and refined) and palm kernel cake.	Cultivation of oil palm, processing of fresh fruit bunches into crude palm oil for resale; planting rubber plantation and processing of rubber lumps to rubber cake for export.
Area of Crops grown as at 2019		
a. Oil Palm (Hectares)	23,470 out of which 7,721 were immature.	19,060 out of which 1,883 were immature.
b. Rubber (Hectares)	14,400, all of which are still immature	7,335 out of which 1,892 were immature.
Year Established	Late 70s; incorporated 1991	1976; incorporated 1979
Original owner	Bendel State Government (now Edo and Delta States)	Federal Government of Nigeria
Year Publicly Quoted	2002	1990
Management and technical partners	NVSiats.A.(Societie d' Investissement pour l'Agriculture Tropicale), Brussel, Belgium	Socfinco F.R.S.A based in Switzerland
Authorised share capital		
a. At incorporation	50,000,000 shares valued at N50 million at 1991;	68,000,000 shares valued at N34,000,000;
b. At 2019	1,100,000,000 valued at ₦ 550,000,000	1,200,000,000 valued at ₦ 600,000,000
Issued fully paid share capital		
a. At incorporation	50,000,000 shares valued at ₦ 50 million at 1991	55,200,000 shares valued at ₦ 27,600,000;
b. At 2019	1,000,000,000 valued at ₦ 500,000,000	953,910,000 valued at ₦ 476,956,000
Total Shareholders at 2019	9,194	16,142
Shareholding structure at 2019		
a. Nigerian investors (%)	40.00	37.31
b. Foreign investors (%)	60.00	62.69
Composition of directorship		
a. Nigerian	7	4
b. Foreign	5	7
Total Assets at 2019	₦ 27,887,576,000	43,595,792,000
Biological Assets at 2019	₦ 5,092,477,000	18,000,000,000
Gross Revenue at 2019	₦19,720,000,000	₦ 18,867,271,000

Source: Compiled by author from Annual Reports & Accounts of Presco and Okomu Oil

3.2 Contributions of Presco and Okomu Oil to National Development

3.2.1 (a) Contribution of the Companies to National Wealth Creation

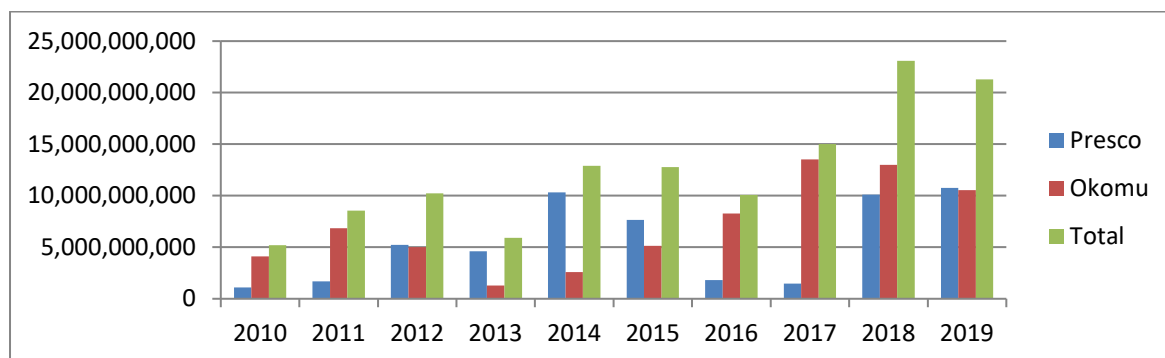


Figure 1: Value Added of Presco and Okomu Oil Plc form 2010-2019

The total wealth or value-added created by both companies from 2010 to 2019 was ₦125 billion (Presco: ₦54.7 billion; Okomu: ₦70.3 billion). This gives a mean value added generation of over ₦10 billion per annum contributed to the nation's gross domestic product (GDP). The wealth created through the effort of the employees and the companies was appropriated as shown in Table 2. Apart from the amount (retained profit and replacement of assets) set aside for the future expansion of the companies, employees had the highest share of the wealth created and ranges from about 14% to 23%, with a mean of 18.24%. This translates to about ₦ 22.80 billion being earned by the workforce of both companies in ten years. The government's share (in form of income tax) of the wealth created was ₦ 13.775 billion while share of shareholders and other providers of capital (banks in the form of interest on loans and overdrafts) were ₦ 12.138 billion and ₦7.475 billion respectively.

Table 2: Share of Value Added (%) among Stakeholders of Presco and Okomu Oil (2010-2019)

	PRESCO (%)	OKOMU (%)
Employees	13.98	22.50
Interest on capital	9.61	2.35
Dividend	6.52	12.90
Income Tax	10.39	11.65
Depreciation of Fixed Assets	15.40	16.00
Retained Profit	44.10	34.60

Source: Computed from annual Accounts & Reports of Presco and Okomu Oil, 2010-2019

3.2.2 Contribution to employment generation

The operation of Presco and Okomu nucleus estates had provided employment to a number of Nigerians. As at 2019, both companies employed 1,133 persons (Okomu: 474; Presco: 659) as permanent workers. According to the 2019 Presco annual Report and Accounts, the company is one of the largest employers of labour in Edo and Delta states, with a total of about 8,000 employees. Indirectly, Presco's operations positively impact on the livelihoods of many more people through transport and/or construction contracts, and Kernel purchase from out-grower farmers, as well as by the company being a large consumer of goods and services. On the other hand, Okomu Oil Pam

Company employs nearly 2,000 workers (permanent and casual) directly, and about 10,000 indirectly, together with several hundred independent sub-contractors providing some essential services to the company (15). The number of persons employed in the two companies' value chain could reach 50,000, if one considers those engaged in the Presco out-grower scheme, the persons employed by contractors of the companies, and the marketers at various stages of the distributive trade of the both firms.

3.2.3 Contribution to provision of food and raw materials to industries

Presco and Okomu Oil Palm companies contribute to food security through the production of crude palm oil (CPO) and processing of refined bleached and deoderised palm oil, palm olein, palm stearin, palm fatty acid distillate. These products are used for food purposes including as cooking oil, in margarines, noodles, baked goods etc. In addition, palm oil is used as an ingredient in non-edible products including in the production of bio-fuel, soaps, detergents and surfactants, cosmetics, pharmaceuticals and a wide variety of other household and industrial products. In 2019 alone, both companies produced 91,481 metric tonnes of crude palm oil, which is about 10 % of annual output of the product in Nigeria. Figure 2 shows the production of fresh fruit bunches (FFB) and crude palm oil by Presco from 2010 to 2019. The production level of the company's product has been on the rise since 2010. This is also the trend for Okomu Oil.

Products such as palm oil, palm kernel oil and palm cake also serve as raw materials for agro-processing companies. The Presco's products, for instance, are sold directly to customers comprising wholesalers, consumers and industrial users with majority located within Nigeria. Some of these are: Nestle Nigeria Plc, Lagos; Wamco Nigeria Plc, Lagos; Chikki Food Industries, Lagos; PZ Cussons Nigeria Plc, Lagos; PZ Wilmar Ltd, Lagos; Fan Milk Plc, Ibadan; Golden Pasta Company Ltd, Lagos; Aspira Nigeria Ltd, Kano; KLK Emmerich GmbH, Germany; Promasidor, Lagos; Primera foods, Lagos; Orient foods Lagos; Beloxi Industries Limited, Lagos; Dangote Group, Lagos; amongst others (16).

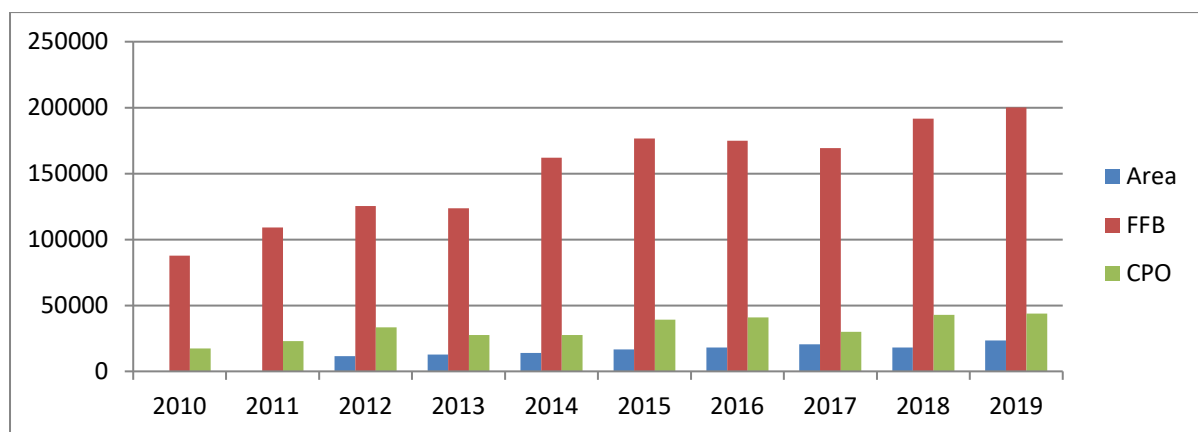


Figure 2: Output of Presco (FFB and Crude Palm Oil, 2010-2019)

3.2.4 Contribution to generation of foreign exchange through export

Rubber produced by Okomu is processed into rubber cakes for export which helps to generate foreign exchange. Presco has also exported refined oil to sister companies under SIAT group. The value of export for both companies from 2010 to 2019 is shown in Figure 3. Both companies exported goods worth over ₦30 billion (Okomu: over ₦26.8 billion; Presco: over ₦3.8 billion) during the period under review. This, of course, was a great source of foreign exchange earnings for Nigeria from the non-oil export sector. As more of the plantation crop products are exported, they will provide foreign

exchange that will certainly be needed to finance importation of fertilizer for food crops, spare parts, raw materials and incentive goods.

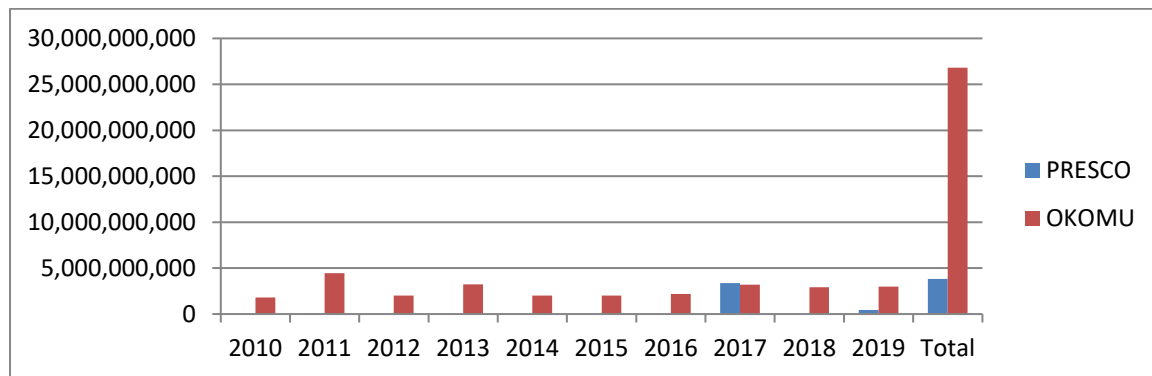


Figure 3: Contribution of Presco and Okomu Oil to export

3.2.5 Contribution to Rural Community Development

Both Presco and Okomu Oil carry out corporate social responsibility (CSR) programmes that impact positively on their host communities. On annual basis, disbursements are made for training of youths to acquire some skills, bursaries are given to students in higher institutions, and contracts are awarded for roads, electricity and other infrastructural development. In this way, the nucleus plantation estates have made contributions to community and rural development in Nigeria. Figure 4 shows that both companies spent about two billion naira on community development and donations as part of their corporate social responsibility between 2010 and 2019. The research community in Nigeria was also enhanced through the operations of the nucleus estates. Presco alone committed over ₦1.7 billion to research into oil palm and farming practices from 2010 to 2019. The research efforts of both companies are undertaken by foreign technical partners. This allows for transfer of technical knowhow while the research products are likely to benefit other stakeholders in Nigeria, aside from Presco, Okomu Oil and sister companies.

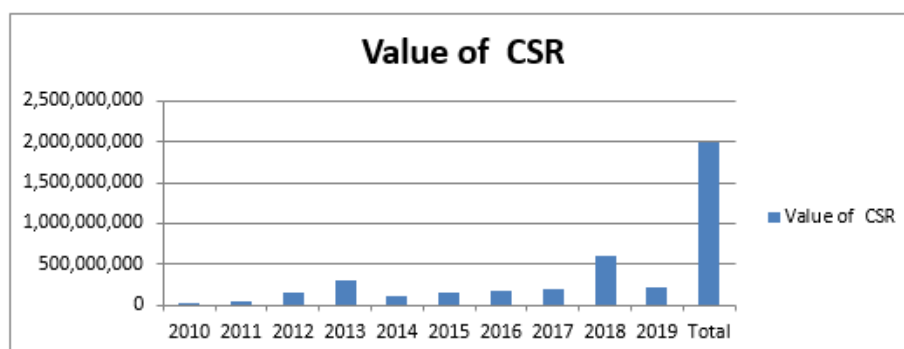


Figure 4: Expenditure on CSR Programmes by Presco and Okomu Oil, 2010-2019

Both companies have also developed local economies by serving as market for the supplies of products such as diesel, petrol, jerry cans, fertilisers and other farm inputs.

3.2.6 Promotion of Regional and Global Cooperation in Trade

The experience of plantation agriculture as practised by Presco and Okomu Oil in Nigeria shows that under good management regional and global cooperation could be promoted. Presco Plc, for instance, trades with companies under the Siat group located in West Africa and beyond. Presco also engages

the services of technical and management partners based in Belgium. Okomu equally gets the services of a technical partner, Socfinco F.R.S.A., based in Switzerland. The agreement is usually made with the approval of the National Office for Technological Acquisition and Promotion (NOTAP). The agreement is renewed periodically, the last for Presco being in 2018 for a period of three years. The NOTAP's approved rates and bases include 3% of net sales for technical knowhow and 3% of profit before tax for management fee. There is the likelihood that local researchers in Nigeria may grow in expertise as they associate with Presco and Okomu Oil to be able to render same services to other nations and earn foreign exchange for their country in the process.

3.3 Externalities Associated with the Operations of Presco and Okomu Oil, and the companies' responses

Oil palm plantations are known to produce some social and environmental negative impacts on their operational areas. There was one reported case of conflict between one of the host communities and an oil palm estate over land issue in the period under review. Okomu Oil reported that in December, 2015 the company's immediate host community had a conflict with Ijaw militants over claims to part of the estate's land. This led to the burning of several hectares of the company's rubber plantation (17). This reported experience supports the views of Etim (11) and Ojo(12) that Okomu Oil Company's expansion programme in Edo State and PZ-Wlmar's acquisition of land for oil palm estates in Cross River State had been causing social conflict between local communities and oil palm estates in Nigeria. Enaruvbe (18) also showed from his study on "A systematic assessment of plantation expansion in Okomu forest reserve, Edo State, Nigeria" that plantation agriculture increased by over 8% in Okomu Forest Reserve between 1987 and 2015 leading to a 15% forest loss, increased pressure on the rainforest and depletion of the natural habitat. The researcher also observed that the allocation of de-reserved parts of Okomu forest reserve to large-scale, labour intensive plantation companies attracted labourers to the area which led to the establishment of settlements designed for plantation workers and their families. These settlements, however, attracted other service providers such as mechanics, traders and other artisans leading to an increase in the population of such settlements. This increasing population results in the demand of land for subsistence farming activities which puts further pressure on the neighbouring forest resources. The operation of Presco estates is likely to have produced adverse effects similar to that of Okomu Oil, though no documented evidence was available. Both companies' operations could have also increased carbon emission in the area through slash and burn activities preceding planting of plantation trees.

However, both companies have carried out measures to mitigate the social and environmental impacts of plantation agriculture in line with the requirements of Roundtable on Sustainable Palm Oil (RSPO). According to Sudarsono (19) RSPO requires all of its members to conduct social impact assessment (SIA) and free prior informed consent (FPIC). RSPO has principles and criteria that must be fulfilled by each member. The principles include amongst others responsibility to workers, individuals and communities affected by plantation and palm oil mills.

The measures carried out by Okomu Oil, for instance, include commitment to environmental conservation, health, education and safety issues among all stakeholders with the aim of ensuring the sustainability of the surrounding biodiversity within the company's domain. The 2019 Annual Report and Accounts of the company indicate that this has been achieved through participation in statutory environmental audits which was completed without any sanctions in 2019. The company had also achieved certification on 3 ISO Certification Schemes in the past: ISO 9001(2015), OHSAS18001 (2007) and ISO14001 (2015) for good quality products, environment and safety respectively. In 2019, Okomu

Oil became the first in Edo State to be RSPO certified. This proves, independently, that the company's peers worldwide confirm the operations at the Okomu estates to be in conformity with internationally recognized standards in areas such as sustainable environmental conservation, health, education, community, workers, legal, and safety practices. Okomu Oil also continues to protect the more than 10% of its total area as high conservation value (HCV) areas, as part of the company's conservation goals, through monitoring based on the RSPO principles.

Presco firmly believes also in environmentally friendly and sustainable operation. The company's 2019 Annual Report and Accounts indicates that all factory wastes from the oil mill are recycled into the plantation or used as fuel to generate green process steam and electricity. The company relies majorly on green energy for its operation at Obaretin Estate by harnessing methane gas produced by decomposition of its palm oil mill effluent through its bio-methanisation plant commissioned in 2014. Presco played a leading role in the development of the national interpretation for Roundtable on Sustainable Palm Oil (RSPO) in Nigeria, launched in 2018, and is currently working towards RSPO certification.

3.4 Enabling Environment for the Operation of Nucleus Estates in Nigeria

The contributions of nucleus estates in Nigeria were not without support from the government partly through the provision of some enabling environment. Firstly, in order to avoid conflict between host communities and the nucleus estates, land was not sold outright for the development of large oil palm plantations. Presco Plc's Annual Report and Accounts, 2019 states that land is leased by the government to the owners of the nucleus estates for a period of 99 years, with no extension options and lease payments are renegotiated after five (5) years to reflect market rentals. Secondly, Nigeria allows technological transfer as it suits the foreign investors having major shareholding in the nucleus estates. This has made it possible for the mobility of both human and other resources into the country for the development oil palm industry. Thirdly, the nucleus estates are part of the agro-industries in Nigeria enjoying export incentives and subsidies. Export incentives and subsidies are government grants awarded to companies who export their products and repatriated the foreign proceeds to Nigeria. This gave the companies the ability to offset the certificate given against the duty payable on imported goods to the customs and excise. Fourthly, Nigerian government grants low interest loans to commercial farms which both companies had accessed in the past to expand their operations. For instance, Presco accessed ₦2 billion loans at 7% interest rate in 2015 under the Central Bank of Nigeria (CBN) Commercial Agricultural Credit Scheme (CACS) to finance the company's expansion programme. The company also accessed ₦2 billion loans in 2015 guaranteed under the Nigeria Incentive-Based Risk Sharing System for Agricultural Lending (NIRSAL) for the purpose of establishing 14,400 hectares of rubber plantation at Upper Sakponba in Edo State. In 2013, Presco received a 7% ₦1.066 billion loan under the CBN ₦500 billion Power and Aviation Intervention Fund (PAIF) for the purpose of financing a 2.5 MW steam turbine in order to expand the company's power generating capacity. Similar loans with provision for government grant based on the reduced interest rate charged have also been accessed by Okomu Oil in the past ten years. In addition, Okomu Oil enjoyed the export expansion grant of ₦1,050,883,000 from the Federal Government of Nigeria in 2017 and 2018 (15). This grant must have promoted the export drive of the company.

3.5 Implications of the study

The performance of both companies over the ten-year period under review portrays Presco and Okomu Oil to be making great contributions to the economic development of Edo State in particular,

and Nigeria in general. The two companies had also taken measures to mitigate the externalities associated with their operations. It follows, therefore, that the promotion of oil palm plantation agriculture in Nigeria under the right enabling environment can further the agricultural development and economic development in the country. A possible future positive effect can be envisaged as more land is committed to oil palm nucleus estates. If, for instance, we have additional four nucleus estates of Okomu and Presco status, the volume of crude palm oil (CPO) with assured quality produced could increase to over 270,000 metric tonnes per annum, thereby greatly increasing the national annual production of oil palm products in Nigeria. This would mean more value added or wealth creation (estimated to be ₦30 billion per annum) to benefit employees, investors (shareholders and banks providing credit facilities in form of loans), State and Federal governments (in form of taxation – income, value-added, PAYE, Education tax, export duties, etc.), and local communities in terms of the companies' expenditure on Corporate Social Responsibility programmes and projects, as well as retained profit for the future expansion of the oil palm industry. If one further assume a situation in which 20% of the land under oil palm in Nigeria (over 2 million hectares) is converted to oil palm estates and responsibly managed as Presco and Okomu Oil are doing, then the future effect could be great. Annual crude palm oil production in Nigeria may increase by over 50% with attendant increase in benefits to all stakeholders. The resulting output together with the contribution from the smallholder oil palm farmers may likely make Nigeria to be repositioned as one of the top leading producers of palm oil and associated products in the world

4 Conclusion and Recommendations

This study examined the contributions of Presco and Okomu Oil as nucleus oil palm estates to the economic development of Nigeria using historical data of both companies' performance between 2010 and 2019. It is established that both companies operate responsibly by putting several measures in place to mitigate their effect on the environment, and have been contributing to employment generation and provision of income to individuals, corporate bodies and the government. They have also generated foreign earnings through export of their products, provided raw materials to many agro-processing firms and provided market for companies supplying agro-chemicals and other farm inputs. The companies' corporate social responsibility programmes have helped in the development of local communities where they are situated. These contributions were partly made possible through the existence of right enabling environment provided by government. The future expansion of the companies is likely to produce greater benefits to all stakeholders in the oil palm industry in Nigeria.

It is recommended that Nigerian investors should consider the oil palm sector as one of the areas to invest in, considering the fact that the two companies examined are doing well and foreigners own over 60% of the shares. Secondly, government should continue to provide greater enabling environment for nucleus oil palm industry to thrive through Central Bank of Nigeria guaranteed loans. Thirdly, Presco and Okomu Oil should continue to operate responsibly in a way that externalities associated with their activities do not exceed the benefits accruing from their companies to the nation and host communities. Effort should be made in identifying forests from degraded forest lands, and ensure their conservation through methodologies such as High Carbon Stock (HCS)⁷⁸, High Conservation Value (HCV), and the RSPO New Planting Procedure. Government should continue to enforce the compulsory environmental and social impact assessments that are explicitly required by law.

REFERENCES

- [1] Foundation for Partnership in the Niger Delta, PIND, *A report on Palm Oil Value Chain Analysis in the Niger Delta*, 2011
- [2] Casson, A. Tacconi, L. & Deddy, K., *"Strategies to reduce carbon emissions from the oil palm sector in Indonesia"*, 2008, Paper prepared for the Indonesian Forest Climate Alliance, Jakarta.
- [3] Goenadi, D.H., *"Perspective on Indonesian palm oil production"*, 2008, International Food and Agricultural Trade Policy Council
- [4] Ayodele, P., *African Case Study: Palm Oil and Economic Development in Nigeria and Ghana; Recommendations for the World Bank's 2010 Palm Oil Strategy*, 2010, Institute for Public Policy Analysis.
- [5] Sheil D et al, *The impacts and opportunities of oil palm in Southeast Asia: what do we know and what do we need to know?*, 2009, Occasional Paper, 51: p. 37-38.
- [6] Tan, K. T., Lee, K. T., Mohamed, A. R. & Bhatia, S. (2009), "Palm oil: Addressing issues and towards sustainable development", *Renewable and Sustainable Energy Reviews*, 13: p. 420-427.
- [7] Budidarsono, S., Susanti, A. and Zoomers, A., *Oil Palm Plantations in Indonesia: The Implications for Migration, Settlement/Resettlement and Local Economic Development in Biofuels*, 2013 Economy, Environment and Sustainability, <http://dx.doi.org/10.5772/535173-19486>, p. 174-193.
- [8] The World Wildlife Fund, *How palm oil production affects the environment*, n.d. www.worldwildlife.org/industries
- [9] Friends of the Earth-US/ERA, *Exploitation and Empty Promises: Wilmar's Nigerian Land Grab*, 2016, Friends of the Earth and Environmental Rights Action Nigeria.
- [10] Rist, L., Feintrenie, L. & Levang, P., *The livelihood impacts of oil palm: smallholders in Indonesia*, 2010, Biodivers Conserv, DOI 10.1007/s10531-010-9815-z. Accessed 20/8/2020
- [11] Etim E., *Cross River oil palm sector success story and more that can be done*, 2015, Cross River Watch: <http://crossriverwatch.com/2015/08/cross-river-oil-palm-sector-success-story-and-more-that-can-be-done-byemmanuel-etim/>
- [12] Ojo, G.U., R.A. Offiong, S.O. Akhaine, A. Baiyewu-Teru, and F. Allen, *Oil palm plantations in forest landscapes: impacts, aspirations and ways forward in Nigeria*, 2017, Wageningen, the Netherlands: Tropenbos International.
- [13] The Economist, *Grow but cherish your environment*, www.economist.com/news/middle-east-and-africa/21612241-companies-wanting-make-palm-oil-face-angry-environmentalists-grow-cherish
- [14] The Okomu Oil Palm Company annual report and accounts (2014)
- [15] The Okomu Oil Palm Company annual report and accounts (2019)
- [16] Presco Oil annual report and accounts (2019)

- [17] The Okomu Oil Palm Company financial statement (2016)
- [18] Enaruvbe, G.O., *A systematic assessment of plantation expansion in Okomu forest reserve, Edo State, Southern Nigeria, 2018*, Nigerian Research Journal of Engineering and Environmental Sciences, 3(1), p. 39-47.
- [19] Sudarsono, S., *Impact of oil palm plantation on the livelihood of the local communities and the conservation area, 2004*, IOP Conference Series: Earth Environmental Science. 336 (2019) 012004. Doi.10.1088/1755-1315/336/1/012004