Assesment of Women Participation in Palm Oil Processing in Dekina Local Government Area, Kogi State, Nigeria.

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Abstract

The study was undertaken to assess the participation of women in palm oil processing in Dekina Local Government Area of Kogi State. The study describe the Socio-economic characteristics of palm oil processors in Dekina, examine the methods of palm oil processing in the study area, ascertain the level of women participation in palm oil processing in the study area, identify the constraint of palm oil processing in the study area, and determine the influence of socio-economic characteristics of the respondent on the method of processing adopted. A multi-stage sampling technique was used for this research. At the first stage, a total of 140 palm oil processors in the study area using structured questionnaire. Data collected were analyzed using descriptive statistic and Binary logit. Female processors are the main focus of this study. The result shows that the mean age of respondents was 46years. Majority of the respondents were married, having 12 as mean for the household size and majority of the respondents, have no formal education. Household size (P≤ 0.01), education (P≤ 0.05), marital status (P≤ 0.05) and processing experience (P≤ 0.05) were significant factors influencing the probability of processors

adopting the mechanized method of processing. The study shows that several problems are militating against palm oil processing in the study area. Hence, it was recommended that women should have ready access to productive resources like credits, land, processing facilities, and information on mechanized method of processing.

Keywords: Women, Processing, Oilpalm, Mechanized, Manual

Introduction

The participation of women in agriculture especially in developing countries has been appreciated silently, without much recognition and documentation of their contribution. Millions of women work as farmers, farm workers and natural resources manager (onyemobi, 2000).women contribute to the nation agricultural output, the maintenance of the environment and family food security. In Nigeria, female farmers are often among the voiceless-particularly when it comes to influencing agricultural policies and projects, they have not been for active involvement in the development proves.Women are predominantly engaged in the processing of palm oil in different agro-ecological zones of Nigeria. Palm oil is a product from oil palm fruit (*Elaeis guineensis*) which originated from the Tropical Rain Forest region of West Africa (FAO, 2002) of which Nigeria is located. The oil palm tree *(Elaeis guineenesis)* is one of the important economic crops in the tropics (Soyebo *et al.* 2008*)*. Palm oil is currently the second largest traded edible oil and accounts for about one quarter of the world's fats and oil supply *(*Ibekwe, 2008*)*. it is the highest yielding and most important source of vegetable oil of all oil-bearing plants. Oil palm fruit is predominantly found in abundance in the South-Western, middle-belt and Eastern parts of Nigeria where Palm oil fruit bunches is processed into palm oil using traditional method which is simple but stressful, the semi-mechanized method which mashes the fruits and presses out the crude palm oil and the fully mechanized method. Adeniyi *et al.* (2014) reported that the process of producing palm oil requires a large set of equipment which ranges from crude, manual mechanism to advance automated machinery.

Women have been largely ignored when research priorities are set and their needs are therefore not addressed. The altitude of ignoring such an essential resource limited the capacity of many

women to engage in fruitful and productive activities. Women contribution to economic development and food security of any nation seems not to gain much recognition because; data on women's socio-economic and agricultural activities that lead to food production are scanty especially in Nigeria. But the fact that women contribute immensely in socio-economic development of the rural areas with less authority and opportunity than men implies that the socio-economic constraints militating against their efficient resource management must be fully understood.

 This would suggest possible solution to their efficient performance and particularly important in the area where palm oil processing is an increasing occupation of the rural inhabitants. The study therefore seeks to investigate the activities of women in palm oil processing, the methods of palm oil processing, the levels of women participation in palm oil processing and the constraints of palm oil processing face by the processors in Dekina Local Government Area of Kogi State. to conclude women in Nigeria constitute more than 60% of the nation's population and the bulk of this percentage partake in agricultural activities which involved processing and marketing farm commodities that leads to food security (ARMTI news September 1999).

Literature Review

It is a long established fact that in Africa, women perform more than 70% of agricultural activities including cash crop production and processing of food crops as well as animal husbandry (FAO, 2000). They carry out 90% of the work of processing food crops (Madeley, 2010). These agro-based food processing and preservation activities engaged in by rural women including palm oil extraction are usually and almost entirely on a small scale basis. Although they do these from the vantage point of increasing their income level, they also stimulate expansion of agricultural production because of the demand for raw materials to feed the industry. In fact, women are found in nearly every sector of the economy where they derive income for the survival of their household. They were reported to engage in more multiple income generating activities than men (Omiye, 2004). It was observed that women probably produce 60 – 80% of Africa's agricultural products As earlier observed, Palm oil processing in Nigeria is mainly carried out by women. It is even, traditionally, regarded as exclusively a female job (Olawoye, 2001) and they have never shield away from it. Generally, processing involves transformation of

the raw produce into other forms in which it can be stored or eaten. Indeed, processing improves the acceptability of the produce. Research findings reveal that about 60% of all agricultural (on-farm) labour and 100% of labour involved in agricultural processing are supplied by the women folk (Olawoye, 2001).

Imoukhuede *et al*.(2011) reported that, small-scale processors dominate the palm oil industry in West Africa countries, but they did not report women involvement in palm oil industry. More so, Adeniyi *et al.* (2014) reported the sources of labour used in palm oil processing in Nigeria, in which, family labour has 52% and none for traditional, semi-mechanized and fully mechanized methods respectively. In the study area, Dekina Local Government Area of Kogi State; a good number of women are into Processing of palm oil which is basically for consumption and for sale. Reports has it that women are responsible for at least 70% of food production in Africa and are also important in marketing cash crops and animal husbandry (Ibekwe, 2008). It has also been observed that women are directly involved in pre and post-harvest handling of agricultural produce from the point of initial production to urban centres where most consumption take place. Within the palm oil growing states, women in the southern and central regions of Nigeria have defined roles in agriculture and constitute major component of the work force (Omoti, 2003). In most areas women have the responsibility of managing grove palms owned by individual families. They organize labour for harvesting fresh fruit bunches, picking loose fruit and processing bunches for oil extraction. Women are also involved in the palm oil extraction and clarification. Other activities performed by women are kernel oil extraction, local soap production and marketing of the products. Processing of fresh fruits bunches (FFB) into palm oil remains one of the most difficult activities in traditional palm oil processing in Nigeria (Okolo, 2002).

Method of extraction of palm oil from oil palm fruit

The Food and Agriculture Organization (FAO, 2002) of the United Nations compiled a bulletin describing methods of palm oil processing as; small-scale facilities, which process two or less tonnes of fresh fruit bunch per hour, employ batch processes that utilize manual labour and have low operating costs. Large-scale facilities typically use continuous systems and require skilled labourers and greater management. Large-scale plants process more than ten and often up to sixty tonnes of fresh fruit bunches per hour (Kwaski, 2002).

Manual/Traditional method

The traditional methods are tedious, laborious, time consuming, inefficient and yield very low oil output and often of poor quality. Traditional processing can lead to a loss of between 25 percent and 75 percent of the processed oil due to the inefficient method adopted by the processors (Omoti, 2003). Pounding (digestion) and oil extraction are the most tedious and essential operations in traditional palm fruit processing; therefore, early efforts concentrated on these tasks. In small-scale processing, digestion, that is, the breaking up of the oil-bearing cells of the palm fruits' mesocarp, is the most labour intensive activity (Kwasi, 2002). According to Omereji (2005) processing palm fruit bunches into palm oil is one of the most difficult activities in indigenous food processing in Nigeria. The indigenous method of processing can lead to a loss between 25 percent and 75 percent of the processed oil due to its inefficiency (Omoti, 2003).

Mechanized/Modern Palm Oil Processing

The process of producing crude palm oil requires a large set of equipment, which can range from crude, manual mechanisms to advanced automated machinery. Regardless of the types of machines used to produce crude palm oil, there are still a set of basic steps needed to produce palm oil. There has been considerable research work done to improve on the indigenous palm oil processing. Some of these efforts include the design and fabrication of simple and affordable cottage small mill to the improvement of the equipment and production of some models which gives higher extraction efficiency with less labour inputs as well as recovery of palm kernel as bye product. The promotion and adoption of the mechanized operations is aimed at reducing drudgery, enhancing processing efficiency and avoiding the hazards associated with the manual techniques. The success or failure of processing depends largely on the efficiency of the processing technology used. An efficient processing technique according to Ukpabi (2004) increases the quality and quantity of palm oil available for consumption and trade. The objective of any palm oil processor as noted by Oladipo (2008) is to obtain the highest percentage of possible palm oil and palm oil processors from their individual stand points must be convinced and satisfied that their personal gains from palm oil processing should be more than their cost of processing for them to remain in the palm oil processing business.

A number of research have been carried out to improve the traditional method of processing palm oil, some of which include the design and fabrication of simple and affordable cottage small mills at the Nigerian Institute for oil Palm Research (NIFOR) in collaboration with the Food and Agricultural Organization (FAO) and the United Nation Development Programme (UNDP). This joint NIFOR/FAO/UNDP collaboration led to the production of the NIFOR Small Scale Processing Equipment (SSPE). Further development work on the SSPE in the 1990s led to the improvement of the equipment and production of various models which give higher extraction efficiency with less labour inputs as well as the recovery of palm kernel. In spite of this major breakthrough in palm oil processing technique, the level of income generated by the processors is still generally low.

Palm oil is used domestically, locally and industrially. Domestically, used for cooking, soap making and lamp oil, metal plating. Its palm kernel oil is also used for soap making, as a source of glycerin, for manufacturing of margarine, cooking fat and making pomade. The residue after extraction of oil is called palm kernel cake, which is useful in livestock feeding. (Oke, 2002) outlined that the leaves of oil palm are used for making brooms and for roofing materials. The thicker leave stalks are used for thatch wall of the village huts. The bark of the palm frond are peeled and woven into basket. The main trunk (tree) can be split and used as supporting frames in building. For the purpose of this study, much emphasis would be laid on the principal product of oil palm which is palm oil fruit, it processing methods and involvement of women in the processing of this important economic product.

Level of Women participation in Palm Oil Processing.

Palm oil is very important as an income generator for women in Nigeria. In most cases it is women who are in charge of processing the oil palm fruits into red palm oil and of selling the product in the local and even national market (Omoti, 2009). Women make up a large share of the palm oil processor, although, this is not a definitive figure to show the involvement of women in the processing of palm oil in the Kogi State region. It is also inferred that gross income earnings in oil palm production is reasonable enough to encourage women participation in the business, according to a recent BBC report on palm oil production. The harvest from a handful of trees takes 48 hours to process "the amount of kernels will get us one full jerry can of oil, that's

about 20 litres. The red palm oil is a common ingredient in the cooking of almost every type of dish prepared in Nigeria.

Constraints of palm oil processing

There are various degrees or quality levels desire for palm oil produce. In order to attain the quality, the palm produce must be harvested and processed within 12 hours. However, most small holders that lacks the techniques and labour required to do this, usually processed their harvest within a week, under poor processing conditions, which result in high level of dirt, high FFA levels and high iron content(owed to high deposits from the use of old machines). Over 70% of nations processing centers are non operational and without capital and spare parts required for maintenance, these poor processing practice continue to reduce quality. About 80% of palm oil produced in Nigeria is sold out to industries. However, only about 20% of the oil produce is of premium quality.

Some other constraints that pose threat to palm oil processing in Nigeria include: adequate access to productive resources, access to land or land tenure system, provision of affordable credit facilities, access to agricultural inputs and technologies and need training and access to extension services among others.

METHODOLOGY

The Study Area

This study was carried out in Dekina local government area of Kogi state, Nigeria. It's located in the eastern part of Kogi State with a land area of 2,461km2 and population of 260, 968 (Tukool, 2018).https://tukool.com/know-nigeria The peolple of this area are predominantly Igalas with few migrants from Hausa, Yoruba and the Igbo speaking areas. Arable crops are the major crops and few cash crops such as palm oil, cotton, kola nut and cashew grown in the study area. *(KSADP. 2006)*. The population for the study comprise of all the women palm oil processors in Dekina Local Government Area, a multi-stage sampling technique was used for this research with purposive selection of Dekina local government fall into the zone-D agricultural division of the state which comprises of Okura, Dekina and Biradu. At the first stage, a total of 7 villages

were selected from each districts. At the second stage, 2 villages from two districts were selected from the area of study and at the third stage, 3 villages were selected from 1 district. A total of 20 palm oil processor (women) was randomly selected from each of the 6 villages to give a total number of 140 respondents for this study. The main criterion that was use for the selection of Dekina local government is that the raw material (oil palm) obtained from oil palm fruits are predominantly produced within the study area more than other local government areas.

Primary data was used for the study using a structured questionnaire as the research instrument which was administered to palm oil processor. Data obtained was analyzed using descriptive statistics, such as percentage, frequency, mean, likert and Binary logit regression .The socio-economic characteristics of palm oil processors, method of palm oil processing, level of women participation in palm oil and Constraints of palm oil processing were analysed using descriptive statistical tools such as frequency, mean, median and constraints of palm oil processing in the area was achieved using mean score from Likert scale. The mean score was calculated after processors responses are obtained on a Likert scale. The three point Likert type of scale was used to identify the constraints of palm oil processing in the study. Very Serious (VS) =3; Serious (S) =2; and Not Serious (NS) =1, the mean response to each item was calculated. For factors that affect palm oil processing, the mean response to each item was interpreted using the concept of real limits of numbers. Decision Rule states that Any mean score of 2 and above was considered as serious, while any mean score less than 2 was considered as not serious and Influence of socio-economic characteristics on the method of processing adopted by respondents was also achieve using binary logit regression analysis.

Binary Logit Regression Analysis: binary logit regression model was used to capture the influence of socio-economic on method adopted by the respondents as stated: $Y = f(X_1, X_2, X_3, X_4, X_5, X_6) + e_1$ Where: Y= Method of palm oil processing adopted was measure as (Mechanical = 1 and Manual = 0)X_1= Age (years), X_2= Level of Education (years), X_3=Marital Status, X_4= Farm Land Size (hectares), X_5 = Farming experience (years), X_6= Religion, e_1= Error term

RESULTS AND DISCUSSION

Processing involves transformation of the raw produce into other forms in which it can be stored, value added to the quality of produce or eaten. This research results consider only women processor as respondents. This was due to dominance of female palm oil processors in the study area which implies that women had full participation in palm oil processing activities as seen in Figure 1. and this agrees with the findings of Olawoye, (2001) who reported that women play an important role palm oil sector in particular. It is even traditionally regarded as exclusively a female job Olawoye, (2001).

Table1. Socioeconomic Characteristics of the Respondents

Distribution of Respondents According to Socio-economic Characteristics

Socio-economic variable	Frequency	Percentage	Mean/Mode
Age			
30-39	28	20	
40-49	42	30	46year
50-59	60	42.9	
60 and above	10	7.1	
Total	140	100	
Marital status			
Single	18	12.9	
Married	84	60.0	Married
Widow	22	15.7	
Divorce	16	11.4	
Total	140	100	
Household size			
1-10	43	30.7	
11-20	87	62.1	12 members
21and above	10	7.1	

Total	140	100	
Level of education			
No formal education	64	45.7	No formal education
Primary education	51	36.4	
Secondary education	17	12.1	
Tertiary education	8	5.7	
Total	140	100	
Processing experience			
1-10	23	16.4	
11-20	81	57.9	13year
21 and above	36	25.7	
Total	140	100	
Source of capital			
Loan	15	10.7	
Cooperative	59	42.1	Personal savings
Personal saving	66	47.1	
Total	140	100	

Source: Field Survey, 2018.

Findings in Table1 reveal that about 60% of on-farm labour and 100% of labour involved in processing are supplied by the women folk which is also in accordance with Olawoye, (2001). The average household size was 12 members which are fairly large to reduce problem of farm labour. This is in line with the findings by Orisakwe and Agomuo (2011), they inferred that large household is advantageous in processing as labour may be derived from its members including children as shown in Figure 2 and . The study revealed that (45.7%) of the respondents had no formal education however, (36.4%) had primary education. According to Henry-Ukoha, Orebiyi and Obasi *et al*. (2011) the level of education of a person not only increases his farm productivity but also enhances his ability to understand and evaluate new production technologies. Okoye, Okorji and Asumugha (2004) also noted that educated processors are expected to be more

receptive to new and improved technologies than processors with informal level of education or no formal education.

The average year of processing experience in the study area is 13 years. The high level of processing experience recorded among palm oil processors in the area could have a great influence on their productivity since experience is directly proportional to skills and adoption of agricultural innovation. Nwanchukwu *et al*. (2007) posited that small holder processors with more years of experience will achieve higher levels of economic efficiency than processors with lesser years of experience in Imo state, Nigeria.

Figure1: Women processing palm oil

Figure2: Children contributing in family labour

Figure3: A woman and Child participating in palm oil processing

Method of Palm oil Processing

Table 2 Distribution of Respondent According to Awareness of Mechanized Method of Processing Palm oil Fruits.

Awareness	Frequency	Percentage (%)
Yes	86	61.4
No	54	38.6
Total	140	100

Source: Computed From Field Survey, 2018.

Result in Table2 shows that majority (61.4%) of the respondent were aware of the mechanized method of processing palm oil while 38.6% were not aware. Majority of the respondent affirms that they are aware of mechanized method of palm oil processing which is more efficient than the manual method in the area.

Table 3 Distribution of Respondent According to Methods of Palm oil Processing Engaged in by Processors

Methods	Frequency	Percentage (%)
Manual	62	44.3
Mechanized	78	55.7
Total	**140**	**100**

Source: Computed From Field Survey, 2018.

The mechanized process is mostly preferred due to it saves time fast and efficient, However, the manual process is low yielding due to its inefficiency, time consuming, labour intensive but gives better quality products according to the research made which is contrary to Omoti, (2003) quality of traditional processed palm oil. Hence, most processors in line with the demand of the consumers who mostly prefer the manually processed one, combine both manual and mechanized processing. They do this in some stages of the processing especially during crushing of the cooked palm fruits. Where at the stage of boiling in is done manually as depicted in Figure 4.

Figure 4: Boiling oil on the fire in drums

Table 4 Distribution of Respondent According to level of participation in palm oil processing.

Processing activities	Low	Medium	High	Total	Mean
Harvesting of palm oil fruit bunch	62(44.3%)	50(35.7%)	28(20.0%)	196	1.40
Transportation of palm fruits`	54(38.6%)	66(47.1%)	20(14.3%)	246	1.76
Removing fruit from bunch	36(25.7%)	48(34.3%)	56(40.0%)	300	2.14
Cooking/boiling	32(22.9%)	47(33.5%)	61(43.6%)	309	2.21
Crushing	63(45.0%)	59(42.1%)	18(12.9%)	235	1.68
Sorting out the oil fiber	15(10.7%)	53(37.9%)	72(51.4%)	337	2.41
Extraction of oil from fiber	41(29.3%)	49(35.0%)	50(35.7%)	289	2.06
Sterilization/clarifying	51(36.4%)	47(33.6%)	42(30.0%)	271	1.94
Storage	15(10.7%)	49(35.0%)	76(54.3%)	341	2.44

Source: Computed From Field Survey, 2018

Results shows that majority of the respondents participated in the whole of activities involved in palm oil processing, 54.3% engaged in storage operation, Women often engage in this activity in the study area as this happen to be a major source of lively hood for them. The adherence to this particular operation help them in meeting up with family need over a period as they gradually sell and also speculate for positive price fluctuations (Okolo, 2003)..

Constraints of Palm oil Processing

Table 5 Distribution of Respondent According to Constraints of Palm oil Processing

S/N	Constraints	VS	S	NS	Total	Mean
1	Harvesting problem	62	50	28	314	2.24
2	Lack of credit facilities	66	54	20	326	2.33
3	Palm fruit scarcity	50	62	28	302	2.16
4	Shelf life of palm fruit/palm oil	36	48	56	260	1.86
5	High cost of processing	61	47	32	309	2.21
6	High cost of labour	59	63	18	321	2.29
7	Inadequacy of extension services	49	51	40	289	2.06
8	Lack of processing machines	69	37	34	315	2.25
9	Inadequate storage facilities	50	47	43	287	2.05
10	Transportation problem	51	49	40	291	2.07

Source: Computed From Field Survey, 2018.

Legend: VS = Very Serious, S = Serious, NS = Not serious.

Results in Table 4 shows that lack of credit facilities (Mean =2.33), high cost of labour (Mean =2.29), lack of processing machines (Mean =2.25), harvesting problem (Mean = 2.24), high cost of processing (Mean =2.21), palm fruit scarcity (Mean =2.16) constituted the major problems confronting respondents palm oil processing in the study area. A direct consequence of women's lack of access to land is one of the factor that deny them access to credit because land in most cases is usually required as collateral for loans on one hand, and inability of women to belong to membership of rural organization on the other also deny them of credit schemes that are often

channeled through rural organizations to its members. Paradoxically, numerous studies have shown that women are more likely than men to repay loans. Furthermore, result showed that lack of processing facilities (mean score = 2.25) for processors militates against palm oil processing couple with the high cost of some machinery which is alarming. Supportively, Idrisa *et al.* (2010) found out that poor access to new technology necessary for palm oil processing and poor access to extension services were among the constraints that jettison palm oil processing.

The need for appropriate agricultural inputs and technologies, access of women processors to agricultural inputs and technologies is constrained by their lack of access to credit and membership in rural organizations, so also gender blind development programs and lack of attention to the needs of women processors in research and technology development programs.

Table 6 Influence of socio-economic characteristics on the mechanized method of processing palm oil adopted by processors

Variables	Coefficient	P-values	Wald
Sex	-.1732	0.442	2.202
Age	-.0921	0.512	-0.231
Household size	1.534	0.001***	0.784
Education	.0123	0.012**	1.093
Marital status	-.0891	0.031**	-1.027
Processing experience	0.9810	0.0326**	0.129
Constants	-2.909	.0.213	-21.019

Source: Computed from field survey, 2018. **, *** = significant at, 5% and 1% respectively.

Nagelkerke's R^2 = 0.547

Log likelihood = -64.321

Table 6 provides results of the binary logistic regression model to determine the influence of socio-economic characteristics on the mechanized method of processing adopted by processors. The model estimates shows that variables such as household size, education, marital status, and

processors experience were factors that significantly influence mechanized method of processing adopted by processors of palm oil processing. Results revealed that age was statistically insignificant which implies that negative relationship between age and the adoption of mechanized method of palm oil processing indicates that the younger processors have higher or greater probability of adopting mechanized method of palm oil processing relative to their aged counterpart. Young processors are usually more open to trying new technologies which is in agreement with a study by Harper *et al.* (1990) that revealed a negative relationship between age and IPM sweep nets adoption in Texas. However, it was otherwise with a study by McNamara *et al.* (1991) that found a positive relationship between age and adoption of IPM on peanuts in Georgia. The coefficient of household size was found to be positive and significantly related with the level efficiency of palm oil processors. The estimated coefficient of 1.534 implies that the economic efficiency of palm oil processors will increase by a magnitude of 1.534 percent as household size increases by one unit. This means that larger household size also augments the total labour supply of the farm household and thereby enhances its farm income generating potentials. This implication is that majority of the household contributes to farm income by supplementing its labour supply especially during peak period of labour requirement such as harvest and weeding period (Liverpool-Tasie, 2011). The major contributing factors to efficiency were processors years of experience and family size. Oguntade *et al*. (2010) evaluated the technical efficiency of cocoa processors in Cross River State of Nigeria. Coefficient of education was found to have a direct relationship with the economic efficiency of palm oil processors in the study area and is statistically significant at 1% level of probability. The estimated coefficient of .0123 implies that the economic efficiency of palm oil processors will increase by a magnitude of .0123 as the number of years spent in school increases by one unit. Education enhances the acquisition and utilization of new technologies by processors Nwaru, (2004); Effiong, (2005); Onyenweaku *et al,* (2005).

The coefficient of processing experience (2.0911) was positively signed and significant at 1% which implies that as processing experience increases, participation of processors in the output and technology increases and conforms to *a priori expectation.* Although the result vary with Yaron *et al*. (1999) that a small land area may stir up the motive to participate in agricultural programmes and will enable the processors to adopt the new technologies learnt.

A positive and significant relationship was similarly found between years of processing experience and adoption of mechanical method of palm oil processing. The general indication is that individuals with more experience in palm oil processing, would likely adopt mechanical method perhaps reflecting their experience. Ani (1998) and Iheanacho (2000) also indicated that processing experience of processors, to a large extent, affects their managerial know-how and decision making. Namwata *et al.* 2010) reported that increased farming experience was positively and significantly associated with overall adoption of improved agricultural technologies among processors in Tanzania. Experience of the processor is likely to have a range of influence on adoption. Experience will improve processors'skill at production. A more experienced processor may have a lower level of uncertainty about the innovation's performance.

Conclusions

The results showed that majority of the sampled processors were within their active ages and are engaged in palm oil processing, it further showed that the majority of processors were aware of the mechanized method of palm oil processing and engaged it use for processing oil palm fruits. The result also revealed that processors participate in the major activities involved in palm oil processing of which major problems identified affecting palm oil processing in the study area were harvesting problem, lack of credit facilities, lack of processing machines, inadequate storage facilities and transportation problem. The need for training of women processors of palm oil is also of importance because result revealed that that most of the respondents affirm they needs training in harvesting, extraction and processing of palm oil to obtain high quality oil yield and packing of palm oil. Binary logistic regression results on the influence of socio-economic characteristics on the mechanical method of processing adopted by processors revealed that household size, education, farm size and farming experience had a positive regression with the influence of socio-economic characteristic on the mechanical method of processing adopted by processors. The relationship was significant at 5% and 1% respectively.

Recommendation

1.   Extension should be geared towards encouraging the farmers to adopt the mechanized processing method which seems to be less laborious and cost effective, construction of feeder roads to enhance easy accessibility for carriage of produce and products from the farm should be a project of preference to the government to encourage farmers and reduce transportation cost and boost revenue.

2.   Government should provide women processors with easy access to input facilities such as credit, information, and subsidizing capital for processing machines and other incentives that can increase their participation in palm oil processing.   Social amenities like electricity, water and hospitals should be provided in the areas where oil is processed to facilitate palm oil production and enhance welfares.

3.   Both Private and public intervention in improving the socio-economic statuses of women folk should give priority attention to education (adult education), and access to productive resources.

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