

Women in Local Production and Marketing of Palm Oil in Akinyele Local Government, Ibadan, Nigeria

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Abstract

Women in rural areas, constitute and play significant roles in palm oil production and marketing in Nigeria and thus occupy a dominant place in the socio-economic life of the country. In spite of these attributes, however, rural women remain the most economically and socially deprived in the society. This study, therefore, examined the challenges to production and marketing of palm oil in Akinyele Local Government Area (LGA) in Oyo State, Nigeria. From All women involved in oil palm production activities, from fruit picking to marketing, in the communities where oil mills are located in the LGA were selected for interview. The findings revealed that production and processing of the produce is largely rudimentary and inefficient, leading to production losses. The oil palm mills in the study area were all local mills and the palm species were the tall ones that are difficult to harvest. Marketing of the finished product was constrained by arbitrary and often poor unregulated pricing, leading to marginal profits. The study advocated the intervention of non-governmental organizations in the procurement and the provision of modern oil mills to boost production. Also, there is a need for government in collaboration with agricultural research outfits, to provide new breeds of oil palm species for quicker and less cumbersome harvesting of the palm nuts.

Keywords: Oil palm marketing, Rural women, Oil palm improved species, Modern oil mill, Household income.

Introduction

The oil palm is one of the most important food security crops in Nigeria. It has a number of by-products such as palm-oil, palm kernel oil, palm wine, palm kernel cake and brooms for sweeping. Palm oil, its main by-product, remains the principal source of much of the edible oil consumed in Nigeria and the rest of the West African region (Akangbe, Adesiji, Fakayode & Aderibigbe, 2011). In Nigeria, the oil palm tree grows along the coastal belt up to about 150 kilometres inland and along the Niger/Benue trough which is about 450 kilometres from the coastal line. It features regularly in the natural vegetation of the lowland humid to sub-humid areas in a belt that covers almost 24 million hectares. The palm-oil producing states in Nigeria include: Cross River, Akwa-Ibom, Abia, Imo, Rivers, Anambra, Enugu, Ondo, Ogun, Delta, Edo, Oyo and Ekiti.

Palm oil is an extractive from the mesocarp of the fruits of the oil palm tree (*Elaeis guineensis Jacq*). Palm oil possesses several characteristics which are important in determining its incorporation into food products. Such characteristics include: high solid glyceride content, giving the required consistency without hydrogenation; high resistance to oxidation; and long shelf life. (Nwodo, 2012). Palm oil when extracted is naturally reddish in colour because of its high beta-carotene content, a precursor of Vitamin A. It can be used both for edibles as cooking oil (cooking and frying in various traditional dishes), or margarine and ice cream, and for non-edible products such as soap, the production of emulsifiers, in food processing and pharmaceutical industries, and the production of toiletries and paints, among others.

Owing to its multifarious uses, palm oil has played a major role in the employment of labour since pre-colonial times because of its manual process of production (Agbamu, 2016). Till date, the mode of production still remains mostly traditional locally in Nigeria and the production processes are gender dominated. Ekinne, Onu & Unaeze (2006) noted that women are generally more involved in the processing, storage and marketing of locally-produced palm oil. From the rural to the urban centres, women were found to be very skillful and better traders in the

palm-oil business (Omirin and Okpara, 2018). For example, the marketing of palm oil has provided rural women with the opportunity to come out of the poverty shell with a psychological feeling of financial self-autonomy that reduces dependence on husbands or male relatives (Nwosu and Okon, 2013). Nonetheless, as noted by Ibekwe (2008), with the tripartite burden of child bearing, domestic chores, and agricultural activities, women are sandwiched between several constraints in the production and marketing of palm oil for sustainable financial independence.

Essentially, women in rural areas in Nigeria actively participate in many agricultural activities. Okolo (2015) stated that women contribute about 30% of the overall workforce in the agricultural production sector, about 70% of food production for household consumption, 90% of the basic processing of foodstuff, 80% of food storage and transport and 60% of harvesting and marketing of agricultural products. The incursion into the oil palm business in the south western part of Nigeria started with the farm settlements programme of the then Western Region government of the 1950s. Today, most of the oil palm trees in the region are the old and traditional species that are very tall and not easily accessible and can only be harvested by virile men, most of whom have found their way to adjoining cities. The rural communities are thus depleted, to the extent that the older generation of men are no longer capable of harvesting the ripe palm nuts during the productive seasons. Equally the manual and rudimentary production processes employed are fraught with labour intensity, inefficient yield and production losses. This study, therefore, focused on local production and marketing of palm oil by rural women in Akinyele Local Government Area of Oyo State, Nigeria and the many endemic challenges they face.

Related Literature

In 2016, the global production of palm oil was established at 62.6 million tonnes, 2.7 million tonnes more than in 2015. The production value was estimated at 39.3 billion dollars, a 2.4 billion dollar increase above the 2015 production figure. According to FAO forecasts, by 2020, the global demand for palm oil would be double these figures and triple by the year 2050 (Prokurat, 2013). Ayodele (2011) asserted that as at 2011, Nigeria was the third largest producer with approximately 2.3 million hectares of cultivation. Until 1934, Nigeria was the world's largest

producer, with both small- and large-scale producers participating in the industry. Ekenta, Ajala, Akinola and Oseni (2017) noted that the most important product of the oil palm is the palm fruit, which is processed to obtain three products of commercial importance. These are palm oil, palm kernel oil and palm kernel cake.

Falola (2018) asserted that from pre-colonial times to the early 21st century, the role and status of women in Nigeria have continually evolved. Division of labour was along gender lines and women controlled such occupations as food processing, mat weaving, pottery artifacts and cooking. Moreover, land was communally owned and although men were the head of the household in a matrilineal system, women had access to land through their husbands or parents.

Rural women hold a dominant position in the socio-economic life in Nigerian. According to Ekong (2003), the Nigerian rural economy and its urban food security are largely sustained by rural women. In spite of these attributes, rural women have remained the most economically and socially deprived in the society. Rural women not only make up a disproportionate number of rural poor which accounts for about 40 per cent of the Nigerian population, they are more vulnerable than their male counterparts in terms of menial job opportunities (Nnadozie and Ibe, 2000; Ani, 2004). The situation is further compounded by the poor economic outlook of rural areas, which consistently triggers rural-urban migration of the youth in search of elusive jobs in the urban centres. Thus, in contemporary Nigeria, in general, women have also assumed the role of family economic providers, a role which was traditionally an exclusive preserve of the men. Omirin and Okpara (2018) averred that women were bearing the burden of farming duties and household tasks, while also maintaining responsibility over family nutrition, food security and child care.

Agricultural activities are central for sustaining the family's livelihood, especially by women in the rural areas. One of such agricultural activities is palm oil production. In most cases, the men do the harvesting, however, picking, transportation and selling of the finished product has always been the traditional duty of the women. Traditional palm oil production is a physically strenuous process (Carrere, 2013, Brown and Offor, 2017). The volume of palm oil produced may be meagre owing to the production technology adopted but, in

many instances, the income generated from the activity represents an important source of revenue for village women.

However the income accruing from palm oil production is not sustainable owing to a number of challenges the women experience during the production process. Brown and Offor (2017) traced the challenges faced by women in the production and marketing of palm oil in Nigeria to the patriarchal nature of traditional society. The norms of patriarchy define men as leaders and women as dependents. This fact, according to Agbo (2009), weakens the effort of women in the promotion of local industry. In addition, women's occupation in domestic chores on the home front limits their capability to venture into other economic activities to supplement household income. Corroborating this view, Nwosu and Okon (2013) noted that rural women in Nigeria have remained the most economically and socially deprived in the society and suffer general neglect in the area of development efforts.

Also, Ekine and Onu (2008) identified inadequate credit facilities and funding as major constraints to palm oil production investors, especially for the establishment of processing mills. Orji (2006) also noted that mechanized palm-oil mills are capital intensive and this may be the main reason why very few mechanized palm-oil mills exist in Nigeria. On the other hand, the traditional methods of palm-oil production are inefficient and tedious and do not suit the physique of women.

The Setting and Methodology

Akinyele Local Government is one of 774 local governments created in 1976 in Nigeria and one of the 11 that make up Ibadan region. It occupies a land area of 464,892 square kilometres with a population density of 516 per square kilometre. The total population of Akinyele Local Government Area, according to the 2006 census is 211,811. The population, when projected at the rate of 3.2 percent growth rate becomes 368,042 in 2018. The Yoruba, who are the main ethnic group of the local government, believe in strong kinship ties as a means of holding the community together. The main occupation of the people is farming, with the production of food and cash crops such as maize, cassava, vegetables, cocoa and predominantly traditional palm-oil production. The study area has a vast array of rural communities each with a sizeable collection of palm trees thriving naturally.

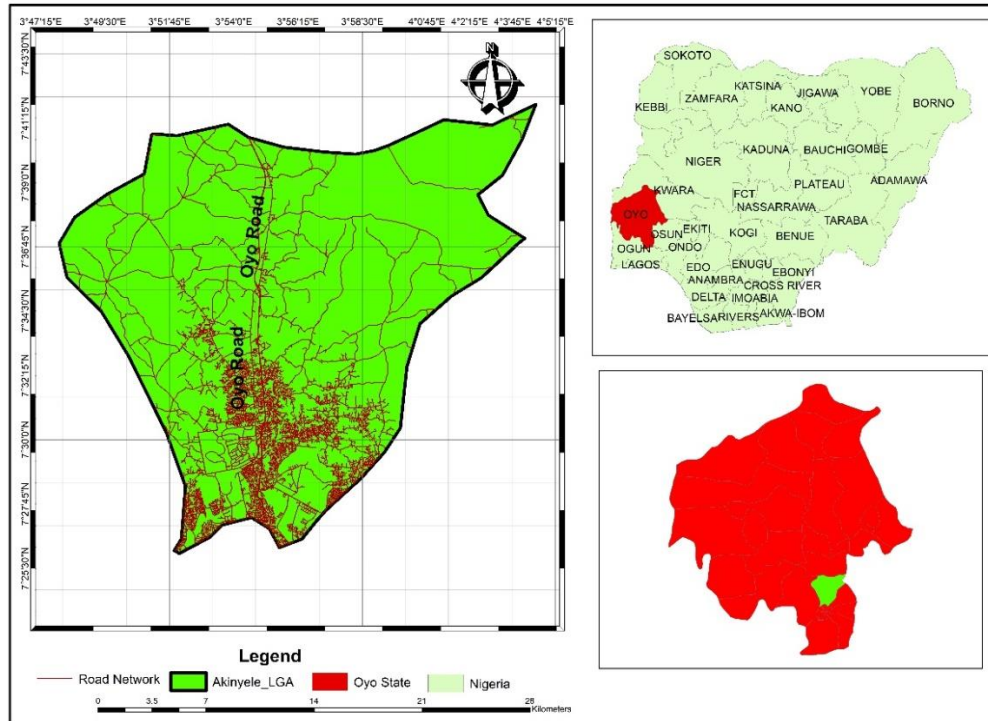


Figure 1: The study area

Source: Department of Geography, University of Ibadan.

This study is based on the survey research design. Data for the study were collected using a questionnaire, direct interviews and observation. From the sample frame of twelve (12) wards, that constitute Akinyele LGA, a purposive-cum-quota sampling technique was adopted to select the communities in the wards where a palm-oil mill and oil production activities were located. The oil mills were located in Babasango, Sagbe, Ajibode, and Akingbola. From these locations, all women (167) that were involved in oil palm production activities, from fruit picking to transportation to marketing, were selected for interviews, as shown in Table 1.

Table 1: Sample size distribution

Community/Village	Respondents
Babasango	8
Sagbe	51
Ajibode	92
Akingbola	16
Total	167

Findings and Discussion

Socio-economic profile of respondents

This section examines the socio-economic characteristics of respondents and the major factors that define the role of women in the local production and marketing of palm oil in the Akinyele communities. The age distribution of the respondents shows that the majority of the respondents (50.3%) were above 50 years (see Table 2). Similarly, most of the respondents (58.1%) were residents of the communities selected. Also 44.3% of the respondents were married and 42.5% were single. It is important to note that the singles were only involved in oil palm production at the point of marketing the product and more often than not, they were children and relatives of the primary palm oil producers.

In terms of household size for the women, 47.9% had a minimum of seven household members. For other economic activities to supplement the income from palm oil production, 38.3% were engaged in farming, 57.3% were traders, and 14.4% were involved in produce processing and other menial household occupations. As observed by Omirin and Okpara (2018), the profile of the respondents reflects the social and rural settings of this study. The reason for the involvement of women in other economic activities was attributed to the seasonality of palm oil production. This corroborates the work of Okolo (2015) who noted that in most parts of the country, palm oil production is mostly done twice annually.

Table 2: Socio-economic profile of respondents

	Ajibode	Akingbola	Babasango	Sagbe	Total
Age (Yrs)					
20-30	7 (7.6%)	1 (6.2%)	1 (12.5%)	2 (3.9%)	11 (6.6%)
30-40	31 (33.7%)	5 (31.3%)	2(25.0%)	17 (33.3%)	55 (32.9%)
40-50	7 (7.6%)	2 (12.5%)	2 (25.0%)	6 (11.8%)	17 (10.2%)
Above 50	47 (51.1%)	8 (50%)	3 (37.5%)	26 (51.0%)	84 (50.3%)
Marital status					
Married	39 (42.4%)	8 (50.0%)	5 (62.5%)	22 (43.1%)	74 (44.3%)
Single	39 (42.4%)	6 (37.5%)	3 (37.5%)	23 (45.1%)	71 (50.0%)
Widowed	14 (15.2%)	2 (12.5%)	0 (00.0%)	6 (11.8%)	22 (13.2%)
Household Size					
4 – 6	45 (48.9 %)	10 (75.0%)	6 (75.0%)	26 (50.9%)	87 (52.1%)
7 – 9	47 (41.1%)	6 (25.0%)	2 (25.0%)	25 (49.1%)	80 (47.9%)
Occupation					
Farming	31 (31.7%)	8 (50.0%)	4 (50.0%)	21 (41.2%)	64 (38.3%)
Trading	42 (45.7%)	8 (50.0%)	4 (50.0%)	25 (49.0%)	79 (47.3%)
Produce processing	19 (20.0%)	0 (0.0%)	0 (0.0%)	5 (9.8%)	24 (14.4%)
Monthly Income (₦)					
Below 20,000	78 (84.8%)	14 (87.5%)	5 (62.5%)	38 (74.6%)	135 (80.8%)
20,001- 30,000	10 (10.8%)	2 (12.5%)	2 (25.0%)	9 (17.6%)	23 (13.8%)
Above- 30,000	4 (4.4%)	0 (0.0%)	1 (12.5%)	4 (7.8%)	9 (5.4%)

Palm oil production and marketing by the rural women in the study area was found to contribute significantly to total household income of the respondents. The seasonal nature of the activity peaks around the production period of October to April annually. For most of the women sampled, palm oil production increases the overall income of 8.0% of respondents by as much as 250% during the production months. The benchmark of about ₦20,000 monthly income moved to about ₦30,000 averagely during the production months (table 2). This is an indication that with improved new species of palm seedlings, production

can be done in a seamless manner throughout the year, thus raising the overall income of the women (Nwosu and Okon, 2013).

Reasons why rural women engage in palm oil production and marketing

The distribution of respondents according to reasons for engaging in palm oil production and marketing is presented in table 3. The first reason which is a result of the demand-pull factor, is the generation of additional income for household expenditure by women, as most of them have large family sizes and great financial needs. Other reasons which include economic empowerment (11%) reduction of poverty, (10%) food security (8%) and seasonal vocation (7%) are apparently subsets of the main reason, which is all about generating additional income (55.1%).

Table 3: Reasons for rural women engagement in palm-oil production and marketing

Possible Reasons	Ajibode	Akingbala	Babasango	Sagbe	Total %
Generation of additional income	52	10	4	26	92 (55.1)
Economic empowerment & survival strategies	12	3	2	1	18 (0.11)
Reduction of poverty	4	1	0	12	17 (0.10)
Generate fund for other farm investments	8	1	0	5	14 (0.08)
Assurance of household food security	6	1	2	5	14 (0.08)
Seasonal vocation	10	0	0	2	12 (0.07)

The need for rural women to improve their social class from housewives to enterprising and financially buoyant women is a contemporary trend. In most traditional settings, the role of women is changing from mere housewives to equal partners in the economic sustainability of the household. As opined by Varley (1996) and Worku and Woldetsadik (2013), women have taken responsibility as breadwinners and household financial enablers to supplement the

dwindling financial capacity of the men as a result of unemployment, under-employment and limited livelihood options in developing countries.

Palm-oil marketing strategies

Table 4 reflects the various strategies used in palm oil marketing by women as revealed by the respondents from the four locations of this study. The results show that sales to wholesale traders with transactions mostly during community periodic market days ranks very high as the marketing strategy for processed palm oil. The itinerant hawking of the commodity by the respondents is usually undertaken by retailers. Some respondents, however, adopt bulk sales to local industrialists or wholesalers. For this type of sales arrangement, as deduced from the interviews conducted, the would-be-buyers pay some money upfront to have the option of first refuser whenever the palm oil is produced. In this type of arrangement, the price for the final product is set before the production. If there is a price fluctuation, the agreed price is binding on both parties. The women use the money paid upfront to augment the family's income, especially during the off-season of palm oil production.

Table 4: Techniques used in palm-oil marketing

Techniques for Palm-Oil Marketing	Respondents (N=167)	Percent
Processed oil taken to periodic or daily markets	134	80.2
Display of palm oil by roadside	24	14.4
Direct sales to wholesale traders	130	77.8
Itinerant hawking from community to community	124	74.3
Direct sales to retailers at the oil mill	127	76.0
Direct purchase by buyers	122	73.1
Bulk purchase by industries	98	58.7
Sales retention till off-session	86	51.5

Constraints to palm-oil production and marketing

The result in Table 5 shows that one of the major constraints to palm oil production identified by the respondents was poor access for women to credit finance to adopt new technologies needed to expand the scope of business on an annual basis. The majority (74.0%) of them

lamented the reluctance of financial institutions, such as banks, to advance grant and loans to finance their projects. At the same time, the seasonal production of the commodity does not allow for continuous reliance on local cooperative and thrift associations for effective investments in the project. Another area of contention reported by 71.3% of the women was the old and tall nature of the palm trees that could delay harvesting, especially when the limited number of palm tree climbers and harvesters are not available. Any delay when the palm fruit is ripe allows rodents and birds to feed on the fruit, thereby reducing the quality and volume of yield. Also as noted by 50.9% of the respondents, the locations of the local oil mills are environmentally determined and more often than not they are far away from the oil palm plantations. This could lead to additional costs incurred transporting the fruit to the oil mill site. This situation is made more precarious owing to non-availability of modern palm oil extracting machines and presses within most of the localities where oil is produced. The location of the existing mills, according to 52% of the respondents, may not be too efficient for local production in view of the large of the rural communities with women engaged in the business.

Poor storage facility also affects the shelf life of palm oil and profitability of the producers. When there is glut in the market, especially at the peak of the production period, poor storage facility forces the producers to sell at cheaper prices. This has implications for marketing strategies and the profit realized from investing in palm oil production. For example, 75.4% of the respondents complained of the lack of storage infrastructure for processed oil. This necessitates immediate evacuation from the mill and more transportation costs. In addition, 68.7% of the respondents complained of the negative activities of the third party in the negotiation and pricing of the final product, often resulting in marginal profits for the investors. The combination of these challenges coupled with the arduous effort required in the production process may have implications for household food security and the disposable income available to the household, especially female-headed households.

Table 5: Constraints to palm-oil production and marketing

Constraint to Oil Palm Production	Respondents	Percent
Inaccessibility to agro-allied credit finance to operate the business	123	73.7
Difficult in locating climbers to harvest old and tall palm trees	119	71.3
Lack of modern oil mills for efficient processing and production	85	50.9
Lack of storage infrastructure for processed oil	126	75.4
Inefficient distributive and marketing skills for processed oil	128	76.6
Marginal profit on investment due to poor pricing of the final product	115	68.7

The relationship between the local production materials, marketing and palm oil processing was analysed. As shown in Table 6, local production materials ($B= 0.021$; $t=0.281$; $p < 0.05$), and marketing ($B =0.465$; $t =6.235$; $P < 0.05$) jointly and significantly have relationship with palm oil processing in the study area. Since $R =.458^a$, R Square = 0.209; Adjusted R Square = 0.200 $F_o = 21.708$, it could be inferred that production materials and marketing have a joint relationship with palm oil processing by 20.9%. However other variables not included in this model may have contributed to the remaining variance. It is, therefore, worthy of note that marketing had the largest contribution to the level of relationship.

Table 6: Analysis of local production and marketing of palm oil

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	9.184	2.140		4.292	0.000		
Local Production Materials	0.020	0.071	0.021	0.281	0.009	0.868	1.152
Marketing	0.409	0.066	0.465	6.235	0.000	0.868	1.152

$R = 0.458^a$; R square = 0.209; Adjusted R Square= .200; $F_o = 21.708$

Conclusion and Recommendation

Palm oil production and marketing by rural women in the study area could be seen as an off-farm income strategy that has not received the required attention in discussions about rural development and poverty alleviation. The participation of women in this trade is of great importance to rural productivity and employment opportunity, by effects boosting the household income and by inference growing the share of rural incomes. The contribution becomes significantly important for food security and farm sector competitiveness in the industrial production chain. This study further revealed the rudimentary production method, infrastructural deficiencies and institutional factors that, if addressed, can help to boost future production strategies. In view of this, rural women should be encouraged to increase their scale of production through the adoption of modern processing techniques supported by loans and grants from government and the private sector. Interventions in this area are urgently required, especially by government agencies at the rural level (local government), non-governmental organizations (NGOs) and other private institutions that can empower the women in the use of large oil mills with modern and advanced technology in which the production and processing of palm oil is automated. For example, the adoption of the hydraulic press machine reduces the intensity of labour and aggravated production losses. This should be accompanied by training on the job programmes for its effective utilization.

It is equally imperative that the old species of palm oil trees are gradually phased out in the study area through agricultural researchers' intervention for improved breeds of palm oil seedlings that would make for easier harvesting of fruits that produce more oil. This study also advocates for the intervention of financial institutions in the provision of soft credit facilities for women to assist in their investment and the ease of production of palm oil. There should also be provision of good rural roads for prompt evacuation of palm fruits to the mills and from the mills to the city markets. Finally, the marketing strategies of the commodity should also be improved upon with the intervention of the local government agricultural extension workers in the provision of storage facilities for the processed oil and the control of palm oil prices.

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