

Palm Oil Processing and Marketing and Sustainable Livelihood in Rural Communities of Akwa Ibom State, South-South- Nigeria.

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Abstract: *Oil palm processing and marketing in South-South Nigeria is one economic activity in which the people eke a living and sustain their lives. Despite its economic importance, the business is fraught with series of challenges begging for solutions. This study was conducted in three palm oil processing communities in Akwa Ibom State. The communities comprised Ibagwa in Abak, Mbiafun Nkuono in Ikono, and Ibesikpo in Ibesikpo-Asutan Local Government areas, respectively. Sample consisted of 136 selected respondents. Questionnaire and Oral Interview combined with Participant Observation methods were used for data collection. Data were analyzed using Simple Percentages. Findings from the study showed that, palm oil processing and marketing is a lucrative economic activity of Akwa Ibom people of the South-South, Nigeria. The business enhances the financial status of the people, boosts the sales of other economic crops, promotes inter-tribal communication, trade and marriages as well as encouraged the use of locally produced goods and tools. Equally, findings revealed that poor transportation, low pricing of goods, inaccessibility to credit facilities and the used of obsolete processing equipments as the challenges the business is currently facing. The study recommends among others that, palm oil producers should form co-operative associations thereby attracting corporate and govern support and use the services of agricultural agents among others in order to promote proper pricing and increased productivity of palm oil and kernel in the area.*

Keywords: *Palm oil processing, Marketing, Sustainable Livelihood, Development, Akwa Ibom State.*

I. Introduction

Nigeria is blessed with lots of natural and human resources such as crude oil, natural gas, water resources, good climate, fertile soil, good vegetation, agricultural produce, rocks, gravels, sand as well as palm trees which are found everywhere in the South-West, South-East and South-South part of the country. In spite of these rich natural endowments, it is observed that incidence of poverty, manifested in the form of inadequate agricultural goods is still very high. Also, cases of hunger, malnutrition, unemployment and rural-urban migration have been widely reported in the country. The World Development Report (2000/2001) puts Nigeria as the 28th poorest country in the world. The Federal Office of Statistics (FOS) also observed that, in 1990, the rural areas of Nigeria accounted for 66 percent of the incidence of poverty in the country (FOS, 1992). It estimated also that, over 65 percent of Nigerians live below poverty line and a large majority of those affected live in rural communities. But according to the National Bureau of Statistics, the national poverty incidence in Nigeria is estimated to be 54.7 percent, while majority of Nigerians lived in absolute poverty (NBS, 2012).

As observed by Olurode (2001), Ekong (2003), and Udoh (2004), many Nigerians live in rural areas and in spite of the enormous human and natural resources found there, majority of the people are poor. Orokpo (2006) experientially declared that, the scourge of poverty in rural communities is high in spite of their engagements in petty agricultural activities, crafts, subsistence trading and other socio-economic endeavours. According to National Poverty Eradication Survey Report (NPESR, 2010), rural poverty profile in Nigeria has increased from 66 percent in 1999 to 73.2 percent in 2010. Although several intervention strategies by the Federal Government such as, Operation Feed the Nation (OFN), Green Revolution (GR), Directorate of Food, Roads and Rural infrastructure (DFRRI), National Directorate of Employment (NDE), Better Life for Rural Dwellers (BLRD) and the National Poverty Eradication Programme (NAPEP) and many others have been developed to solve the problem of poverty, but the situation continue to pose serious challenges to the people in the country.

However, oil palm processing and marketing in South-South, Nigeria is one economic activity in which the people use to eke a living, break the shackles of poverty and sustain their lives. Oil palm processing and marketing is as old as the region itself. Before the discovery of crude oil and gas in the region in 1957, oil palm produce formed the bulk of Nigeria's export crop which generated over 65 percent of the post colonial economy's income. The contributions of palm produce in terms of cash and employment warranted the region to be renamed the Oil River Protectorate by the Colonial Administration (Akpan, 1988 and Abasiokong, 2003). According to Ndon (2006), the oil palm tree has remained most cost-effective vegetable oil plant in the world. It

has a major advantage over other oil producing crops because it delivers two distinct types of oil: palm mesocarp oil and palm kernel oil. These two types of oil attract high prices in the world market as their demand increased from 28.8 percent in 1997 to 30.5 percent in 2001 (Federal Ministry of Agriculture; FMA, 2002).

Oil palm production industry is an important sub-sector in the Nigeria's economy where several plantations and wild farms exist. According to the Federal Ministry of Agriculture, Akwa Ibom is the third largest producer of palm oil and kernel in Nigeria (FMA, 2002). Study by Ehirim (2004) shows that palm oil is rich in carotenoids (pigments found in plants and animals) and fatty acid. Because of its importance as a high yielding source of edible and automobile oils, the oil palm is now grown as a plantation crop in most countries with high rainfall of 1600 mm/yr and a tropical climate of between 10⁰F. The palm bears its fruits in bunches which vary in weight from 10 to 40 kg, with individual fruits weighting between to 20gms and 30gms. According to Poku (1993), the palm fruit has an outer skin of a pulp mesocarp containing the palm oil in a fibrous matrix, a central nut covered with a hard shell (endocarp), which contains the kernel that contains the "kernel oil" on extraction. The palm produce business therefore, constitutes a significant sector of the Nigerian economy by providing revenue, food and raw materials for the people and for industrial use. The sector also provides employment for hundreds of rural and urban dwellers. People in the South- Eastern, South-Southern and parts of South-Western and the North- Central Nigeria, largely depend on oil and kernel as their major source of revenue. Also, the market and demand for palm and kernel oil is national as middlemen engaged in bulk buying of the product to the Northern parts of the country.

In Akwa Ibom State, palm produce business first started in the riverine communities of Eket and Ikot Abasi Local Government Areas where Ibo traders found and bought the product at very cheap rates. With the high demand of palm oil at the international markets, attention for palm and kernel oil shifted to Abak, Ikot Ekpene and Ikono Local Government Areas. Udoh (2001) observed that the success of this business depended largely on women who constituted the necessary cheap labour force for palm oil and kernel processing in the area. The economic importance of palm tree makes engagement in the business more profitable to the people. For instance, both the palm trunk and the palm frond were and are still used for construction of residential buildings. The shaft at the middle of the palm frond are used for broom making, while the frond are also used making of fence by the rural people. The residue from milled-palm-fruits is used for the manufacturing of animal feeds, and firewood for domestic cooking, while the cracked-kernel shells are used for local road repairs and construction of residential buildings. As observed by Ehirim, (2004) and Chambers, (1995), no part of the palm tree is wasted.

Earlier Studies by Poku (1993), Ndon (2001) and Ibrahim (2001) revealed that, palm oil processing and marketing is a major economic activity of the people of Akwa Ibom and is mostly carried out by rural dwellers particularly women under manual and subsistence methods. The marketing of palm oil and kernel is often under taken by men who buy direct from the local producers. Usually, local producers will take their processed oil and kernel to the periodic or daily markets, or display same by the road side or village square where prospective buyers will come for purchase. Essien (2013) found that, palm oil processing and marketing generates revenue for the rural people and therefore boost the economy of the rural dwellers.

Notwithstanding, it is however reported by the operators that the business has been facing series of challenges ranging from lack of mechanized processing, poor produce pricing by middlemen, lack of storage facilities, lack of capital for large-scale production and expansion, lack of credit facilities by micro-finance banks, and long period of maturity. More ever, literature obviously reveals little empirical studies on this all important self-sustaining occupational activities and it thus appears as if it has been ignored and the operators neglected. In the light of the above therefore, the present study attempts to investigate:

- (a) How the people process and market palm and kernel oil in the area
- (b) How palm oil processing and marketing has enhanced the well-being of the people of the area
- (c) The challenges affecting palm oil processing and marketing in the area
- (d) What measures should be taken to boost and aid the expansion of palm oil processing and marketing in Akwa Ibom State in general

II. Literature Review

The processing and marketing of palm produce (palm oil and kernel) has been one of the most important economic activities of the people of South-South, Nigeria. Studies by Poku (1993), Onochie (1966) and Udoh (2012) show that, palm oil business was the foremost occupation of the present rural subsistence farmers and petty traders who move from house to house to purchase palm oil and kernel in small containers and sell back to Ibo middlemen. According to Olunode (2001) and Orokpo (2006), in rural communities of Akwa Ibom, Cross River, and Rivers States, palm oil processing was originally done by women while men engaged in its marketing. With the introduction of the mechanically operated mills and processing systems, the business changed its form and structure to reflect the new scientific economic system.

According to the Oxford Advanced Learner's Dictionary (2000), a palm tree is a straight tree with a mass of long leaves at the top, growing everywhere in tropical countries. In Nigeria for instance, palm trees grow within the tropical rain forest. Akwa Ibom State is situated in the forest belt of the country. Its soil and climate permit enormous growth of palm trees and palm processing. Palm oil producers also engaged in other agriculture and subsistence farming. Generally speaking, some rural people who are now engaging in palm oil business had experienced low per capita income and low wage-earning opportunities in other economic endeavours. The need for money for tax and other levies (such as the annual collection for school and church buildings) and for the purchase of Western goods encouraged the rural people to become interested in the production of palm oil and kernel (Ekpenyong, 2006).

Under the system of subsistence farming in palm oil and kernel, labour was provided mostly by women and by the extended family. Palm grove owners and producers also depended mainly on labour provided by the young members of the village who were organized into age-groups. Owners of large palm groves supplemented their family labour from small groups organized by their sons-in-law. Voluntary work groups, consisting of an age-group of kinsmen and in-laws also provided labour during its processing. The major form of payment then was food and drink provided by women (wives) for the workers.

For many families in the South-South, palm oil and kernel business is a major economic occupation for their survival. Under subsistence economy, palm grooves were solely owned and controlled by men while women undertook the processing and extraction of oil. Bunches of palm fruits were harvested by men who were proficient in climbing the tall palm trees with special robes (*ikpo eyop*). Women only evacuated the harvested fruits from the bush. It is of interest to state also that, palm bunches were often owned and controlled by men while women own the "scattered" fruits that fall after harvesting. Fruits may be sold in bunches or after de-husking for it bunches.

Production process of palm fruits involve de-husking fruits from bunches using a sharp knife. This was followed by boiling the fruits for some hours before it is marshalled. The marshalling is done with the use of a long wooden mortar and pestle or 'buried-in' iron mortar. Before the introduction of the mechanically operated mills system, extraction of palm oil was done manually by squeezing the marshalled (soft) fruits to extract oil. As can be observed, however, the mechanically operated mill system has reduced the stress experienced through manual process. The oil is separated from the hard kernel shell which when cracked will produce kernel nuts. The residue from the de-husked fruits, the milled fruits, and the cracked kernel are being used as firewood for domestic looking.

Marketing of palm oil and kernel is carried out in three phases. First, there are buyers who go from house to house to buy the product direct from producers. Secondly, products are taken to the market, usually on specific market days, or to a particular location (usually at road junctions, village squares or town halls for prospective buyers). There are also buyers who pay for the goods in advance for the local producers to process and store oil and kernel for them. According to Alan (1994), palm oil processing and marketing is a set of economic and behaviour activities that involves the coordination of various stages of economic activities from production to consumption. Ebong (2007) also observes that, palm oil production and marketing is a business activity that has influenced the flow of goods and services from the producer to the consumer. It includes assembling, sorting, storage, processing, grading transportation as well as financing of all economic and agricultural activities.

In the course of palm oil and kernel processing, challenge such as price fluctuation and complete drop in the market price of palm produce is often experienced. For instance, the dry seasons when the palm yields at its highest rate, the price of palm oil often fluctuates downward. A reversed is also the case during the rainy seasons that marks the scarcity of palm fruits, the product is often scarce and its price usually high. According to Ebong and Udongwo (2005), palm oil and kernel price had never been stable due to the role of the Ibo middle men who dominate the retail palm oil and kernel business. Again, the lack of storage facilities for oil and kernel make its price to go down during the dry seasons when every producer has some products for sale. This is in line with Ekong (2003) who notes that, the nature of rural economy does not favour the mass production of perishable goods since there are no storage facilities. In a study of Ikpe Rice Farmers in Ini Local Government Area of Akwa Ibom State, Udoh, (2004) observed also that, the same challenge of lack of storage facilities made the local rice farmers to lose huge profits as a result of dwindled market price.

Scholars such as Alaga, Ilechie and Omoti (1993), Ehirim (2004), Ndon (2006) and Okaro (2010), have identified other challenges associated with the production and sales of palm produce to include, poor transportation system, preservation of products produced in bulk as well as hoarding of products by both producers and marketers. Another identifiable challenge involves the long period of maturity which farmers have to wait for several years before the palm begins to bear fruits. Where producers obtained loans from micro finance banks, the bank's interest for that long period would almost swallow what would have been his gains altogether, a situation that discourages so many potential investors from going into agro-business (Alan, 1994; Harris, 1995, Ebong, 2007 and Essien, 2014). In the light of the above, it can be argued that, production and

marketing of palm produce (palm oil and kernel) in Akwa Ibom State, in spite of its numerous contributions to the socio-economic development of the area is full of challenges.

III. Theoretical Framework

The study employs Sustainable Livelihood Theory in its analysis of the issue under study. The term “sustainable livelihood” came to limelight in the 1990s following a number of cross-disciplinary studies that focused on households, villages and farming settlements (Almaric, 1988). According to Carney (1998), sustainable livelihood comprises the capabilities, assets (including material and social resources and activities needed as means of living). A livelihood is said to be sustainable when it can cope with and recover from stresses and shocks and maintains or enhances its capabilities and assets both now and in the future while not undermining the natural resources base (Carney, 1998). Sustainable livelihood tenets include:

- A framework that helps in understanding the complexities of poverty, and
- A set of principles to guide action to address and overcome poverty.

The sustainable livelihood framework places people, particularly rural low income people at the centre of a web of interrelated influences on positive change for themselves and their household, using resources and assets that they have access to. These include natural resources, technologies, skills, knowledge and capacity, health, education, source of credit or their network of social support. The extent of their access to these assets is strongly influenced by their vulnerability context which takes account of socio-economic, political, and technological trends. It is also a factor of seasonality such as prices, production, and employment opportunities. Again, the prevailing social, institutional, and political environment which affect the ways in which people combine and use their assets to achieve their goals are contributing factors (Carney, 1998; Olurode, 2001 and John, 2002).

Sustainable livelihood in this study denotes a strategy to identify the contributions, opportunities, and constrains faced by palm oil producers and marketers in the area of study. It helps in analyzing their livelihood pattern and how they change overtime. It also acknowledges that, people adopt many survival strategies to secure their livelihood and one of such strategies is the processing and sales of palm produce (palm oil and kernel). It builds on people’s strength, natural endowment, institutions, information and insights. The emphasis of this theory hinges on broad partnership between individuals, private and public sectors, and it emphasis on the importance of sustainability in poverty reduction; make its application to the present study worthwhile.

IV. Methodology and Design

This study was conducted in three palm oil producing communities in Akwa Ibom State. The communities included Ibagwa in Abak Local Government Area, Mbiafun Nkwono in Ikono Local Government Area and Ibesikpo in Ibesikpo-Asutan Local Government Area. The population of the study consisted of 136 oil palm processors and owners of palm oil mills. The study’s population was obtained through census enumeration conducted on the operators of oil palm processing business in the three Local Government Areas. The census data revealed a total of 64 oil palm processors and owners of palm oil mills in Ibagwa in Abak Local Government Area, 42 oil palm processors and owners of palm oil mills in Mbiafun Nkwono in Ikono Local Government Area and 30 oil palm processors and owners of palm oil mills in Ibesikpo in Ibesikpo-Asutan Local Government Area. In view of the not too large population, the 136 respondents were purposively regarded as the sample size. Questionnaire and interview schedule were used for data collection. These techniques were complemented by observation (participant) method. Visits were paid to small holders and local producers at their mills to observe how they carry out their businesses. Respondents were selected using cluster, snowball and purposive sampling techniques. Forty-two (42) respondents who were owners of palm processing mills in the areas were also interviewed. Analyses and interpretation was through simple percentages. The study was conducted between January and March, 2015.

V. Findings and Discussions

(i) Demographic Characteristics of Respondents:

Table I: Analysis of demographic characteristics of the respondents

Demographic Characteristics	Frequency	Percentage (%)
Sex:		
Male	94	69.1
Female	42	30.9
Total	136	100.0
Age:		
20-25	6	4.4
26-30	11	8.1

31-35	21	15.4
36-40	33	24.2
40-45	31	22.8
46-50	27	19.9
50 years and above	7	5.2
Total	136	100.0
Marital Status		
Married	89	65.4
Single	19	14.0
Divorced	3	2.2
Widow	17	12.5
Widower	7	5.1
Separated	1	0.8
Total	136	100.0
Educational Level		
FSLC	30	22.1
SSCE/WAEC	53	39.0
OND, NCE	25	18.4
HND, DEGREES	16	11.7
Other (Please Specify)	12	8.8
Total	136	100.0
Estimate Monthly Profit		
N5,000 – N10,000	8	5.9
N11,000 – N20,000	21	15.4
N21,000 – N30,000	47	34.5
N31,000 – N40,000	31	22.8
N41,000 – N50,000	16	11.8
N50,000 and above	13	9.6
Total	136	100.0
No. of Worker Employed		
1 – 3	17	12.5
4 – 6	73	53.7
7 – 10	21	15.4
10 and above	25	18.4
Total	136	100.00
Source of Finance		
Loan from MFB	31	22.8
Loan from Co-operative Society/ Osusu	68	50.0
Personal Saving/Sales of Property	23	16.9
Gifts from Family Member/Friends	14	10.3
Total	136	100.00

Source: Palm oil producers, processors and marketing Survey; Akwa Ibom State, 2015.

Analyses of demographic characteristics of the respondents in Table I above shows that, of the one hundred and thirty-six (136) respondents, 94 (89.1 percent) were male while 42 (30, 9 percent) were female. Of this number, majority 64 (47.0 percent) were of the age bracket of 36 and 45 years old. More than a half 89 (65.4 percent) were married, while the rest were either single (14.0 percent), divorced (2.2 percent), widow (12.5 percent), widower (5.1 percent) or separated (0.8 percent). Majority of the respondent (9.5 percent) had obtained certificates ranging from First School Leaving Certificate (FSLC), SSCE/WAEC 53 (39.0 percent) obtained 25 (18.4 percent) had obtained OND/NCE, while a few obtained HND, Degrees and other qualifications. The respondents were also assessed in respect of their monthly profits. Here, a little above a half (57.3 percent) indicated to have been making profit of between N21, 000 to N40, 000 per month. About a half (53.7 percent) mentioned that they have employed 4-6 persons in their business. On how they obtained money to finance their business, a half (50.0 percent) mentioned that they obtained loans from co-operative or 'Osusu' organizations. Others mentioned sources such as Micro-Finance Banks (MFB) 31 (22.8 percent), and 23 (or 16.9 percent) of the respondents mentioned that they engaged in personal savings and sales of property and gift from family members and friends to start up the business.

(ii) How the people processed and market palm oil and kernel:

Findings from the present study indicate that, largely palm oil and kernel are processed manually using rudimentary tools such as locally made pots, wooden mortar and pestle and in recent times the use of mechanically operated palm mills. Harvesting of palm fruit is a sole responsibility of men while women convey harvested fruits in basins or baskets home. Before the processing commences, fruits must be de-husked by cutting off the fruits from its bunch with a sharp knife. This is also the responsibility of men. The fruit is then separated from the shaft with a large locally made filter (*ukeng*). Usually, some people will keep the fruits for two to three days for fermentation to take place before boiling it, while others will not mind about fermentation.

The reason for keeping the fruits for some days is that, it allows for more oil to be extracted when seeds become fermented. The next stage of processing is the marshalling of fruits with a locally made mortar and pestle (*Urung eyop*) measuring about one and a half meters tall. While some mortars are buried inside the ground with its mouth opened, others are not. Usually, the buried ones are fabricated with iron. The mashed fruit is emptied into a locally made wooden basin (*akwa*) usually placed on the floor with one end a bit lifted higher than the other. This makes for palm oil to drain to one end. The wooden basin is then surrounded by two to three women who sit facing each other as they select and separate the kernel from the mashed fruit (endocarp) and simultaneously squeeze the mashed fruit to extract the oil. In recent times, palm oil processing has changed from manual to the mechanically operated mill system with the use of modern fabricated tools. Here, women convey the de-husked palm fruits to the mills for processing. The modern mills have made it easier for processing of palm oil and kernel since the entire manual exercise has been taken over by machines.

From the findings also, the marketing of palm produce is undertaken in phases. In the first instance, the product may be sold direct to middlemen who go from house-to-house for the product. In other case, producers may take their produce to the local markets which are often on a fixed market day. Another sales strategy has now developed where a prospective buyer will give money to the producer in advance, and then collect the goods thereafter. This last stage of marketing has some disadvantage to the producer because, he cannot negotiate for a new price of the product should there be any form of upward change in price. The studies show also, that, in recent times, both men and women now buy palm oil and kernel and latter sell it to the big time traders for onward transportation to Northern Nigeria where the goods are semi-processed for export to Europe.

(ii) How palm oil processing and marketing affect peoples' life in the area:

On the question: How does palm oil processing and marketing affect peoples' life in the area? In an attempt to answer the above question, respondents were diverse in their opinions. The table below explains their answers:

Table II: Respondent's view on the effect of palm oil processing and marketing in the area

Questionnaire items	Frequency	Percentage (%)
• Promotion of financial status of people	36	26.5
• Contribution to community development services.	19	14.0
• Promotion of inter-tribal trade and communication.	20	14.7
• Promotion of inter-tribal relationship and marriage.	16	11.8
• Promotion of sales of other products.	21	15.4
• Exchange of knowledge and ideas.	24	17.6

Source: Questionnaire Survey, 2015.

As indicated in Table II above, of the one thirty-six (136) respondents, 36 (26.5 percent) were of the views that the processing and sales of palm oil and kernel has promoted the financial standard of the people. Of this number 19 (14.0 percent) agree that the business has helped in developing the community. This is so when the people set aside part of their profits for community development services such as roads, markets and town hall projects. Twenty respondents (14.7 percent) suggested that palm oil processing and trade has led to inter-tribal communication and trade. In like manner, about three-quarters of the respondents 16 (11.8 percent) agree that palm oil business has led to inter-tribal marriage, while 21 (15.4 percent) and 24 (17.6 percent) of the respondents agree that palm oil processing and marketing has contributed to the sales of other products as well as exchange of ideas and knowledge between the produced buyers and the local people, respectively.

(iv) Challenges faced by the people during palm oil processing and marketing:

On the question: What challenges are being faced by the people in the course of palm oil processing and marketing in the area? Respondents' reactions are presented on the table below:

Table III: Challenges faced by palm oil processors and marketers in the area

Questionnaire items	Frequency	Percentage (%)
• Low pricing of palm oil and kernel.	33	24.3
• Problem of transportation.	22	16.2
• Long period of maturity of palm trees.	15	11.0
• Lack of credit facilities to small holders.	42	30.8
• Poor storage facilities for excess products.	16	11.8
• Continuous dependence on manual processing by many local producers.	08	5.9

Source: Questionnaire Survey, 2015.

The frequency distribution on Table III shows that, of the one hundred and thirty-six (136) respondents, 33 respondents (24.3 percent) noted that palm oil processing and marketing is being hindered by low pricing of palm oil and kernel. 22 respondents (16.2 percent) were of the views that poor transportation facilities posed serious challenges to the business. Fifteen respondents (11.0 percent) attributed the problem of palm oil processing and marketing in the area to the long period that palm trees take before it starts bearing fruits, while about one-third (42 or 30.8 percent) of the respondents suggested that lack of credit facilities have hindered the processing and sales of palm produce in the area. However, 16 (11.8 percent) of the respondents attributed the problem of palm oil processing and marketing to lack of storage facilities while 8 (5.9 percent) of the respondents associated their challenge to continuous dependence on manual and crude tools for production by the local people.

VI. Conclusion and Policy Recommendations

Findings of the present study draw attention to the fact that, palm oil processing and marketing has greatly helped in improving the socio-economic statuses of the Akwa Ibom people, promotes community development services, encouraged inter-tribal trade and communication, promotes inter-tribal relationship and marriage, promotes the sales of other products as well as encouraged exchange of knowledge and ideas among others. It has also proven to be a strategy for rural poverty reduction and a source of alternative revenue to the people. Although some challenges such as low commodity pricing, poor transportation, long period of maturity, inadequate credit facilities, lack of storage facilities as well as continuous dependence on manual processing method continue to hinder the business, palm oil processing and marketing has demonstrated to be the hallmark for alternative some of revenue and sustainable livelihood in the area of study. In the light of the above, the study therefore makes the following policy recommendations:

- Palm produce boards should be re-introduced in the country. This agency will determine the appropriate pricing for palm oil and kernel as well as other agricultural products in the area.
- Palm oil producers should form co-operative unions and 'osusu' organizations to enable them negotiate the price of their produce in fair terms.
- Micro-finance banks operating in palm oil processing and marketing areas should be encouraged to be considerate in their terms for financial assistance so that producers would be able to obtain facilities they would be able to pay back.
- In addition, governments, private agencies, and non-governmental organizations should invest in oil palm business as a means of diversifying the country's economy from crude oil.
- Importation of all forms of oil into the country should be banned as a strategy to promote locally produced palm oil and export of same to international markets.
- Scientific research should be intensified in order to bring-in quick yielding varieties as a replacement to the ones that take years to yield.

Put together, the above suggestions may not be exhaustive; nonetheless, they constitute important additions to existing policy options for sustainable palm oil and kernels production and marketing for sustainable economic diversification in the country.

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