

Determinants of Rural Children's Participation in Cassava Processing in Egbeda Local Government Area of Oyo State

Ogunwande, I.O.^{1*}, Akinrinola, O.O.¹ and Awoniyi, S.O.M.²

¹Department of Agricultural and Resource Economics, Federal University of Technology, Akure, Ondo State.

²Department of Agricultural Economics and Extension, Joseph Ayo Babalola University, Ikeji-Arakeji, Osun State

*Corresponding author: segog23ng@yahoo.com

ABSTRACT

Rural children are in recent times confirmed to be engaged in numerous farm activities most especially processing, particularly cassava, mainly to augment the income of their respective parents and in turn improve household welfare but in many cases this is detrimental to their livelihood and negatively affects their general lifestyle. The study examined the determinants of rural children's participation in cassava processing in Egbeda Local Government Area of Oyo State. Multi-stage sampling technique was used in selecting a total of 150 respondents using instruments like copies of structured questionnaire and recording gadget such as cell phone. Primary data collected were analysed using descriptive statistics and parametric tool, Probit model in determinants of rural children's participation in cassava processing. The result of the maximum likelihood estimate (MLE) of probit regression showed that age, dependency ratio, parent's marital status, financial need gap, daily wage, technology type, and number of friends kept by respondents amongst others were all significant at the least of 10% level and positively affected participation of rural children in cassava processing. Poor remuneration (29.30 percent) was voted highest for the constraints confronted while income generation (58 percent) remained the main reason for rural children's engagement in cassava processing. Garri was the most common cassava product produced by the respondents. It was recommended that, crop processing related training be given to farmers who are into cassava processing in the study area.

Key words: Cassava, Participation, Processing, Probit, Rural children

INTRODUCTION

Labour is of paramount recognition in agricultural production and more so, inevitable if the operation will be feasible and end up in realizing optimal output. It is complemented by other factors of production such as land, capital and management (Olayemi, 2004). Farm labour in agriculture is typified as family, hired, communal, and exchange among others; this when utilized in farming in a correct proportion and combination result in achievement of production goal. However, farm activities are carried out by different types of labour based on sources while it could also be classified according to age. According to Adegeye and Ditto (1985), male and female farmers are active participants in farming most especially in the developing world and more so subsumed this under age characteristics as adult male, adult female, and children. He elucidated further that, all these categories contribute significantly to farming most especially the small scale which is relatively labour consuming when juxtaposed with the option, mechanised farming which requires a very small number of labour.

In the developing countries most especially the sub-Sahara Africa, the use of farm labour is on the increase as major agricultural production still rest in the hands of the peasant farmers who produced on the subsistence scale and their farm operations obviously characterised with a high number of labour use, suffice it to say that, there is a high dependence on labour use in the production of crop and livestock (International Labour Organization-ILO,2006)). The intensive labour use in farming has greatly extended to women and the children's participation which is worrisome and thus become a source of concern and condemnation by the local and international organisations, government and non-governmental organizations such as the International Labour Organisation (ILO), Food and Agricultural Organisation (FAO), World Health Organisation (WHO), United Nations International Children Emergency Funds(UNICEF) and the host of others, based upon the fact that they are less than 18 years of age. Children's participation in the labour force has attracted the attention of stakeholder and most

concentration of use appears to be in agriculture(Grier, 2004).

The use of children as labour has become a universal phenomenon as children are being used in many countries of the world for both harmful and hazardous work ranging from factory to field. According to UNICEF (2012), an estimated 246 million children are engaged in child labour; nearly 70 percent (171 million) of these children work in hazardous conditions- including working in mines, working with chemicals and pesticides in agriculture or with dangerous machinery. It stressed further that, they are not limited to a location but toiling as domestic servants in homes, labouring behind the walls of workshops, hidden from view in plantations and concluded that the vast majority of working children – about 70 percent- work in the agricultural sector.

Also, the regional estimates lucidly indicated that the Asia and Pacific region harbours the largest number of child workers in the 5 to 14 age group, 127.3 million in total resulting in 19 per cent of children working in the region. The sub-Sahara Africa has an estimated 48 million child workers with almost one child in three (29 percent) below the age of 15 is economically active. The Latin America, and the Carribean, harbours approximately 17.4 million child workers(16 percent of children in the region are working) while 15 per cent of children in the Middle East and North Africa are working with approximately 2.5 million and 2.4 million children working in developed and transition economies respectively(ILO,2007).

Table 1: Comparison of Labour Force Participation Rates of Children and Adults (in %).

Region	15 years and over	10-14 years
Africa	65.20	22.00
Americas	61.80	7.90
Asia	68.10	15.30
Europe	54.50	0.30
Oceania	62.70	6.90

Source: ILO, 1993

In recent times, the use of children as labour was not location specific as in Ghana, 63 per cent of the parents explained that they asked their children to work to ensure their training and 33 percent of the parents clearly agreed to do this because, they wanted their children to contribute to the household financially(Mull and Kirkhorn, 2005). Also, school children were required to do farm work for

the school at least once a week when farmed crop such as yams and plantain that could be sold to generate revenue for the school (Whitehead et al, 2007) while in the 2006-07 farming season, 13.3 percent of the surveyed school children participated in farming for teachers and 11.5 per cent for a school contract farm (Dottridge and Feneysel, 2007). Moreso, in Cameroon, it was reported by ILO (2007) that teachers often require their students to work on their cocoa farm or hire out children to local farmers during school time. Table 1 shows the comparison of labour force participation rates of children and adult by region as expresses by ILO (1993) with Asia making use of 68.1 of children of 15 years and over, while Africa appeared to be the continent with highest use of children of between age 10-14 years with 22 per cent. All this unreservedly unveiled that, no part of the world is spared when it comes to alleging the use of child labour for productive ventures. In Nigeria, myriads of rural farmers produce cassava, cowpea, melon, pigeon pea, yam and the host of other crops which are of immense contribution to economic and food value. However, cassava stands out greatly among all because of its numerous products which are not far-fetched in the daily meal of Nigerians. Almost 60 percent of the world production is concentrated in five countries namely; Nigeria, Thailand, Indonesia, and the Congo Democratic Republic but Nigeria remained the highest producer with 38 million metric tonnes per annum (United Nations Industrial Development Organization, 2008).

Cassava as an economic crop with many useful and edible products which are edible and easily convertible to money requires addition of value in order for farmers in the rural to earn appreciable income. Therefore, the processing of the crop is highly needed and, this could be achieved manually or with partial mechanical method of processing. However, in the rural, most of the processings are done manually resulting in garri, fufu, starch, tapioca, e.t.c. Based on the enormity of labour-use and the high rate of rural urban drift, the use of children as labour in the processing of these products is highly prevalent and sustainably practised among rural households. Based on the foregone, this study seeks to answer the following research questions. What are the socioeconomic characteristics of respondents? What are the factors that determine participation of children in cassava processing? What are the constraints identified with cassava processing? What reasons are adduced for children's participation in the processing of the crop? What types of productions are extracted from cassava? These and other questions are to be provided answers through an intensive empirical research.

The paper thus describe the socioeconomic characteristics of respondents, assessed the constraints confronting cassava processors, ascertained the reasons for children's participation in processing cassava, and determinants of children's participation in cassava processing. It is hypothesized in the paper that there's no significant relationship between children's participation in cassava processing and some selected socioeconomic variables..

METHODOLOGY

The study was carried out in Egbeda Local Government Area (LGA) of Oyo State. It was created in 1996 and it is one of the eleven LGAs in Ibadan Metropolis. The LGA is bounded to the West by Ibadan North LGA, to the North by Akinyele LGA and in the South and East by Ona-Ara and Iwo LGA (Osun State) respectively. Egbeda LGA is located on latitude 7° 21' - 8°N and longitude 4° 02' - 4° 28'E and covers the land area of 191 sq. Km. The population of the LGA is 281,573 (National Population Commission, 2006). Egbeda LGA is located in the rainforest belt with mean annual temperature of 2870mm and 27°C respectively while the edaphic quality reveals its moderately weathered soil which retains macro and micro nutrients on the soil surface; this makes the cultivation of surface feeder crops such as maize, guinea corn, tomato and the host of others prevalent while deep-rooted crops such as cassava, yam, cocoa, cashew, mango among others are also given preference by the farmers for consumptive and commercial purposes. Diverse Nigerian tribes inhabit the area; among them are Hausa, nomadic Fulani, Egede, and Gwari.

Primary data used in the study were collected using structured, pretested and validated copies of questionnaire and electronic gadget such as tape recorder and cell-phone. Multistage sampling technique was used to select respondents. Five (5) cells of eight Agricultural Development Programme (ADP) cells from the block (normally referred to as local government area) were purposively selected based on the record of high production of cassava coupled with high population of farmers in the area. These were, Ayede, Egbeda, Erunmu, Osegere, and Olode. This formed the first sampling stage. The second stage was also the purposive sampling of two (2) communities of the eight (8) villages existing in each of the cells listed in the foregone. The third stage was random sampling of fifteen (15) respondents from each of the selected ten (10) villages (see Table 2). Respondents used are mainly children who were the primary focus of the study and aptly identified by age which was highlighted as anyone that falls below 18years.

The socioeconomic characteristics of respondents was analysed using descriptive statistics while factors for participation of respondents in cassava processing was identified using a probit model which is probabilistic in

nature. It was preferred over ordinary least square (OLS) multiple regression because of its amenability to analyse dependent variables that are ordinal in nature. The choice of the model was useful in accounting for the dichotomised dependent variables: participation and non-participation of children in cassava processing. The choice of this model followed Adeoti and Adewusi (2005), Apata *et al.* (2010) and Ogunwande *et al.* (2011) in which dependent variable was chosen as traditional cultivation and mechanised cultivation and represented by '0' and '1' respectively. The model is explicitly expressed below in line with Gujarati (2004):

$$P_i = [y_i=1] = [FR_i] \dots\dots 1$$

Where,

$$Z_i = \beta_0 + \beta_1 R_i \dots\dots 2$$

$$y_i = \beta_1 + \beta_2 R_{2i} + \dots \beta_k R_{ki} + U_i \dots\dots 3$$

y_i^* is un-observed but $y_i = 0$ if $y_i^* < 0$; $y_i = 1$ if $y_i^* \geq 0$

$$P(y_i = 1) = P(y_i^* > 0)$$

$$= P(U_i \geq -\beta_1 - \beta_2 R_{2i} - \dots - \beta_k R_{ki}) \dots 4$$

$i = 1, 2 \dots 150$ respondents.

Y = Cassava processing participation (1 = Participation; Non-participation= 0)

β = A vector of unknown coefficients.

R_i = vector of characteristics of children representing independent variables.

Y = (Participants=1; Non-participants= 0)

X_1 = Age (in yrs)

X_2 = Sex (male=1; female=0)

X_3 = Households' size (No).

X_4 = Parents' marital status (Married=1; Single=0)

X_5 = Children's education (in years)

X_6 = Parent's educational status (literate= 1; non-literate= 0)

X_7 = Household income (in Naira)

X_8 = Financial needs gap-Value of household felt needs minus value of possession (in Naira)

X_9 =Dependency ratio: (Number of dependent children: for children(0-14

Years)/Household members (16-64 years) x 100

- X₁₀ = Household type (Monogamy=1; Polygamy=0)
- X₁₁ = Distance to School/Training (in km)
- X₁₂ = Type of technology used (Mechanized=1; Manual= 0)
- X₁₃ = Extension contacts/month (No.)
- X₁₄ = Daily wage (in Naira)
- X₁₅ = Number of friends

Test of Hypothesis

One sample t-test was used to test the hypothesis formulated in the study, which was based on the significant relationship between participation of rural children in cassava processing and some selected socio-economic characteristics such as household size, years of child’s education and age. The choice was informed by the scale of variables estimated. One sample t-test is stated as follows:

$$t = \frac{X_1 - X_2}{S_{x_1x_2} \cdot \sqrt{\frac{2}{n}}} \dots\dots 5$$

where $S_{x_1x_2} = \sqrt{\frac{1}{2}(S_1^2 + S_2^2)} \dots\dots 6$

S_{x₁x₂}: Grand standard deviation (or pooled standard deviation)

RESULTS AND DISCUSSION

Socioeconomic Characteristics of Respondents

Table 3 shows the socioeconomic characteristics of rural children in cassava processing. The majority (62%) who are (≤10) years old participated in cassava processing.

This implies that most of the children in the job are at very tender or prime age. This result associates with the findings of Rosati and Rossi(2003) who stated that, child labour was comprised of children under 18 years of age which is exploitative, hazardous or inappropriate for their age and this was underscored by Akarro and Mtweve (2011) who noted that it paves the way for enslaving children and worst of all shrank their schooling opportunity. Result on sex participation among rural children revealed that the majority (68%) were female while their male counterparts were 32 percent. The disproportional population confirmed the natural familiarity of female with sedentary and less energy demanding, money-generating activities. Household size (>10) is highest with about 65 percent. This shows that, the polygamous nature of households enhanced their relatively large size. This result agrees with the findings of HBS (2007) which expressed that there is a high correlation between the household structure and the breeding level, and elucidated further that women in such households at their breeding stages would normally procreate at time interval hence, increase in household population. Parent’s marital status shows that households who are married were about 60 percent showing that culture and tradition of marital state of couples was held in high esteem. The educational level of children revealed that attempted primary (63.3%) was highest. This result suggests that most of the children participating in cassava processing are still in their primary educational level when they could not yet know for sure their chosen career in life. This result is also in tandem with the findings of Rosati and Rossi (2003) who agreed that the low quality educational progress of children in the rural pronounces a serious set-back on their academic pursuit. Parent’s educational level shows that the majority (28.7%) of parents in the various households had uncompleted primary education. This result suggests that most of the children from this type of households will not place high premium on education and based on this released their children for the job every now and then.

Table 2: Sampling procedure

LGA/Block	Cell	Village	Respondent
Lagelu	Ayede	1. Alugbo	15
		2. Ayede	15
	Egbeda	1. Egbeda	15
		2. Oluwo	15
	Erunmu	1. Owo baale	15
		2. Erunmu	15
	Osegere.	1. Osegere	15
		2. Aba Alfa	15
Olode	1. Olode	15	
	2. Adegbayi	15	
Total			150

Source: Field Survey, 2015

Children's participation in cassava processing

Table 3: Socioeconomic characteristics of cassava processors from field survey of 2015

Variable	Frequency(F)	Percentage (%)
Age(in years)		
≤10	93	62
11-12	35	23.3
>12	52	34.7
	Mean Age= 10 years	
Sex		
Male	48	32
Female	102	68
Household Size		
≤5	14	9.4
6-10	98	25.3
>10	38	65.3
	Mean Household size= 8 years	
Parent's Marital Status		
Single	20	13.3
Married	92	61.3
Divorce	18	12
Separated	14	9
Widow	6	4
Child's Educational Level		
No formal education	-	-
Attempted primary	95	63.3
Primary	28	18.7
Attempted JSS	15	10
Completed JSS	6	4
Attempted SSS	4	2.7
Completed SSS	2	1.3
Tertiary	-	-
Parents' educational level		
No formal education	32	21.3
Attempted primary	43	28.7
Completed primary	38	25.3
Attempted secondary	19	12.7
Secondary	15	10
Tertiary	3	2
Household's Income/Month(in N)		
<10,000	102	68
10,000-15,000	40	26.7
>15,000	8	5.3
	Mean Income/Month=N8, 800	
Children's remittance(in N)		
<2,000	142	94.7
2,000-2,500	5	3.3
>2,500	3	2
	Mean Remittance/Month=N2,000	
Household type		
Monogamy	56	37.3
Polygamy	94	62.7
Parents' occupation		
Farmer	59	39.3
Artisan	44	29.3
Civil servant	25	16.7
Trader	16	10.7
Politician	6	4
Technology type		
Manual	90	60
Mechanical	60	40
Total	150	100

Source: Field Survey, 2015

Household income shows that 68 percent of households realised less than N10, 000 as monthly income which is equivalent to US\$43.47 and US\$1.45/day. This result suggests that majority of households from which children processing cassava come are from income poor and this may be the reason behind releasing their children for such job. This result associates with Patrinos and Psacharopoulos (1993) who found in their study that the number of siblings does not have much of an effect on school enrolment but pronounces a significant effect on child labour. The remittance earned from parents by children was less than N2, 000 among 94.70 percent of rural children on monthly basis. This monthly stipend when converted is US\$8.70/month and US\$0.29/day. This amount is very meagre and highly insufficient for a child to cater for himself daily.

However, this can make a child look for an income generating job to complement the little financial care offered from home. The occupation of parents shows that majority (39.3%) are farmers. This result suggests that this nature of job will entice more of their children to cassava processing as it is a value addition stage of the produce from their parents' farms. The processing of cassava revealed that manual method was being used by about 60 percent of respondents. Although, manual processing method requires a large number of labourers and this increases more job opportunities but the operation may be time consuming and monotonous.

Determinants of Rural Children Participation in Cassava Processing

Table 4 shows the maximum likelihood probit regression of the determinants of participation of rural children in cassava processing. Of all the variables included in the model, age(0.9915), sex(-0.4215), parent's marital status(0.3859), educational training(-0.7514), household income(-0.1300), financial needs gap(0.1855), dependency ratio(0.1727), Household type(-0.6393), technology type(0.5292), daily wage(0.2512), and number of friends(0.8125) were found to be significant at the three conventional significant levels of 1%, 5% and 10% respectively.

Age was found to be positively significant at 1 percent. A unit increase in age of the respondents lead on the average to 0.9915 percent increase in probability of children participation in cassava processing. This result suggests that with advanced age, children are more attracted cassava processing and the more reason for this may be due to the financial gain made which helped children to meet their various needs during that period of their lives. Result on sex of the respondents showed that female children participated more than their male counterparts. Therefore, a unit increase in number of male cassava processor leads on the average to 0.4215 decrease in

probability of children participation in cassava processing. This result shows that more females were found in the processing of cassava, suggesting that, the operation is less rigorous and sedentary and based on this, attracted more of female children.

Married parents, according to the result in Table 2 were found to discourage children participation in cassava processing than other categories listed. A unit increase in the number of married parents leads on the average 0.3859 unit decrease in probability of children participation in cassava processing. It could be inferred from this result that, children from married homes enjoyed more of good parentage and moderate financial care which is reflected in the adequate supply of their needs by their parents, while rural children from separated, divorced and widowed households among others were devoid of this opportunity thus, forced into child labour by their parents. This result agrees with the findings of Chernichovsky, 1985 and Singh and Schuh, 1986 which expressed that those parents in developing counties often assign different roles to children and this increases the number of working children in labour work. Years of education of children was found to be negatively significant to participation of children in cassava processing in the study area. A unit increase in the year of education of the children leads on the average to 0.7514 decrease in probability of children participation in cassava processing. This suggests that, there is a likelihood of reduction of participation in cassava processing as children advance in their educational career which necessitates more attention devoted to their educational carrier towards improving their relative academic performances. This finding agrees with ILO (1992) studies which expressed that low school enrolment drastically reduces child employment everywhere in the world.

Household income was found to be positively significant at 1 percent; a unit increase in household income leads on the average to 0.1300 decrease in probability of children participation in cassava processing. This result suggests that, with more income generated by a household, more of the needs of the children in the household will be met. By this, their attention would not be diverted to seeking alternative income source, which in most cases is the initiative of their parents to augment household income. Moreso, financial needs gap is also positively significant at 1 percent. Therefore, a unit increase in the household financial needs gap leads on the average to 0.0815 unit increase in probability of children participation in cassava processing. It could be inferred from this result that, the more the needs of a household, the more the pressure on the children to participate in cassava processing.

The dependency ratio was also found to be positively signed and significant. A unit increase in dependency ratio of households leads on the average to 0.1727 increase in probability of participation of children in cassava processing. This result suggests that, with an increase in

dependent household members, there is a pressure for more household needs which the current income may not be enough to acquire. As a result, more children in the household would be released to generate the income needed for the farm family to cater for additional and felt needs.

Household type showed that polygamy encouraged participation of more children in cassava processing among respondents while monogamy proved otherwise. A unit increase in the number of monogamous households leads on the average to 0.6393 unit decrease in the probability of participation of children in cassava processing in the study area. It could be inferred from this result that, polygamous households are large in number which invariably results in insufficient income available for household welfare as per capita household income is usually low; this leads to increased pressure of encouraging more of the children in the households by the parents to engage in the processing of cassava for the realization of more income to cater for dire family needs. Cultivation type was found to be positively significant at 1 percent; a unit increase in manual type of cassava processing technology leads on the average to 0.5292 unit increase in probability of participation of children in cassava processing. This result indicates that with manual

processing method, more labourers would be needed for cassava processing, if otherwise, most of the stages of the operation would be done by machines, hence, the reduction in labour need.

Daily wage earned by respondents was found to be positively significant. A unit increase in wage of respondents leads on the average to 0.2512 unit increase in the probability of children's participation in cassava processing. It could be inferred from this result that, amount of wage earned by respondents encouraged their participation as this creates more purchasing power in acquiring their relative basic needs. Number of friends was also found to be positively significant. A unit increase in the number of friends leads on the average to 0.8125 unit increase in the probability of respondents' participation in cassava processing, suggesting that, some children in some cases could be enticed to participating in the processing of cassava because of their intimate peers that do it even when there were no cogent reasons or pressure for them to do so.

The log-likelihood ratio of -83.32 was found to be significant at 1% suggesting that the model used was fit and appropriate for the analysis.

Table 4: Probit regression on determinants of rural children participation in cassava processing

Variable	Co-efficient	t-ratio
Constant	1.1451***	6.32
Age(in years)	0.9915***	8.53
Sex(Male=1; female=0)	-0.4215*	- 1.70
Household Size (No.)	0.6838	1.36
Parents' marital status(Married=1; if otherwise=0)	-0.3859*	1.63
Child's Education (in years)	-0.7514***	- 5.79
Parents' educ. status	-0.1333	- 0.55
Household income(in Naira)	-0.1300***	- 4.33
Financial needs gap(in Naira)	0.0185***	13.2
Dependency ratio	0.1727*	1.89
Household type(Monogamy=1; Polygamy= 0)	-0.6393**	- 2.38
Distance(school/training)-in km	0.2565	0.87
Technology type(Manual=1; Mechanized= 0)	0.5292***	13.0
Extension contacts	0.0924	1.67
Daily wage(in Naira)	0.2512*	1.76
Number of friends	0.8125***	15.7
Likelihood Ratio(LR)	= 22.91	
Prob. Chi-sq.(χ^2)	= 0.000	
Pseudo R ²	= 0.1209	
Log-Likelihood Ratio(LLR)	=-83.32	
Sample size	= 150	
Dependent variable(Participants)		

Source: Field survey, 2015

Constraints to Cassava Processing among Rural Children

Table 5 shows the constraints encountered by the rural children in the process of value addition to cassava. Of all the diverse problems tabulated, poor remuneration was found to be the most (29.3%), followed by crude processing tools (13.3%) and risk ridden (12.7%) were found to be notable. Daily wage paid to processors of cassava was confirmed to be very low based on responses received. This could be so because of the supply of labour that was more than the demand for labour needed for the task. However, demand for labour and the wage received is inversely related, by this wage becomes low. Moreso, crude processing tool was also identified as a constraint confronted by cassava processors as it was believed to make the task monotonous and time-consuming. This situation could make many participants in cassava processing reluctant to be actively involved in this distinctive value addition stage. Some respondents adjudged the processing of cassava as being risk-ridden and capable of putting present and potential participants away from the industry. Some of the attendant risks inherent were perhaps experienced during stages like

peeling, washing and grinding among others. The least of all the constraints identified by respondents was insufficient professional training with a low of 3.3% was suggested to be due to the rural nature of the area which could result in dearth of professionals to impart the necessary skills. Also, paucity of extension contacts might be a barrier to better performance of cassava processor.

Reasons for Rural Children Participation in Cassava Processing

Most reason for participation of rural children in cassava processing was found to be income generation as shown in table 6 with 58 percent of respondents while 3.3 percent was recorded for knowledge acquisition. This result is in tandem with Bequele and Boyden (1988) who elucidated that children work the longest hours and are the worst paid of all labourers. Most of the rural households are poor and among many other reasons, this may be imputed to their low educational status and conservativeness. Households are large, dependency ratio is high, resource poor and failure to adopt innovation timely characterise their lifestyles.

Table 5: Constraints to cassava processing among rural children

Constraint	Frequency(F)	Percentage (%)
Poor remuneration	44	29.30
Crude processing tools	20	13.30
Slowness of operation	17	11.30
Risk ridden	19	12.70
Insufficient water	15	10.00
Government rate/charge	11	7.30
Dearth of expert for repair	12	8.00
Poor drainage	07	4.70
Insufficient professional training	05	3.30
Total	150	100.00

Source: Field Survey, 2015

Table 6: Reasons for rural children's participation in cassava processing

Reason	Frequency(F)	Percentage (%)
Income generation	87	58.00
Keeping busy	10	6.70
Training purpose	16	10.70
Peer influence	17	11.30
Personal interest	15	10.00
Knowledge acquisition	05	3.30
Total	150	100.00

Source: Field Survey, 2015

Table 7: Various cassava products made by respondents

Product	Frequency(F)	Percentage (%)
Garri	135	90.00
Starch	115	76.67
Tapioca	72	48.00
Cassava flour	128	85.33
Fufu	98	65.33
Cassava peels	150	100.00

Source: Field survey, 2015.

*NB: *Multiple Choices Allowed.*

Table 8: Test of Hypothesis

Variable	t-value	Sig.(2-tailed)	Decision
Participation	-2455.05***	0.000	Significant
Household size	-383.45***	0.000	Significant
Child's education	-434.35***	0.000	Significant
Child's age	-355.29***	0.000	Significant
N=150			
Df= 149			

Source: Field survey, 2015

Diverse Cassava Products Made by Respondents

Cassava products produced by respondents are presented in table 7. Garri (90%) was the highest quantity of cassava produced by children processor. This result showed that, garri is mostly acceptable in the area suggesting that it served both consumptive and income source purpose in the study area. Starch (76.67%) production was also found to be produced massively in the study area. The purpose of producing this quantity is for conversion to money which is believed to support the households financially so as to acquire basic needs and meet up with miscellaneous expenditure. Tapioca (48%) production was found to be relatively unpopular in the area as the production was found to be low. It could be inferred from this result that the majority of the rural households do not consume it. Fufu was found to be produced massively after garri by respondents. The reason for this may be due to its popularity and preference that rural households have for the product; hence the attendant income from the product to sustain the household. Fufu(65.33%) was also produced by respondents in appreciable quantity either for consumption or income realization while cassava peels(100%) was the most produced and the reason was believed to be due to the fleshy part of the crop which is needed, whatever the purpose it would serve. Therefore, whatever the purpose the crop would be used, peels must

be gotten rid of. This product was used to feed farm animals in the household or sold for income purpose.

Test of Hypothesis

Hypothetical t-test between participation of rural children in cassava processing and some selected socioeconomic characteristics is contained in table 8. It was found that all variables were significant at 1 percent level($P < 0.01$), suggesting that household size, years of education and the age of children are critical to determining cassava processing participation among children in the study area.

CONCLUSION AND RECOMMENDATION

It could be concluded from the study that rural children participated in cassava processing mainly for income generation, but evidently, the method used in the processing of the crop is still manual which resulted in low output but encouraged more labour-use. Based on the findings, it is therefore recommended that:

1. Effort should be geared towards making improved technology available to cassava farmers as there is an inverse relationship between labour-use and machinery-use;
2. crop processing related trainings should be given to farmers who are into cassava production and rural children must be encouraged to acquire

education not only the basic primary but at least secondary education;

3. extension education must be improved in the rural to ensure farmers are properly guided in terms of information availability, skill improvement and knowledge demonstration;

REFERENCES

- Adegeye, A.J. and Ditto, J.S. (1985). *Essentials of Agricultural Economics*, New Era Oluji Nig. Ltd. Pp 54-56.
- Adeoti, A.I and Adewusi, O.A (2005). Factors influencing the adoption of soil conservation technologies in the derived Savanna of Nigeria, Ibadan. *Journal of Agric. Resource*, 1(1), 39-47.
- Akarro, R. R. J. and Mtweve, N. A. (2011). Poverty and its Association with Child Labour in Njombe District in Tanzania: The Case of Igima Ward. *Current Research Journal of Social Sciences* 3(3):199-206.
- Apata, T.G, Apata O.M., Igbalajobi, O.A. and Awoniyi, S.M.O. (2010). Determinants of rural poverty in Nigeria: Evidence from small holder farmers in south-western. *Journal of Science and Technology Education Research*, 1(4), 85-91.
- Bequele, A. and Boyden J. (1988). "Working Children: *Current Trends and Policy Change* 32: 319-332.
- Chernichovsky, D. (1985). "Socioeconomic and Demographic Aspects of School Consequences." *Pakistan and Gulf Economist* 10: 36-39.
- Dottridge, M. and Feneyrol, O. (2007). Action to Strengthen Indigenous Child Protection Mechanisms in West Africa to prevent migration children from being subjected to abuse. Lausanne: Terre des Hommes. [http://www.ungift.org/doc/knowledgehub/resourcecentre/CSO_indigenous_children_in_West_Africa.pdf]
- Grier, B. (2004). Child Labour and Africanist scholarship: a critical review. *African Studies Review*, 47(2):1-25.
- Gujarati, Damodar, N. (2004). *Basic econometrics*. New Delhi, India: Mc Graw-Hill Press. Pp. 235-239.
- HBS (Household Budget Survey) 2007. National Bureau of Statistics, Dares Salaam Household Fertility Decisions: Evidence from a Developing Country, Brazil." *Indian*
- ILO (International Labour Office). 1992. *World Labour Report* 1992. Geneva
- ILO (International Labour Office). 1993. *Bulletin of Labour Statistics* 1993-3. Geneva
- ILO(2006). Maritime Labour Convention: Working of the Special Tripartite Committee Established Under the Maritime Labour Convention, From 3rd to 5th April, 2006.
- ILO. (2007). Rooting out child labour from cocoa farm. Paper No. 2: Safety and health hazard. By R. Rinehart, International Programme on the Elimination of Child Labour (IPEC), Geneva: International Labour Organization(ILO). [<http://www.ilo.org/ipeinfo>]
- Mull L.D. and Kirkhorn, S.R. (2005). Child labour in Ghana cocoa production: focus on agricultural tasks, economic exposures, and associated injuries and illnesses, *Public Health Reports*, 120 (6):649-656.
- National Population Census (2006). Population Report of the Federal Republic of Nigeria. Pp 2-4.
- Olayemi, J.K. (2004). *Principles of microeconomics for applied economic analysis*. Pp. 67-92, Mokola, Ibadan, Oyo State: SICO Publishers
- Ogunwande, I.O., Ogunwande, O.A., Awoniyi, S.M., and Samuel, K.D. (2011). Impact of Forest on Rural Farmers' Cultivation Method and Farm Productivity in Oyo State. *Journal of Sustainable Environmental Management*, 3 :95-108.
- Rosati, F. and Rossi, M. (2003). Children's working hours and school enrolment : Evidence from Parkistan and Nicaragua. *World Bank Economic Review*, 17, 283-295.
- Patrinos, H.A. and Psacharopoulos, G. (1995). "Educational Performance and Child Labor Responses." *International Labor Review*, 127, 2: 153-171.
- Singh, R. and Schuh, G.E. (1986). The economic contribution of farm children and the household fertility decision: evidence from a developing country, Brazil. *Indian Journal of Agricultural Economics*, 41 (1): 29-41.
- Syed, K.A., A. Mirza, R. Sultana and I. Rana. 1991. "Child Labour: Socioeconomic Tienda,
- UNICEF (2010). Cote d'Ivoire: Protecting the children against the worst forms of child labour and trafficking, Abidjan: UNICEF. [provided by UNICEF].
- United Nations Industrial Development Organisation (2008). *Agricultural Mechanization in Africa, time for action planning investment for enhanced agricultural productivity: Report of an Expert group meeting January, 2008, Vienna, Austria.*
- Whitehead A., Hashim, I.M., and Iversen, V. (2007). *Child Migration, Child Agency and Inter-generational relations in Africa and South Asia*. Brighton: Development Research Centre on Migration, Globalization and Poverty, University of Sussex.
