

# Rural Women Involvement in Oil Palm Value Chain in Akwa Ibom State, Nigeria

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## ABSTRACT

The study examined the involvement of rural women in oil palm value chain activities in Akwa Ibom State, Nigeria. Data was collected from two hundred and ten (210) respondents purposively selected from rural oil palm women farmers in Akwa Ibom State. Collected data was analyzed using frequencies, percentage and ranking method. The results showed that the respondents were in their prime age (youthful age/active age) 26-50 years of age. Majority of the respondents also had formal education (primary, secondary or tertiary). Furthermore, most of the respondents (63.8%) were married as that served as labor for the oil palm value chain activities. Also, most of the respondents had a household size of 1-5 persons. A greater percentage of the respondents equally had 11-20 years experiences in oil palm business. In assessing the oil palm value activities the respondents were involved in, the result revealed that the respondents were actively involved in the processing, marketing and storage of the oil palm business. They were less involved in the planting and harvesting of the palm fruits which was more cumbersome and manly. Among the constraints, lack of finance was identified as the topmost constraint to risk, high cost of labor, high cost of transportation, theft etc. The study recommended that government/stakeholders should ensure that the rural women have access to credit and technology to make the business more attractive to the young women.

**Keywords:** Agriculture, Constraints, Involvement, Oil palm, Rural women, Value chain.

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### Highlights of this paper

- The research intention was to examine the aspect of oil palm value chain that rural women in the study area will more active in so that the government and stakeholders can channel resources to build their productive capacity for improved production and attainment of food security in the state.

## 1. INTRODUCTION

Oil palm also known as *Elaeis guineensis* is one of the most important economic tree crops and its cultivation serves as a source of livelihood for many rural families in Nigeria. Oil palm is an economic tree crop with various essential components which are of economic value like the fronds, the leaves, trunk and the roots which can be used for other purposes like palm oil, palm wine, palm kernel oil, broom and palm kernel cake. According to Akangbe, et al. [1] due to the economic importance of oil palm, it is often referred to as a crop of multiple values. In the view of Poku [2]; Olagunju [3], oil palm is a communal cash crop in Nigeria that has shown to serve as livelihood resources for many smallholder farming families in the rural area. Oil palm has been a major source of foreign exchange to Nigeria and income generating venture to most segment of the rural population in the Southern Nigeria Onoh and Peter-Onoh [4]. Its importance outside to the economy of Nigeria, ranges from production of food, employment, income to farmers and raw materials for industries. Omonona and Agbaje [5]; Tiku and Bullem [6]; PIND [7]; Kehinde [8]; Partnership Initiatives in The Niger Delta (PIND) Foundation [9] further buttress on the economic importance of oil palm tree as outside the palm oil gotten from it, the by products like the palm kernel can be used for palm kernel oil, palm kernel cake which serves as animal feed while the fronds can be used to make broom, fire wood and sometimes to make thatch house and the slurry can be used for the production of soap and fertilizer. In the course of these processes, the oil palm business create job for the people mostly the rural people. Despite the important of oil palm business is dominated predominantly by the smallholder farmers who uses outdated production methods [10].

A value chain in agriculture describes the range of activities from production, processing, distribution and marketing of a specific traded commodity and the set of actors that brings the agricultural product from production in the field to final consumer's table and at each stage, value is added to the product. According to EME [11]; Omonona and Agbaje [5] oil palm value chain entails the process of sourcing for inputs, the production, the processing and the delivery of the end product. And the actors involve in the oil palm value chain are the growers, producer, processors, marketers and consumers.

Although oil palm is grown in 24 states of Nigeria namely; Abia, Akwa Ibom, Cross River, Rivers, Bayelsa, Imo, Anambra, Ebonyi, Enugu, Delta, Edo, Ondo, Ogun, Osun, Oyo, Ekiti, Benue, Kwara, Kogi, Nasarawa, Plateau, Taraba, Adamawa and Kaduna [12]; [13]. And among these, Delta, Edo, Akwa-Ibom, Cross River, Bayelsa, Rivers, Anambra, Enugu, Imo, Abia, Ogun, Ondo, Oyo and Ekiti are the major palm oil producing states in Nigeria.

Banji and Okunade [14]; ILO [15]; (FAO, 1985 cited in Sabo [16]) noted that in many countries of the world, women work round the year to produce food crops while the task of the men is replanting which occupies a small part of the agricultural year. About 78% of the women are active in agriculture as compared to their male counterparts and they spent 40-65% of all hours spent in the agricultural activities thus providing more than two thirds of the workforce in agriculture.

Therefore, the objective of this study was to;

1. Examine the socio-economic characteristics of the rural women.
2. Examine the oil palm value chain activities involved in.
3. To evaluate the constraint faced by the rural women in the oil palm value chain.

## 2. METHODOLOGY

### 2.1. Study area

Akwa Ibom State is located in south-south Nigeria and the State lies between latitude 4°31 and 5°31 North and longitude 7°35 and 8°35 East; occupies a total land area of 7, 254, 935km<sup>2</sup> and has an estimated population of 3, 920, 208 [17]. Located at an elevation of 42.58 meters (139.7 feet) above sea level, Akwa Ibom has a Tropical monsoon climate (Classification: Am). The city's yearly temperature is 28.47°C (83.25°F) and it is -0.99% lower than Nigeria's averages. Akwa Ibom typically receives about 342.56 millimeters (13.49 inches) of precipitation and has 294.37 rainy days (80.65% of the time) annually.

### 2.2. Sampling Procedures

Multi-stage random sampling procedure was used in the study. The first stage involved simple purposive selection of three local government areas (LGAs) (Ikot Ekpene, Etinan, Abak) based on the concentration of oil palm business. The second stage involved simple random selection of five communities from the LGAs. The third stage involved purposive selection of 42 women oil palm respondents from each of the communities which made up the sample size (210) for the study.

### 2.3. Data Collection and Analysis

Data collection was done with the aid of administered questionnaires. Descriptive statistics involving the use of frequency counts and percentages were used to describe the socio-economic characteristics of the respondents, type of value chain activities engaged in and the constraints.

## 3. RESULTS AND DISCUSSION

### 3.1. Distribution of the Respondent's Socio-Economic Characteristics

#### 3.1.1. Age

The result in Table 1 showed that 58.5% of the respondents were within the age of 26 – 50 years which indicated that most of the respondents were still in their youthful and active age. The oil palm value chain activities required energy which the result confirmed. 28.6% and 12.9% of the respondents were within the age of 51 – 75 years and 1 – 25 years. The low number of women within the age of 1 – 25 years can be attributed to the fact oil palm value chain activities is a job that involves dirt/stains to the respondents. This agreed with Fabiyi, et al. [18]; Nwankwo and Nwosu [19] that majority of the women farmers were young women with the age of 20-49 years of age and were likely to contribute more effectively to family welfare and general economic growth.

#### 3.1.2. Marital Status

The result showed that 63.8% of the respondents were married. This was as the result that oil palm value chain activities can be more beneficial to a family person in that the family members would assist in one of the value chain activity or the other. Another reason can be that married women get actively engaged in the oil palm value chain in order to support their family. 23.3%, 6.7% and 6.2% showed that the respondents were widowed, single and separated/divorced. The low percentage of single respondents involved in the oil palm value chain can be an affirmation to the fact that young women (single) who do not have family to cater for, do not consider the business as a neat business. This agreed with Fabiyi, et al. [18] that many of the women farmers were married followed by widowed.

### 3.1.3. Level of Education

The result showed that most of the respondents (84.3%) had a formal education (primary, secondary or tertiary). Most of the respondents acquiring education will expose them to use of modern technology in oil palm value chain activity. The result also showed that 15.7% of the respondents had no formal education but are into the business because at times the returns can be high and one of the businesses available in the rural community. This agreed with Fabiyi, et al. [18]; Nwankwo and Nwosu [19] who stated that majority of the respondents had formal education mostly primary and secondary education. Educational attainment impacts positively on business as it enhances business skills. Nurudeen [20] had reported that level of education enhances business skills.

### 3.1.4. Experience

The result showed that 33.8% had within 11 – 20 years of experience which helped the respondents to avert the risk involved in oil palm business. The years of experience also assisted the respondents to try several technologies to reduce the stress involved in oil palm value chain and also improve the returns. 29.5% had 21 – 30 years of experience, 28.1% had 31 years and above, and 8.6% had 1 -10 years of experience. This corresponded with the findings of Fabiyi, et al. [18]; Nwankwo and Nwosu [19] that 65% of the respondents had 11-40 years of framing experience.

### 3.1.5. Household Size

The result showed that majority (89.5%) of the respondents had a household size of 1 – 5 persons. The large household size attest to the fact that oil palm value chain business is cumbersome and required a lot of labor which a large household size can supply. Also, the cost of labor would be reduced as the respondents would employ family labor in the business. About 10.5% of the respondents had a household size of 6 – 10 persons which also showed that family labor is needed in oil palm value chain business.

**Table 1.** Distribution of the respondent's socio-economic characteristics.

Sn	Variables	Frequency (n = 210)	Percentage (100%)
1	Age (years)		
	1 – 25	27	12.9
	26 – 50	123	58.5
	51 – 75	60	28.6
2	Marital status		
	Single	13	6.2
	Married	134	63.8
	Widow(er)	49	23.3
	Separated/Divorced	14	6.7
3	Level of education		
	No formal education	33	15.7
	Formal education	177	84.3
4	Farming experience (Years)		
	1 – 10	18	8.6
	11 – 20	71	33.8
	21 – 30	62	29.5
	31 and above	59	28.1
5	Household size (No)		
	1 – 5	188	89.5
	6 - 10	22	10.5

Note: Field study, 2022.

### 3.2. Distribution of Women According to Oil Palm Value Chain Activities

In the oil palm value chain activities as showed in Table 2 below, the rural women were more into processing (27.6%), followed by marketing (24.8%), 23.3% were involved in the storage of the oil palm produce, 21.4% were involved in harvesting and 2.9% were involved in planting. The result buttressed the fact that processing, marketing, storage and harvesting of oil palm was seen as a woman's job and therefore, women and their children were more into this aspect of oil palm value chain. The result concurred with Adamu, et al. [21]; Nwankwo and Nwosu [19] that women were more prominent in oil palm extraction activities. The planting and the major cutting of ripe oil palm bunches was left to the men as this was cumbersome and manly in nature. According Ibitoye, et al. [22]; Adesiji, et al. [23] to male were involved in production of oil palm as cultivation/production activities and are more tedious which may be more compatible with men nature than for their women counterpart. Overall result, showed that there is opportunity of more employment in the oil palm value chain activities that can curb the high unemployment state of the State and nation. The result confirmed the findings of Ohimain and Izah [24]; Ohimain, et al. [25]; Alabi, et al. [26] that the oil palm industry was lucrative and create employment opportunities.

**Table 2.** Distribution of women according to oil palm value chain activities.

S/N	Variables	Frequency (n= 210)	Percentage (100)	Ranking
1	Planting	6	2.9	5 <sup>th</sup>
2	Harvesting (Gathering of loose fruits and picking of fruits)	45	21.4	4 <sup>th</sup>
3	Processing (Removal of debris, covering of chopped bunches, digestion of boiled oil, boiling of palm fruit, clarification of oil, extraction of oil, chopping of bunches)	58	27.6	1 <sup>st</sup>
4	Storage	49	23.3	3 <sup>rd</sup>
5	Marketing	52	24.8	2 <sup>nd</sup>

Source: Field study, 2022.

### 3.3. Constraints to Women Involvement in Oil Palm Value Chain

The result in Table 3 showed that the respondents indicated lack of finance (18.57%) as the top most constraint to go into large scale oil palm value chain, next was the risk (17.14%) associated with the oil palm value chain, high cost of labor (15.71%), high cost of transportation (15.24%), theft (13.33%), lack of market (11.43%) and lack of technology (8.57%). Overall, lack of finance was the major constraint encountered by rural women in the oil palm value chain business as the business required huge capital investment. The result agreed with Chukwu and Nwaiwu [27]; Fabiyi, et al. [18] who stated that lack of funds and poor access to capital constituted the major challenge facing oil palm industry in Nigeria.

**Table 3.** Constraints to women involvement in oil palm value chain.

S/N	Variables	Frequency (n=210)	Percentage (100)	Ranking
1	Lack of finance	39	18.57	1 <sup>st</sup>
2	Lack technology	18	8.57	7 <sup>th</sup>
3	Risk (Injuries, loss, unstable price, dirt)	36	17.14	2 <sup>nd</sup>
4	High cost of labor	33	15.71	3 <sup>rd</sup>
5	Theft	28	13.33	5 <sup>th</sup>
6	High cost of transportation	32	15.24	4 <sup>th</sup>
7	Lack of market	24	11.43	6 <sup>th</sup>

Source: Field study, 2022.

#### 4. CONCLUSION

Oil palm value chain business is the range of activities from production, processing, distribution and marketing of the oil palm and the set of actors that brings the agricultural product from production in the field to final consumer's table and at each stage, value is added to the product.

From the outcomes of the study, the results revealed that most of the rural women were involved in the processing, marketing and storage of the oil palm and left the planting and harvesting to the men because of its cumbersomeness and the energy required in it. The major constraints as identified by the respondents were lack of finance, risk, high cost of labor etc. In general, the oil palm business is a lucrative one and is capable of creating more employment at each stage of the value chain to the rural dwellers.

The study therefore recommended that government/stakeholders should ensure that the rural women in oil palm business have access to credit, technology and trainings mostly in the processing, storage and marketing aspect which the rural are more active in.

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