



AN ASSESSMENT OF LOCAL METHODS OF PALM OIL PRODUCTION IN RIVERS STATE NIGERIA

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ARTICLE INFO	ABSTRACT
<p>Article History: Received 12th December, 2016 Received in revised form 17th January, 2016 Accepted 9th February, 2016 Published online 28th March, 2016</p>	<p>The study was undertaken to assess the local methods of palm oil production in rural areas of Ogba/Egbema/Ndoni Local Government Area of Rivers State. The instrument for data collection was a fourteen item structured questionnaire of four likert scale of Agree, Strongly Agree, Disagree and Strongly Disagree. A simple statistical mean was used for data analysis. A statistical mean of 2.50 and above was accepted while statistical mean below 2.50 was rejected. The findings show that palm oil producers use local methods of palm oil production, strangers are used as casual workers by the uneducated adults who are in charge of the business, the educated adults and youths are not involved. Government does not encourage the business as there are no social amenities such as electricity and water, no good roads and no good markets for the produce. Based on these findings, recommendations were made.</p>

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INTRODUCTION

Palm oil is an important ingredient in the diet of many Nigerians. Palm oil is the world's largest source of edible oil accounting for 38.5 million tonnes or 25 percent of the global edible oil and fat production (Mpoc, 2007). Palm oil is a product extracted from the fleshy mesocarp of palm fruit. The cultivation of palm oil serves as a means of livelihood for many rural families. Hence, oil palm is often referred to as a crop of multiple values which underscores its economic importance (Akangbe, 2011). Palm oil is an essential multipurpose raw material for both food and non-food industries. Palm oil is used in the manufacturing of margarine, soap, candle, base for lipsticks, waxes, pharmaceuticals, lubricants, biodiesels, ice creams, coffee, whipping cream, fatty acids, palm based cheese, filled milk, mayonnaise and sealed dressings, red oil, etc. Basiron and Weng, 2004, Embrandiri, 2011, Aghalino, 2000.

As far back as 1960's, Nigeria was the world's leading producer and exporter of palm oil and has since 1974 ceased to contribute to the export trade of the commodity largely due to

increased domestic demanding consumption that have not kept pace with the production (Omoti, 2004). Nnorom (2012), reports that Nigeria is now an importer as palm oil is being imported from Malaysia and Indonesia. Nigeria lost to Malaysia and Indonesia as the largest oil palm producer in the world today; mostly because of her poor commitment to oil palm production (Nnorom, 2012).

The traditional palm oil processing method of extracting palm oil involves climbing of the palm trees using ropes woven with raffiapalms. The farmers uses a cutlass to cut down the nuts in bunches; which are later sliced into four or more smaller pieces and covers with palm branches and left for two or three days to ferment. This fermentation softens the nuts and facilitates further processing. Water is then added to the pulp and shaken vigorously to float the oil left in the nuts and hairy integument. The oil is siphoned off from the top of the water into drums and boiled for sometimes. The oil is again subjected to additional boiling to remove impurities after which it is poured into kegs of various sizes ready for consumption and sales. The clean nuts and fibrous residues are thrown out of the trough to dry. Later,

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the dry nuts are cracked by women to recover the seeds for domestic use and for sale, Mba (1982).

Statement of the Problem

Palm oil makes up nearly 50 percent of edible oil consumed worldwide. Apart from being a popular ingredient in African food such as soups, stews, pottage, etc, palm oil has one of the most versatile uses of any plant product. It is a hugely versatile vegetable oil used in a variety of ways in different cultures, industries and markets. In food, palm oil is used as a substitute for fat in making condensed milk, coffee, cream, ice cream and margarine, Kwaski (2002). The huge demand for palm oil for our daily consumption had led to the constant shortage of palm oil in both local and international markets. To solve this problem, Nigerians do not need to depend only on the commercial oil producers for supply but the production of palm oil locally must be put into consideration. Hence, this study aims to evaluate the strength of local oil production in Rivers State of Nigeria.

Purpose of the Study

The aim of the study is to evaluate the local production of palm oil in Ogba/Egbema/Ndoni Local Government Area of Rivers State.

The specific purpose of this study was to:

1. evaluate the local methods of palm oil productions in Ogba/Egbema/Ndoni Local Government Area of Rivers State.
2. identify the different group or age bracket as well as the sex directly involved in the production of oil palm in the area.
3. determine the challenges faced in the local production of palm oil processing in the area.

Research Questions

Based on the stated purpose, the following research questions were posed to achieve the goal of the study:

1. Which method of palm oil production is effectively carried out in the area?
2. What categories of people are directly involved in palm oil production in the area?
3. What are the challenges that face the local production of palm oil in the area?

Scope of the Study

This study was to assess the local methods of oil production in Ogba/Egbema/Ndoni Local Government Area of Rivers State, Nigeria.

MATERIALS AND METHODS

Design of the Study

The research design used for the study is the survey design.

Area of the Study

The area of this study is Ogba/Egbema/Ndoni Local Government Area of Rivers State of Nigeria. This area is

chosen for the study because the soil is fertile for crop productions, palm trees are flourishing very well in the area.

Study Population

The population of this study comprises all adults residents in Ogba/Egbema/Ndoni Local Government Area of Rivers state who are directly involved in the production of palm oil.

Study Sample and Sampling Techniques

The sample consists of one hundred respondents who are randomly sampled from five communities where palm oil production business is going on in Ogba/Egbema/Ndoni Local Government Area of Rivers State.

Research Instrument

The researcher developed a structured questionnaire of modified form of four likert scale of strongly agree (4 points), agree (3 points), disagree (2 points) and strongly disagree (1 point) type containing the items which was used to illicit information on various issues raised in the research questions.

Administration of Instrument

The researcher personally administered the instrument to the respondents and also retrieved them immediately after completion.

Research Question 1: Which method of palm oil production is carried out in rural areas of Ogba/Egbema/Nodni Local Government Area?

Items 1-6 of the questionnaire were analyzed to answer this research question as shown in table 1 below.

Table 1 Mean response of the palm oil production method

S/N	ITEMS	A	SA	D	SD	Total	\bar{x}	Decision
1	Mortar pounding, hand bag pressing, milling method used	36 (44)	26 (78)	8 (16)	30 (30)	268	2.68	Accepted
2	Foot blending and oil floating method is used	38 (152)	27 (81)	20 (40)	15 (15)	288	2.88	Accepted
3	Iron mortar blending and bolt and nut manual pressing method is used	40 (160)	55 (165)	3 (6)	2 (2)	333	3.33	Accepted
4	The fruit digestion and pump pressing automated method is used	15 (60)	17 (51)	38 (76)	30 (30)	217	2.17	Rejected
5	The electrical boiler, wheel bleeding and oil compressor technology is used.	5 (20)	10 (30)	50 (100)	35 (35)	185	1.85	Rejected
6	The industrial automatic technique is used	3 (12)	2 (6)	50 (100)	45 (45)	163	1.63	Rejected

Table 1 above shows that significant number of people in this area use the local method of palm oil production.

Research Question 2: What categories of people are directly involved in oil palm production business in the rural areas of Ogba/Egbema/Ndoni local government?

Items 7-10 of the questionnaire were analyzed to answer the research question as shown in table 2 below.

Table 2 Mean responses of people on the categories of people directly involved in the palm oil production in the area

S/N	ITEMS	A	SA	D	SD	Total	\bar{x}	Decision
7	The youth are directly involved in palm oil production.	20 (80)	10 (30)	45 (90)	25 (25)	225	2.25	Rejected
8	The educated are directly involved in palm oil production.	20 (80)	5 (15)	50 (100)	25 (25)	220	2.20	Rejected
9	Palm oil production is a major occupation of uneducated adult in the area.	35 (140)	45 (135)	5 (10)	10 (10)	295	2.95	Accepted
10	Strangers are used as casual workers in the oil production business	30 (120)	50 (150)	10 (20)	10 (10)	300	3.00	Accepted

Table 2 above shows that oil production business is the occupation of uneducated adults in the area while strangers are used as casual workers.

Research Question 3: What are the challenges facing the local producers of palm oil in the area?

Items 11-14 of the questionnaire were analyzed to answer the research question as shown in table 3 below.

Table 3 The mean response on the challenges facing local producers of palm oil in the area

S/N	ITEMS	A	SA	D	SD	Total	\bar{x}	Decision
11	There is a major market for distribution of palm oil produce	5 (20)	5 (15)	45 (90)	35 (35)	160	1.60	Rejected
12	There are government programs that assist the producers with capital for business expansion	7 (28)	3 (9)	45 (90)	45 (45)	172	1.72	Rejected
13	There are basic amenities such as pipe borne water, electricity and good roads in the area	10 (40)	15 (45)	35 (70)	40 (40)	195	1.95	Rejected
14	Palm oil business is lucrative in the area	10 (40)	23 (75)	20 (40)	45 (45)	200	2.00	Rejected

Table 3 above shows that government does not assist the producers, no good market, no road and no other social amenities such as light and water.

RESULT AND DISCUSSION

The result in table 1 shows that local methods of palm oil production such as mortar pounding, hand and bag pressing milling, foot blending, oil floating, iron mortar blending and bolt and nut manual pressing methods are used in rural areas of Ogba/Egbema/Ndoni local government. This finding is in agreement with Poku (1998) who reported that pounding cooked/soaked fruits in alrge wooden or concrete mortars with a wooden pestle and foot trampling, cooked but cold fruits in canoes or specially constructed wooden troughs are used in the study area. It is also in agreement with Omereji (2005) and Olagunji (2008) who reported that outdated equipment was mostly used during palm oil processing.

Table 2 shows that youths and the educated adults are not involved in palm oil production. Those involved are

uneducated adults using adult strangers as casual workers in the area. This finding is in agreement with Carrere (2001) and Olagunji (2008), who added tha the adult women who participated in palm oil production crack the nuts to recover the seeds for domestic use and sales while other processes such as cutting of the bunches from the trees, transportation, etc. are done by the men.

Table 3 shows that there are no social amenities such as good road, good water, electricity, no good market and no government assistance of any kind to the people in the palm oil production business. This is also in agreement with Stridher and Ade-Oluwa (2007) who found out that lack of modern farm mechanization, inadequate infrastructure, poor funding, etc. are bane of oil production in the area of study.

Summary

The study sought to assess the methods of local production of palm oil in rural areas of Ogba/Egbema/Ndoni Local Government Area of Rivers State.

To achieve this, the researcher designed a 14-item structured questionnaire of agree, strongly agree, disagree and strongly disagree and administered to one hundred respondents randomly sampled from five communities in the area. The data collected was analyzed using a statistical mean in which 2.5 and above was accepted while below 2.5 was rejected.

The findings show that local methods such as mortar pounding, foot blending etc. are used. Strangers are employed as casual workers by the adult owners of the businesses. Youths and educated members of the communities do not participate as they see it as dirty job. There are no good markets for the sale of the produce, no social amenities like water or electricity and no government assistance in terms of loan to expand the business.

CONCLUSION

From the result of the research, it can be concluded that:

- i. Local methods of palm oil production are used in the area.
- ii. Male and female adults in the area are directly in charge of oil production business using strangers as casual workers.
- iii. Government do not assist them in any way.
- iv. There are no social amenities such as good roads for transportation and sales of palm oil production.

Recommendation

Based on the findings of the study, the following recommendations are made:

1. Government should diversify the economy by funding agricultural sectors including oil palm and production.
2. Government should establish automated milling factories in the area to create employment and make the business attractive to young graduates.
3. Social amenities such as good roads, electricity, pipe borne water should be provided in the area to make it easy and lucrative and attractive.

4. Seminars and workshops should be organized for the rural dwellers to enable them improve in palm oil production process.

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