

## **WOMEN'S INVOLVEMENT IN CASSAVA PROCESSING IN IJEBU ODE LOCAL GOVERNMENT AREA, OGUN STATE, NIGERIA.**

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### **ABSTRACT**

*Women play major responsibilities in meeting the challenges of agricultural production and development in Nigeria and Sub-Saharan Africa. The study assessed women's involvement in cassava processing in Ijebu Ode Local Government Area, Ogun State, Nigeria. Two stage sampling procedure was used in selecting 120 women cassava processors. Data were obtained with the aid of interview schedule and subjected to frequency counts, percentage means and standard deviation. Results showed that mean age of the women cassava processors was  $42.66 \pm 11.76$  years, majority (80%) were married and had mean household size of 5 persons. The mean of cassava processing experience was  $12.37 \pm 7.59$  years. Majority (67.5%) engaged in cassava processing for commercial reasons. Majority (71.7%) had no access to credit. Majority (62.50%) of the women cassava processors were at a medium level of involvement but their processing activities were majorly constrained by inadequate capital (92.5%), poor market situation (82.5%), high cost of transportation of processed cassava (78.3%), poor access to credit (65.8%), high cost of processing materials (61.7%), inadequate extension staff visitation (56.7%), high cost of labor (55.0%), and preoccupation with house chores (53.3%). The study concluded that the women cassava processors in the study area engaged in cassava processing at a medium level and recommended that governmental and non-governmental agencies should grant the women cassava processors access to credit so as to improve their cassava processing activities. Also, governmental and non-governmental agricultural extension agencies/agents should improve visitation to the women cassava processors so as to intimate them with improved/adequate cassava processing materials/ technologies.*

**Key words:** *Cassava, involvement processing, women, Nigeria.*

### **INTRODUCTION**

Agriculture is the bedrock of any economy especially in Africa (Adama *et al.*, 2018). According to National Bureau of Statistics (2019), Agriculture contributed 21.91 percent to the Gross Domestic Product (GDP) in the first quarter of year 2019. According to Omotayo and Oladejo (2016), cassava is an important crop in Nigeria, and in some regions, its annual regular consumption exceeds 300 kg per person. Cassava is a versatile perennial crop that

adapts easily to different climates and soil conditions and that can be cultivated year-round. It is a dietary staple carbohydrate for most Nigerians, cutting across cultural and social divides. In Nigeria, an estimated 90% of cassava produced is processed into food. Seventy percent of the cassava processed into food is turned into garri, a product achieved when cassava is fermented, dried, and ground. The remaining cassava processed into food takes the form of elubo or lafun, fufu, or abacha.

There is high request for cassava for industrial use, majorly as a local and cheaper substitute for imported raw materials and semi-finished products. Locally, there is a high demand for quality cassava flour (QCF). It currently accounts for 10% of Nigeria's industrial market and is used as a replacement in bread flour, biscuits, and confectioneries, adhesives, seasonings, and hydrolysates for pharmaceutical products. Another industrial use is in the production of native and modified starches (Otekunrin and Sawicka, 2019).

The role played by women in agriculture and the rural society cannot be over emphasized. (Adeoye *et al.*, 2018). Women are employed in the agricultural sector predominantly as self-employed farmers, unpaid labor on family farms and paid or unpaid workers on farms owned by others and agricultural businesses (FAO, 2011). Nigerian women are traditionally in charge of most of the agricultural labor in the homestead and are responsible for household food security and augmenting family incomes. According to Palacios-Lopez *et al.* (2017), the number of women engaged in agriculture as a percentage of the economically active population in the South of Nigeria is roughly equal to that of men, with women constituting 51% of the agricultural labor force.

According to Kehinde and Subuola (2015), fresh cassava root is a highly perishable produce with a moisture content of about 70%. It has a storage time of about 48 to 72 hours after harvesting. Physiological changes occur rapidly after harvesting due to the high moisture content which leads to rot and

decay. The tubers therefore need to be processed promptly after harvesting. The demand for cassava and its products have increased in both the national and international markets. This is as a result of the increased use of the crop for food by human and livestock as well as industrial raw material.

There is a strong association between cassava and women in Sub-Saharan Africa where cassava is often referred to as a 'woman's crop' (Forsythe *et al.*, 2016). Women often play a very active role in the processing of cassava. Cassava processing is one of the major entrepreneurial activities of rural women in Nigeria. Rural women demonstrate major role in all stages of cassava processing, starting from peeling to rinsing, grating, dewatering, fermenting, sieving as well as roasting. Bracing efforts to improve the processing of cassava will improve the lives of many households in Ijebu-Ode Local Government Area of Ogun State and Nigeria in general. In view of the above, the need to assess the involvement of women in cassava processing in Ijebu-Ode Local Government Area of Ogun State becomes essential.

### **OBJECTIVE OF THE STUDY**

The main objective of this study was to assess women's involvement in cassava processing in Ijebu Ode local government Area, Ogun State, Nigeria.

The specific objectives were to:

- i. describe the socio-economic characteristics of women involved in cassava processing,
- ii. determine the level of women's involvement in cassava processing in the study area, and to

- iii. identify the constraints to involvement of women in cassava processing in the study area.

## **MATERIALS AND METHODS**

The study was carried out in Ijebu-Ode Local Government Area (LGA) of Ogun State, Nigeria. Ogun State covers an area of approximately 16, 409 square kilometres and lies within latitude 7° North of Equator and longitude 3° East of Greenwich Meridian. It borders Oyo State to the North, Lagos State to the South, Ondo State to the East and Benin republic to the West. The 2006 provisional census figure gives the population of Ogun State as 3,751,140 (National Population Commission, 2012). The natural vegetation ranges from fresh-water swamp with mangrove forest in the Southwest and diverse forest communities to the woody Guinea savannah in the Northwest.

A two-stage sampling procedure was used in selecting 120 women cassava processors for the study. The first stage involved the purposive selection of five (5) wards out of the eleven (11) wards in the LGA due to a high proliferation of cassava processing in the wards namely; Isoku, Odo esa, Porogun, Isiwo and Ijada. The five wards selected thus constituted 45 percent of the total wards. At the second stage, twenty-four (24) women cassava processors were randomly selected from each ward making one hundred and twenty women cassava processors. Data were collected using well-structured interview schedule and analyzed with percentage, mean scores and standard deviation. Women's involvement in cassava processing was measured by providing them with a list of

practices in relation to cassava processing and were asked to indicate the extent to which they were involved. The response options were always involved, involved and never involved. They were scored 2, 1, and 0 respectively. Mean was calculated and used to categorize the scores into high, moderate and low levels. Constraints to involvement in cassava processing was measured by providing the women with a list of possible constraints and were asked to indicate which one(s) served as constraint(s) to their involvement in cassava processing. The response options were yes and no. They were scored 1 and 0 respectively. Percentage was calculated and used to rank the scores.

## **RESULTS AND DISCUSSION**

### **Socio-economic characteristics**

Results in Table 1 showed that the mean age of the women cassava processors was  $42.66 \pm 11.76$  years. This shows that majority of the women cassava processors fall within their active ages and may imply better processing decision that can improve their standard of living. In addition, processing involves much energy and therefore requires middle-aged women to do the job. Adeoye *et al.*, (2018) reported a mean age of 44 years among women cassava processors in their study area. The results further showed that majority (80.0%) of the women cassava processors in the study area were married. This implies that the women cassava processors had marital relationships and as such may have responsibilities. It further implies that part of the products (garri) and proceeds (money) from cassava processing can be utilized by the women cassava processors to cater for their family members. This result agrees with the findings of Oladejo (2019) that majority

of the women cassava processors in the study area were married.

The results further showed that the mean years of experience was  $12.37 \pm 11.76$  years, implying that majority had been into cassava processing for more than a decade and as such should be able to make optimal decisions. The results further showed that

majority (71.7%) of the women cassava processors had no access to credit. This implies that there could be some new technologies in cassava processing which the women cassava processors may not be able to afford without having access to credit and this may impede their involvement in cassava processing.

**Table 1: Distribution of women cassava processors according to their socio-economic characteristics (n = 120)**

Characteristics	Percentage	Mean
<b>Age (years)</b>		
≤30	19.2	42.66±11.76 years
31-60	76.7	
≥61	5.0	
<b>Marital status</b>		
Single	10.0	12.37±7.59 years
Married	80.0	
Separated	1.7	
Widowed	8.3	
<b>Years of processing</b>		
0-10	48.3	12.37±7.59 years
11-20	30.8	
21-30	20.8	
<b>Access to credit</b>		
Yes	32.3	
No	71.7	

**Source: Field survey, 2020.**

#### **Extent of women's involvement**

Results in Table 2 showed that roasting/frying came first with mean score of 1.78, this was followed by peeling with mean score of 1.77. rinsing came third with mean score of 1.55 followed by grating with mean score of 1.47. Sieving came fifth with mean score of 1.45 followed by pressing and dewatering with mean score of 1.43.

Fermentation with mean score of 1.22 came last. From a measurement scale of 0, 1, and 2 for never involved, involved and always involved respectively, it is regarded that the women cassava processors were involved in any cassava processing practice that has a mean score of at least 1. This implies that the women cassava processors were involved in all the cassava processing practices.

**Table 2: Distribution of women cassava processors according to their extent of involvement in cassava processing**

S/N	Processing practices	Mean scores	Rank
1.	Roasting/frying	1.78	1 <sup>st</sup>
2.	Peeling	1.77	2 <sup>nd</sup>
3.	Rinsing	1.55	3 <sup>rd</sup>
4.	Grating	1.47	4 <sup>th</sup>
5.	Sieving	1.45	5 <sup>th</sup>
6.	Pressing and dewatering	1.43	6 <sup>th</sup>
7.	Fermentation	1.22	7 <sup>th</sup>

Source: Field Survey, 2020

### Level of involvement

The results in Table 3 showed that majority (62.50%) of the women cassava processors were at a medium level of involvement, few (9.20%) had high level of involvement, and 28.30 percent of the women cassava processors had a low level of involvement.

The overall result implies that the women cassava processors had a considerable level of involvement in each of the processing activities involved in cassava processing in the study area. It further implies that the women cassava processors play important roles in food production and improvement of their standard of living.

**Table 3: Level of women's involvement in cassava processing**

Level of involvement	%
Low (Below 7.55)	28.30
Medium (Between 11.09 and 7.55)	62.50
High (Above 11.09)	9.20

Source: Field Survey, 2020

### Constraints to involvement of women in cassava processing

Results in Table 4 showed that inadequate capital ranked first as identified by 92.5% of the respondents, poor market situation ranked second at 82.5%, high cost of transportation of processed cassava ranked third at 78.3%, poor access to credit ranked fourth at 65.8%, high cost of processing materials ranked fifth at 61.7%, inadequate extension staff visitation ranked sixth at 56.7%, high cost of labor ranked seventh at 55.0%, preoccupation with house chores ranked eighth at 53.3%, and inadequate water supply ranked ninth at 45.0%. From a scale of 1 to 100 per cent, constraints that were identified by at least 50 per cent of the respondents were used as benchmark for the identified constraints. This

means that 8 out of the constraints could be regarded as identified.

This result showed that inadequate capital, poor market situation, high cost of transportation of processed cassava, poor access to credit, high cost of processing materials, inadequate extension staff visitation, high cost of labor and preoccupation with house chores were the identified constraints to the women's involvement in cassava processing. This result inferred that any intervention that would be applied to solve the identified constraints to the women's involvement in cassava processing in the study area should be applied mostly to solve the identified constraints in ascending order. Adeoye *et al.* (2018) also reported that inadequate capital is a major constraint to cassava processing in the study area.

**Table 4: Constraints to involvement of women in cassava processing**

Constraint	Percentage	Ranking
Inadequate capital	92.5	1 <sup>st</sup>
Poor market situation	82.5	2 <sup>nd</sup>
High cost of transportation of processed Cassava	78.3	3 <sup>rd</sup>
Poor access to credit	65.8	4 <sup>th</sup>
High cost of processing materials	61.7	5 <sup>th</sup>
Inadequate extension staff visitation	56.7	6 <sup>th</sup>
High cost of labor	55.0	7 <sup>th</sup>
Pre occupation with house chores	53.3	8 <sup>th</sup>
Inadequate water supply	45.0	9 <sup>th</sup>

**Source: Field Survey, 2020**

## CONCLUSION AND RECOMMENDATIONS

The study concluded that there was medium level of involvement of women in cassava processing in the study area and that major constraints to women's involvement in cassava processing in the study area were inadequate capital, poor market situation and high cost of transportation of the processed cassava.

The study therefore recommended that governmental and non-governmental agencies should grant the women cassava processors access to credit so as to improve their cassava processing activities. Better transportation facilities should also be provided to improve the women's involvement in cassava processing in the study area and that governmental and non-governmental agricultural extension agencies/agents should improve visitation to the women cassava processors so as to intimate them with improved/adequate cassava processing materials/ technologies.

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