

RESEARCH ARTICLE

YOUTH INVOLVEMENT IN ENTREPRENEURIAL ACTIVITIES ALONG OIL PALM FRUIT PROCESSING VALUE CHAIN- A CALL TO SKILL DEVELOPMENT AND LIVELIHOOD SUSTENANCE IN NIGERIA

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ABSTRACT

The study specifically described the socio-economic characteristics of the oil palm processors, determined the level of involvement of the respondents in oil palm processing entrepreneurial activities and examined the constraints to oil palm processing in Ekiti State, Nigeria. Multi-stage sampling procedure was used to select a total of 180 respondents for the study while structured interview schedule was used to collect quantitative data. Data collected were analyzed using percentages and frequencies while hypotheses were tested using Chi-square, multiple regression model (MRM) and Correlation. Results showed that the mean age of respondents was 38±5years, mean household size was 6±2 persons, mean year of formal education was 15±2 years and mean monthly income was ₦45,000±23,000. Results showed that 68.7percent of the respondents indicated moderate level of involvement in oil palm processing entrepreneurial activities; 25.3percent indicated high level of involvement while very few (6.0%) indicated low level of involvement respectively. Further results showed that household size ($r = 0.224$; $p \leq 0.01$) and years of formal education ($r = 0.211$; $p \leq 0.01$) had positive and significant relationship with involvement in oil palm processing entrepreneurial activities. It was concluded from the study that majority of the respondents indicated moderate level of involvement in oil palm processing entrepreneurial activities in the study area.

KEYWORDS

Involvement, Oil Palm Fruit, Entrepreneurial Activities, Value Chain.

1. INTRODUCTION

Overtime, oil palm fruit entrepreneurial activities have been a lucrative enterprise in Nigeria. It is grown commercially in at least 43 countries of the world and accounts for almost ten per cent of the world's permanent crop land (Basiron, 2002). It originated from Africa (Malaysian Palm Oil Council, 2014) and the main oil palm belt runs through the southern latitudes of Cameroon, Côte d'Ivoire, Ghana, Liberia, Nigeria, Sierra Leone, Togo, the equatorial region of Angola and the Congo. In the early 20th century, West Africa alone exported 157 000 tonnes of palm oil with about 75 percent coming from Nigeria (Ohimain et al., 2014). Africa led the world in production and exportation of palm oil throughout the first half of the 20th century with Nigeria and Zaire taking the lead. By 1966, however, Malaysia and Indonesia had surpassed Africa's total palm oil production.

In the early and mid-1960's, Nigeria palm oil production accounted for 43 percent of the world production with an average of 1.5 million tonnes of palm oil (FAO, 2016). Three decades after, world oil palm production rose to 14.1 million tonnes with Nigeria accounting for only 7 percent of the total production (Ekenta et al., 2017). Presently, Nigeria ranked fifth in palm oil production in the world. The Nigerian government, through the Agricultural Transformation Agenda of 2012 and different Central Bank initiatives strove to reclaim the lost glory of agricultural production (with oil palm as one of the targeted crops) to address the challenges of poverty,

rural-urban migration and promoting wealth creation, job creation and food security (Federal Ministry of Agriculture and Rural Development, 2012). This feat is to be achieved by focusing on value chain activities in oil palm agriculture.

It has a reported that the major objectives of entrepreneurship are job creation, economic growth and poverty alleviation (Ahmad and Hoffman, 2007). Entrepreneurs are important drivers of economic growth, employment, innovation and productivity. According to entrepreneurship is one of the activities which can resolve many major challenges such as unemployment, low income, lack of economic diversity and others in the rural areas and also has positive impacts on other aspects of villagers' human life (Faraji et al., 2011). With believed that entrepreneurship is the major force of economic development in the village and is along with change, innovation and production services (Markley, 2005).

2. MATERIAL AND METHOD

The study was conducted in Ekiti State, Nigeria. The state is located in south-western region of the country within coordinates 7°40'N 5015'E / 7.667°N 5.250°E with a land area of 6,353 km² and population of 2,737,186 (NPC, 2006), with population projection of 3,270,800 in 2016. Ekiti State was created on 1st October, 1996 out of Ondo State by the then regime of General Sani Abacha. Its capital is Ado Ekiti. Ekiti State covers

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the former twelve local government areas that made up the Ekiti Zone of old Ondo State. Ekiti State is bounded on the South by Ondo State, on the North by Kwara State, on the East by Kogi State and on the west by Osun State. Ekiti State has 16 local government Areas, three senatorial district (North, South and Central) with six federal constituencies. Multistage sampling procedure was used to select respondents for the study. At the first stage, three local government areas was purposively selected based on relative abundance of oil palm production namely; Emure, Ise-Orun and Ikere Local government areas. At the second stage, there was random selection of six farming communities in each of the three local government selected making a total of eighteen communities. At the final stage, there was a random selection of ten oil palm fruit processors through snowball making a total of 180 respondents for the study. A well-structured and validated interview schedule was used to collect quantitative data which were summarised with percentages, means and standard deviation while Multiple regression model (MRM), Chi-square, Correlation were used to draw inferences.

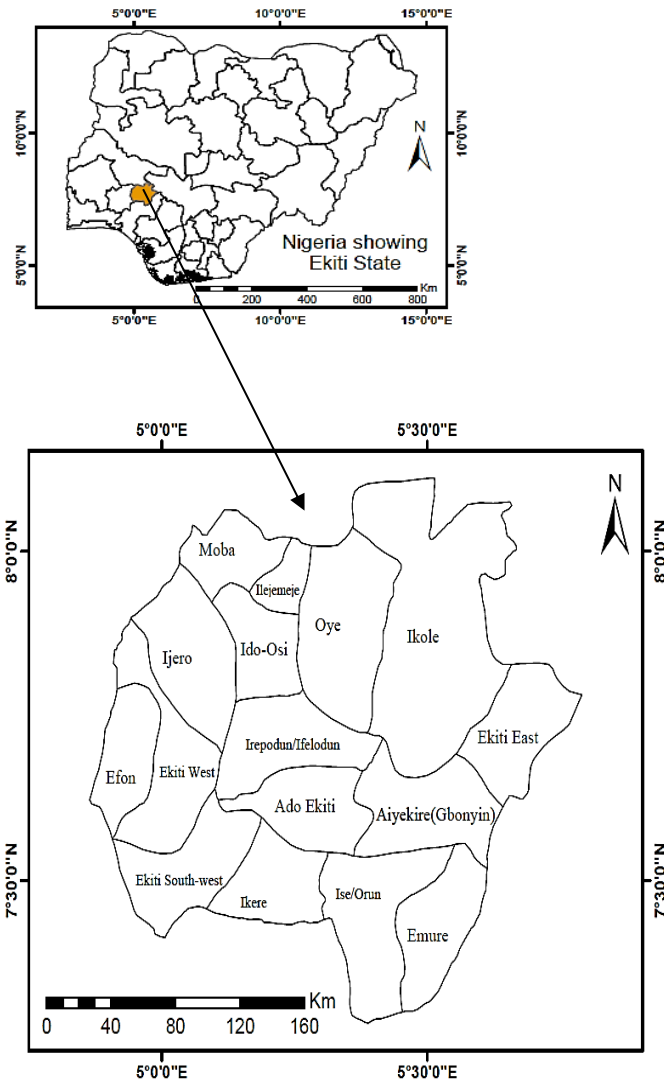


Figure 1: Map of Ekiti State showing Local Government Areas for the study

3. RESULTS AND DISCUSSION

3.1 Personal Characteristics of the Respondents

Results in Table 1 shows that the mean age of the respondents was 38±5 years, majority (76.4%) of the respondents were female, majority (83.9%) were married, mean household size was 6±2 persons, majority (88.5%) were Christians while very few (11.5%) were Muslim, their mean year of formal education was 15 ± 2 years with mean oil palm fruit processing experience of 10±3 years. This findings revealed that the respondents are still in their active age based on categorization of youth as a group of people that are found within the age group of 18 to 40 years of age (Ogunmola, 2013).

| Table 1: Showing the Socio-economic Characteristics of the respondents n = 180 | | | | |
|--|-----------|------------|------|-----------|
| Variables | Frequency | Percentage | Mean | Std. Dev. |
| Age (years) | | | | |
| 30-44 | 91 | 50.3 | 38 | 5 |
| 45-59 | 47 | 26.3 | | |
| Above 59 | 42 | 23.4 | | |
| Sex | | | | |
| Male | 42 | 23.6 | | |
| Female | 138 | 76.4 | | |
| Marital Status | | | | |
| Single | 28 | 15.5 | | |
| Married | 151 | 83.9 | | |
| Separated | 1 | 0.6 | | |
| Household Size | | | | |
| 2-4 | 91 | 50.6 | 6 | 2 |
| 5-7 | 76 | 42.0 | | |
| 8-10 | 13 | 7.5 | | |
| Religion | | | | |
| Christianity | 159 | 88.5 | | |
| Islam | 21 | 11.5 | | |
| Formal Education (years) | | | | |
| 12-14 | 42 | 23.6 | 15 | 2 |
| 15-17 | 131 | 73.0 | | |
| 18-20 | 7 | 3.4 | | |
| Years of Experience in Oil Palm Fruit Processing | | | | |
| 5-10 | 126 | 69.8 | 10 | 3 |
| 11-20 | 41 | 22.6 | | |
| 21-40 | 13 | 7.6 | | |

Source: Field Survey, 2021.

3.2 Income Per Month

Results in Figure 1 revealed that more than half of the respondents (61.3%) earned between ₦41,000 - ₦60,000 per month, 20.1 percent earned between ₦10,000-40,000, 15.1 percent earned between ₦60,001 - ₦80,000, 2.9 percent earned above ₦80,000 and very few (0.6%) earned below ₦10,000 monthly.

The mean monthly income earned by the respondents was ₦45,000.00 with standard deviation of ₦23,000. This value represents the monthly income of the respondents on their processing activities altogether and translated to ₦540,000 annually. This contradicts the findings of that income is a difficult characteristic to measure given the fact that most rural dwellers do not keep proper record of their income and coupled with the fact that sometimes they may deliberately refuse to disclose the amount they actually realized for fear of taxation and security reasons (Filusi and Ayinde, 2019).

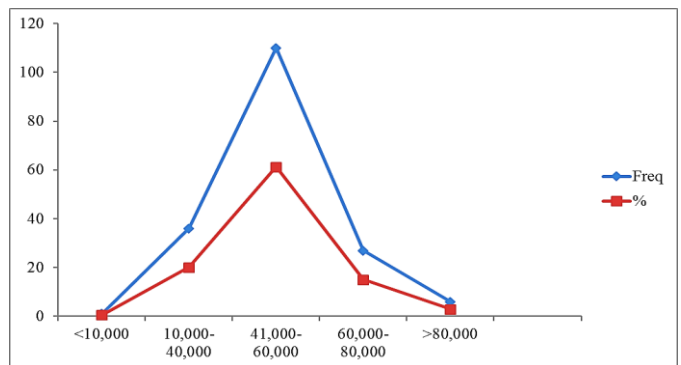


Figure 2: Distribution of respondents based on their average income per month

Mean Score = ₦45,000, Standard deviation= ₦23,000, Source: Field Survey, 2021.

3.3 Involvement in Oil Palm Fruit Entrepreneurial Processing Activities

For oil palm fruit entrepreneurial processing activities, results in Table 2 show that threshing (mean = 2.18) ranked the highest of all the entrepreneurial activities involved in by the respondents followed by oil palm fruit picking (mean = 2.17), oil palm fruit washing (mean = 2.14), oil palm fruit boiling/sterilization (mean = 2.14), digestion (mean = 2.00), oil extraction (mean = 1.67), palm nut cracking (mean = 1.59), fuel fiber

production (mean = 1.48), clarification/palm oil cooking (mean = 1.07) while palm nut recovery (mean = 0.94) ranked the least among the activities involved in by the respondents. This implies that threshing is one of the most important entrepreneurial activities among oil palm fruit processors in the study area. However, the grand mean score for the involvement oil palm fruit entrepreneurial activities is 1.74. This implies that respondents were moderately involved in all the oil palm fruit entrepreneurial activities.

Table 2: Involvement in Oil Palm Fruit Entrepreneurial Processing activities n = 180

| Oil Palm Fruit Entrepreneurial Processing activities | NI Freq(%) | SI Freq(%) | MI Freq(%) | FI Freq(%) | Mean Score | Rank |
|--|------------|------------|------------|------------|------------|------------------|
| Threshing | - | 15(8.4) | 117(65.1) | 48(26.5) | 2.18 | 1 st |
| Fruit picking | - | 11(6.0) | 128(71.1) | 41(22.9) | 2.17 | 2 nd |
| Fruit washing | 2(1.2) | 15(8.4) | 117(65.1) | 46(25.3) | 2.14 | 3 rd |
| Sterilization | 2(1.2) | 22(12.0) | 104(57.8) | 52(28.9) | 2.14 | 3 rd |
| Digestion | - | 37(20.5) | 106(59.0) | 37(20.5) | 2.00 | 5 th |
| Palm oil extraction | 7(3.6) | 82(45.8) | 54(30.1) | 37(20.5) | 1.67 | 6 th |
| Palm nut cracking | 2(1.2) | 85(47.0) | 78(43.4) | 15(8.4) | 1.59 | 7 th |
| Fuel fibre production | 30(16.9) | 67(37.3) | 48(26.5) | 35(19.3) | 1.48 | 8 th |
| Clarification/palm oil cooking | 54(30.1) | 69(38.6) | 46(25.3) | 11(6.0) | 1.07 | 9 th |
| Palm nut recovery | 93(51.8) | 24(13.3) | 43(24.1) | 20(10.8) | 0.94 | 10 th |

NI = Not involved, SI = Slightly involved, MI = Moderately involved, FI = Fully involved

Grand mean = 1.74, Source: Field Survey, 2021.

3.4 Level of Involvement in Oil Palm Fruit Entrepreneurial Processing Activities

Results from Figure 3 show the overall level of involvement of the respondents in involvement in oil palm fruit entrepreneurial processing activities in the study area. The overall level of involvement in various entrepreneurial oil palm fruit processing activities were categorized into low, moderate and high level of involvement using equal interval. Scores below 10 were regarded as low level; 11-20 were regarded as moderate level while scores above 20 were regarded as high level of involvement. The results show that about two-third of the respondents (68.7%) were moderately involved in oil palm fruit entrepreneurial processing activities, 25.3 percent were highly involved and 6 percent had low level of involvement. This implies that at least 94 percent of the respondents were either moderately or highly involved in oil palm fruit entrepreneurial processing activities. The finding indicates that the respondents had moderate level of involvement in oil palm fruit entrepreneurial processing activities in the study area.

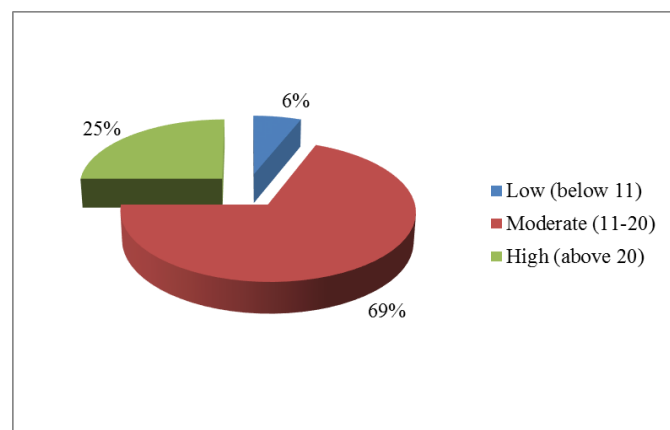


Figure 3: Pie chart showing the level of involvement in Oil Palm Fruit Entrepreneurial Processing activities, Source: Field Survey, 2021.

3.5 Constraints to Oil Palm Fruit Processing Activities

This section was developed with a view to investigate the degree to which selected features identified from literatures were affecting the involvement of the respondents in oil palm fruit processing in the study area. Results in table 3 show that inefficient processing techniques (mean = 0.96) was the highest ranked constraint identified by the respondents followed by stressful processing technique (mean = 0.82), lack of fund (mean = 0.80), inadequate labour (mean = 0.79) water scarcity (mean =

0.78), inadequate processing skill (mean = 0.67), lack of government support (mean = 0.67), poor storage facility (mean = 0.64), lack of credit facility (mean = 0.60), inaccessibility to processing facilities (mean = 0.56) lack of functional association (mean = 0.36), lack of support from family members (mean = 0.36), lack of extension visit (mean = 0.29) and fluctuating market prices (mean = 0.16) were the constraints affecting the oil palm fruit processing activities while the grand mean was 0.60. This implies that the constraints to oil palm fruit processing activities were less severe in the study area, however, all relevant stake holders should work hand-in-hand in order to eschew these problems so as to enhance sustainable interest in oil palm fruit processing activities .

Table 3: Constraints to Oil Palm Fruit Processing activities n = 180

| Constraint | Mean | Standard Deviation | Rank |
|--|------|--------------------|------------------|
| Inefficient Processing Techniques | 0.96 | 0.91 | 1 st |
| Stressful Processing Technique | 0.82 | 0.78 | 2 nd |
| Lack of Fund | 0.80 | 0.80 | 3 rd |
| Inadequate Labour | 0.79 | 0.64 | 4 th |
| Water Scarcity | 0.78 | 0.80 | 5 th |
| Inadequate Processing Skill | 0.67 | 0.74 | 6 th |
| Lack of Government Support | 0.67 | 0.77 | 6 th |
| Poor Storage Facility | 0.64 | 0.82 | 8 th |
| Lack of Credit Facility | 0.60 | 0.64 | 9 th |
| Inaccessibility to Processing Facility | 0.56 | 0.77 | 10 th |
| Lack of Functional Association | 0.36 | 0.53 | 11 th |
| Lack of Support from Family Members | 0.36 | 0.52 | 11 th |
| Lack of Extension Visit | 0.29 | 0.53 | 13 th |
| Fluctuating Market Prices | 0.16 | 0.41 | 14 th |

Source: Field survey, 2021.

3.6 Hypothesis Testing

Hypothesis one: There is no significant relationship between the socio-economic characteristics of the rural household and their involvement in entrepreneurial activities along oil palm fruit processing value chain in the study area. Chi-square analysis was used for variables measured at nominal level while Pearson correlation and multiple regression analysis were used for other variables measured at interval level. The results of the analyses are presented in Tables 4, 5 and 6.

4. RESULTS OF CHI-SQUARE ANALYSIS

Results of Chi-square analysis in Table 4 show that there was no significant association between sex ($\chi^2 = 0.366$) and religion ($\chi^2 = 1.097$) of the respondents and involvement at $P \leq 0.05$. However, there was a significant association between marital status ($\chi^2 = 19.311$) and Cosmo politeness ($\chi^2 = 14.184$) and involvement at $p \leq 0.01$. This implies that the higher the external orientation of the respondents, the higher the involvement in oil palm processing activities.

Table 4: Chi-Square Analysis Showing Association Between Selected Socio-Economic Characteristics of Respondents and Level of Effectiveness of The YCAD Programmed n=180

| Variable | χ^2 - Value | D.F | C | P-Value |
|-----------------|------------------|-----|-------|---------|
| Sex | 0.366 | 1 | 0.046 | 0.545 |
| Marital Status | 19.311 | 2 | 0.316 | 0.000** |
| Religion | 1.097 | 2 | 0.079 | 0.578 |
| Cosmopoliteness | 14.184 | 2 | 0.275 | 0.001** |

**Significant at $P \leq 0.01$; C = Contingency coefficient, χ^2 =Chi-square value, D.f = Degree of freedom, χ^2 = Chi-square, Source: Field survey, 2021.

4.1 Results of Correlation Analysis

Results in table 5 show that household size ($r = 0.224$) and years of formal education ($r = 0.211$) had significant and positive relationship with the involvement at $p \leq 0.01$. This implies that increase in house hold size of the respondents will enhance the involvement of the respondents in oil palm processing activities by using the family as source of labour. Also, years of formal education will enhance easy and quick understanding of the technicalities and procedures for processing.

Table 5: Correlation Analysis Showing The Relationship Between Some Selected Socio-Economic Characteristics and Respondents Involvement. n=180

| Variable | R-value | P-value | Decision |
|-----------------------------|---------|---------|----------|
| Age | 0.029 | 0.707 | NS |
| Household size | 0.224** | 0.003 | S |
| Years of formal education | 0.211** | 0.005 | S |
| Years of farming experience | -0.104 | 0.173 | NS |

**Significant at $P \leq 0.01$; NS = Not significant; S = Significant

Table 6: Regression Analysis Showing Relationship Between Socio-Economic Characteristics and Involvement of The Respondents in Oil Palm Fruit Processing Activities. n=180

| Community and institutional Variables | Beta coefficient | T- value | P-value |
|---|------------------|----------|---------|
| Constant | | 11.201 | 0.000 |
| Age | 0.740 | 1.398 | 0.133 |
| No of Children | 0.024 | 0.205 | 0.838 |
| Years Spent in Oil Palm Processing | -0.39 | -1.424 | 0.155 |
| Years Spent in Formal Education | 0.562 | 0.645** | 0.000 |
| Household Size | 0.422 | 0.411** | 0.000 |
| Time Involved in Oil Palm Activity | 0.354 | 6.922** | 0.000 |
| Reason for Involvement in Oil Palm Activities | 0.011 | 0.464 | 0.620 |

** Significant at $P \leq 0.01$ (2-tailed), Degree of freedom=468; $V_1=9$, $R^2=0.629$; $F= 59.287$, Source: Field survey, 2021.

5. CONCLUSION AND RECOMMENDATION

Based on the findings of this study, the oil palm fruit value chain consists of different activities undertaken by different categories of actors who were predominantly middle aged people characteristically known for being active, highly productive and capable of making independent productive decisions, about two-third of the respondents were moderately involved in oil palm fruit entrepreneurial processing activities, female dominated the processing entrepreneurial activities along oil palm value chain. Also, household size and years of formal education had significant and positive relationship with respondent's involvement in entrepreneurial activities along oil palm fruit processing value chain. This implies that increase in house hold size of the respondents will enhance the involvement of the respondents in oil palm processing activities by using the family as source of labour. However, the processors should form processing association that could help to organize training and self-development programmed for members that will boost their processing skill and consequently their livelihood status. Policy makers, governmental or non-governmental organization should recognize the economic opportunities inherent in palm oil production and therefore work assiduously to tap into it by developing the processing sector.

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