Determinants Of Child Labour In Farming Households In Nigeria

[1*]Oladokun Yetunde O.M., [2]Dada Gbenga Emmanuel., [1]Agulanna Foluso Temitope & [2]Adenegan Kemisola Omorinre

[1]Economics and Extension Department, Cocoa Research Institute of Nigeria, Ibadan, Nigeria

[2]Department of Agricultural Economics, University of Ibadan, Ibadan, Nigeria

*Corresponding author's email: yetunde.oladokun@gmail.com

ABSTRACT

In many countries of the world, children are usually engaged in paid and unpaid forms of work that may or may not be harmful to their lives. However, such children are usually classified as child labourers when they are either too young to work or involved in hazardous activities that may compromise their physical, mental, social or educational development. In less developed countries, about one out of four children (ages 5 to 17) are engaged in labour that is considered detrimental to their health and development. In this study, the determinants of child labour were investigated using data on 765 households living in rural Nigeria and sourced from General Household Survey (GHS 2015/2016). The data was disaggregated into the six Geo-Political Zones in Nigeria (North-Central, North-West, North-East, South-East, South-South, South-West). Information on socio-economic characteristics [age, household size, marital status, years of education and membership of cooperative society] and use of child labour were extracted for analysis, which was done using descriptive statistics, and logit regression at $\alpha_{0.05.}$

Age and household size were 45.9 ± 11.6 years and 8.5 ± 3.3 persons respectively. The heads of household (89.5%) were mostly male, with 7.6 years as the mean of the years of education. Years of formal education (β=-0.04), marital status (unmarried, β=-2.17), food expenditure (β=-0.001) and credit access (β=-0.58) reduced the use of child labour while household size (β= 0.07), membership of cooperatives (β=0.83), place of residence (rural β=0.75) increased child labour. Probability of using child labour was significantly improved in North-East (145.3%), North-West (148.4%) and South-East (132.79%), relative to the North-Central.

It is therefore evident in this study that labour is harmful to the wellbeing of children. In this study years of formal education plays a key role in reducing use of child labour while lack of access to credit increases the use of child labour. Hence, sensitization programmes are needed on the effects of child labour. The government should also enforce laws that discourage this practice.

Keywords: Child labour, Farming households, Nigeria, Rural, Urban

1.0 INTRODUCTION

Child labour is defined as work that impairs the development and welfare of children. Child labour refers to economic activities in which children participate. International Labour Organization (ILO) estimates that 19% of children aged 5-14 in Asia and the Pacific are economically active (ILO, 2002a). These 127.3 million children constitute 60% of all child labourers worldwide (Edmonds, 2002a). In Latin America, about 17 million children aged between 5 and 14 were engaged in child labour in the year 2000 (ILO,

2002b). Africa has the highest incidence of child labour in the world (Bhalotra, 2000) while child labour has been declining in Asia and Latin America. Poverty, Conflict, Hunger and Disease prevalence have combined to increase the use of child labour in Africa. This is against the widespread belief that child labour occurs in factories, the overwhelming majority of working children in Africa are employed on household farms and enterprises such as petty trading, street hawking and other activities in and around the home. An encouraging trend shows that the number of child workers decreased significantly in the eight-year period from 2000 to 2008. The largest proportional decline occurred in Latin America, followed by Asia and the Pacific. Only sub-Saharan Africa has gone against this trend, increasing its total number of child workers by 10 million over the period. The participation rate in the region has fluctuated over the period, starting at 28.8% in 2000, falling to 26.4million in 2004 only to rise again to 28.4 in 2008 (Hagemann *et al.*, 2006; Diallo *et al.*, 2010). Child labour is a consequence of both the supply and the demand for child workers. Brown *et al*. 2002 emphasized that there is no single cause of child labour, rather several factors contribute to this cause such as poverty, greed, as well as nimble fingers. There is a significant rise in the studies of child labour over the years. However, despite this increased attention, child labour remains a major problem in many countries of the world. According to recent estimates by the International Labour Organization (ILO), there were approximately 176 million children between the ages of 5 and 14 in employment in 2008, of which roughly 53 million were participating in hazardous work (Diallo *et al.*, 2010).

In Africa, certain cultural beliefs encourage child labour as character building and skill development for children but with the increase of education, and the emergence of labour laws, child labour has decreased appreciably. However, child labour is still a widespread problem in many parts of the world. The development of agriculture, children were forced to be employed mostly by the families rather than factories (Miller, 2010). United Nations Children's Fund (UNICEF, 2006) posits that children should be seen as humans with rights rather than economic assets of their parents. Child labour was defined as labour that harms the health of the children and deprives them of education rights. Children fall easy victims to unfair job conditions, and they do not have the power to stand-up against mistreatments (Cdcgov, 2014). This act has long-term physical, psychological, behavioural, and societal consequences on the children. Even if they are lacking the competency of making informed decisions, they are considered individuals with autonomy that should be protected and safeguarded (Cdcgov, 2014). A lot of these children are vulnerable. Today, in Nigeria the children are kidnapped while the girls are molested or abused by adults. Child labour is recognized as a global problem, research on factors influencing it has been limited and sometimes inconsistent. However, child labour is still a widespread problem in many parts of the world. Socioeconomic disparities, poor governance, and poor implementation of international agreements are among major causes of child labour. Macroeconomic factors also encourage child labour by the growth of low pay informal economy. Child labour prevents normal well-being including physical, intellectual, emotional and psychosocial development of children. This paper will therefore contribute to knowledge by determining the factors that influence child labour among farming households in Nigeria. It is also important from a policy perspective to identify the hazardous types of child labour in which the majority of children are engaged. It is against this background that this study seeks to proffer an answer to this research question: what are the determinants of child labour in farming households in rural Nigeria? The objective of this study is to investigate the determinants of child labour in farming households in Nigeria.

2 LITERATURE REVIEW

Child labour is work that harms, abuses and exploits a child or deprives a child of fully participating in education. It refers to working children below the national minimum employment age, or children under 18 doing hazardous work. Age-appropriate tasks that do not present hazards and do not interfere with a child's schooling and right to leisure are not considered child labour. Child labour can be found in smallholder farms where children are exposed to inappropriate hazards or risks, such as through exposure to pesticide, or where they have to work long hours, tending livestock for example. Child labour can also be found in large plantations, where children may be obliged to work.

Child labour is a widespread phenomenon in developing countries. In recent times, the issue of child labour has continued to attract attention among policy makers and researchers. Child labour is a persistent problem found almost in all the developing countries and to a lesser extent in the developed countries. Africa and Asia together account for over 90 percent of the total child employment. This is especially prevalent in the rural areas where the capacity to enforce minimum age requirement for schooling and farming is lacking. According to International Labour Organization (ILO, 2002c), there are approximately 186 million child labourers in the World, among which about 111.3 million children work in hazardous conditions. At least 120 million of the world's children between the ages of 5 and 14 years did fulltime paid work. Many of them worked under hazardous and unhygienic conditions and work for more than 10 hours a day. In most parts of Sub-Saharan Africa, school attendance rates continue to fall because millions of school-age children work instead of going to school (Ravallion and Woodon, 2000, Friedrich, 2008). This interference, consequently, hampers the children's educational development and reduces future prospects for human capital productivity and earnings in the nations of the world.

Child labour in agriculture is a global phenomenon and is found in all regions of the world including Nigeria. An estimation of 246 million children (ILO-IPEC, 2002) around the world carryout work that harm their well-being and hinders their education, development and future livelihoods. Seventy percent of all child labourers work in agriculture while many children have traditionally been employed in family enterprises. Children also work in large-scale commercial plantations and in agriculture as migrant farm workers. Majority of work in rural areas is agricultural, nine out of ten working children in rural areas are engaged in agriculture or related activities. Though agriculture takes place mainly in a rural setting, urban agriculture, which is labour intensive and occurs on small plots of land, is found in both developing and developed countries with an estimated 200 million farmers working part time in urban agriculture. Thus, agricultural child labourers may also be found in urban areas (ILO, 2006).

Child labour represents a serious threat to the development and rights of today's Nigerian children and those of tomorrow (UNICEF, 2005). The key consequence is its detrimental impact on education and its ties to intergenerational poverty. There exists high incidence of child labour within the country (Bass, 2004). Out of 42.1 million Nigerian children eligible for primary education, only 22.3 million are in school; for secondary schools, the situation is worse: out of 33.9 million eligible adolescents only 6.4 million are in school and the economic necessity drives much of this (Okafor, 2010). Millions of children attempt to combine school and work, often to pay school fees. This combination rarely succeeds. These children work in public places such as streets and markets, semi-public places (cottage industries, mechanic workshops), private households, agricultural plantations and quarries (UNICEF, 2005). Many are exposed to long hours of work in dangerous and unhealthy environments, carrying too much responsibility for their age. Working in these hazardous conditions with little food, small pay, no education and no medical care establishes a cycle of child rights violations.

In Nigeria, the most populous black nation with 140 million people, there exist high incidences of child labour (World Bank, 2006). Child labour refers to farm work that interferes with children's schooling and subsequently human capital accumulation through education. Child labour deprives children of the opportunity to attend school, manifesting either in total exit from school or interrupted participation in school academic activities. In the Nigeria context, child labour is defined as work done by children under the age of fifteen that is mentally, physically, socially and morally dangerous and harmful to them. It refers to work that interferes with their schooling by depriving them the opportunity to attend school thereby obliging them to leave school prematurely or requiring them to attempt to combine schooling with working at times on the farm (Olujide, 2007). Children have always worked in Nigeria, the incidence has increased significantly over the years especially at the end of oil boom in the late 1970s coupled with the mounting poverty. Traditionally, children have worked with their families, learning skills they would need as adults but today they are forced to work on the family farm and even as labourers in some commercial farms.

Several studies have shown the high prevalence of child labour in Nigeria covering many informal as well as urban sectors (Okafor and Bode–Okunade, 2003; Oloko, 2004; Bassey *et al*., 2012; Amao, 2013). In rural areas of the country, children are found working on farms and herding animals. In northern Nigeria,

children, known as the *almajirai* are sometimes employed in private farms and in commercial farms. Some of the children are even trafficked and used as farm labourers. Robinson (2004) stated that National Child Labour Survey estimates that there are 15 million children engaged in child labour in Nigeria. These children are also vulnerable to being forced to farm work and in many instances they are being deprived of access to education.

Nwaru *et al*, (2011) conducted a study to examine the determinants of child labour among rural and urban farm households in Abia State of Nigeria. Cross sectional data generated from a random sample of 60 farm households comprising 30 urban and 30 rural farm households were analysed using the probit regression model. The results indicated that age of the child; education of the child, sex of the child, education of the household head and worth of contribution of the child to household finances were significant determinants of child labour participation for the rural households. The urban households have age of the child, sex of household head, and worth of contribution of child, sex of child, age of household head and education of household head as significant determinants of child labour. Also, Moyi (2011) examined the causes and magnitude of child labour in Kenya while including household chores. This is important because majority of child labour takes place within the household. Results revealed that socioeconomic status and structure of the household have a strong effect on child labour. Higher child labour rates were observed among older children, rural dwellers, and those of lower household socioeconomic status. The years of education of the head of household and wealth of the household have an impact on child labour. Although poor children have a higher probability of working than wealthier children, poverty does not fully explain child labour in Kenya. Most significantly, the results suggest that the reduction of poverty will not eliminate child labour. Children of all socioeconomic levels in Kenya participate in work. The analysis also found that work and school are not mutually exclusive; about 45% of children combined work and school. Only about 5% reported working without attending school.

According to the International Labour Organization (ILO, 2002b), of all the regions, Sub-Sahara Africa has the highest child labour rates, estimated at 29% compared to 19% in Asia and the Pacific, 16% in Latin America, 15% in the middle East and North Africa, 4% in the Transition Economies and only 2% in the developed countries (IPEC and SIMPOC, 2002). According to International Labour Organisation ILO 2002, Sub-Sahara Africa has the highest child labour rate. The vast majority of the working children are unpaid family workers involved in agricultural work, predominantly on farms operated by their families. Similarly, Betcherman et al (2004), reported that 200 million children between the ages of 5 and 14 years were working globally, which represents one-fifth of the total population of girls and boys in this age group. By the same estimate, almost 111 million children are regularly involved in hazardous work which is a form of labour that has adverse effects on the safety, health and physical development of the child. In Nigeria, the phenomenon is a fundamental problem with consequences on economic development. There is a growing involvement of children in the labour force with work ranging from farming, trading to load carriage, constructing work, housemaids, amongst others (Adekola, 2002; Owate, 2002). Empirical evidence by ILO however shows that there are no specific gender differences in the global incidence of child labour for the age category 5 to 14 years. Gender differences are only observed as boys and girls grow older. The work ratio among boys was observed to be a little higher (44 percent) than what is observed for girls (41 percent) in the age category 15 to 17 years (IPEC and SIMPOC, 2002).

Ray (2000) however finds a strong negative relation between household income and enrollment in Pakistan but no such relationship in Peru. That is, the relationship of household income and child labour is less marked in more affluent developing country. According to Edmonds (2002), at the macro level, in the world's poorest nations with per capita incomes below $1500 in 1998, it is not unusual to find over 30 per cent of children working. In contrast, child labour is rare in countries with per capital incomes above $7,000.

The result showed a weakly inversely U-shaped relationship with child labour. In addition, Ray (2000) notes that child labour need not necessarily be "bad", nor warrant action from policy makers. Indeed, some (low, non-human capital affecting) levels of child labour may even stimulate the children in their personal development as well as generate a natural attachment to the labour market at an early age. Child

labour is most concentrated in Asia and Africa, which together account for more than 90% of total child employment. Although there are more child workers in Asia than anywhere else, a higher percentage of African children participate in the labour force (Fluitman, 2001). The vast majority of these working children are unpaid family workers, involved in agricultural work, predominantly on farms operated by their families (Bhalotra and Heady. 2003; Iversen, 2000).

Children in sub-Saharan Africa tend to be of economic value and, as a result, become a desirable asset for struggling parents. A recent study by Bhalotra and Heady (2001), however, challenged the common presumption that child labour emerges from the poorest households. The authors suggest that this seeming wealth paradox can be explained by failures of the markets for principally labour and land.

3. MATERIALS AND METHODS

The general household survey 2015/2016 was used for this study. Information used covered household socio- economic characteristics such as age, gender, household size, marital status, farm income, farm size, access to credit and membership of cooperatives and child labour use among the households.

Frequencies, tables, percentages, mean, median and standard deviation were used to describe household socio- economic characteristics, and child labour use. The determinants of child labour is achieved through the use of the logit regression model following Ofuoku *et al.*, (2015) The logit model is a binary model with binary dependent variable. The dependent variables were given values 0 and 1. It was estimated with maximum likelihood procedure which is a nonlinear estimating process. Logit regression model examines the influence of various factors on a dichotomous outcome by estimating the probability of the events' occurrence. This it does by examining the relationship between one or more independent variables and the log odds of the dichotomous outcome by calculating changes in the log odds of the dependent variable itself. The log odds ratio is the ratio of two odds and it summarizes the relationship between two variables. The model is expressed as below:

$$P\frac{e^{X_1\beta}}{1+e^{X_1\beta}} \qquad (1)$$

Where ρ is the proportion of occurrence

$$Z = \beta_o + \beta_i X_i + \epsilon \qquad (2)$$

Where $X_1, …, X_n$ are the explanatory variables. Equation 2 above is given by:

$$Z = \ln\left(\frac{p}{1-p}\right) \qquad (3)$$

That is, the natural logarithm of the odds ratio, known as the logit. It transforms ρ which is restricted to the range $[0,1]$ to a range of $[-\infty, \infty]$. It specified as follows

$$Y=\beta_0+ \beta_1X_1+\beta_2X_2+\beta_3X_3+\beta_4X_4+\beta_5X_5+\beta_6X_6+\beta_7X_7+\beta_8X_8+\beta_9X_9+\beta_{10}X_{10}+\varepsilon_i$$

Where, Yi = child labour use (1=Yes, 0=otherwise)

X_1=Age (years)

X_2 =Age square (years)

X_3 = Years of formal education (years)

X_4 = Household Size

X_5 = Gender (Male = 1, Female = 0)

X_6= credit access (Yes=1, No=0)

X_7 = Membership of cooperative (Yes=1, No =0)

X_8 = Per capita Income (Naira)

X_9=Farm size(Ha)

D_1= dummy for North East

D_2 = dummy for North West

D_3 = dummy for South East

D_4 = dummy for South West

D_5 = dummy for South South

ε_i = error term

4.0 RESULTS AND DISCUSSIONS
4.1 Socio-Economic Characteristics of Households
The distribution of respondent is shown in table 1 below. It reveals that most of the household heads are males, 89.56percent are males 10.44percent are female. It implies that there are more male household heads than female household heads among the respondents. The distribution of age of household head in table 1 shows that 36.81percent are within 36 to 45years, 1.96percent are less than 25years, 16.45percent are within 26 to 35years, 25.46percent are within the age of 45 to 55years, 12.01percent are within the age of 56 to 65years and 7.31percent are above 65years. The mean of age of the household head is 45years this indicates that most of the household heads are within 36 to 45years. It reveals that the household heads are mature hence they will be able to carry out various activities to obtain necessary income to meet the needs of the members of their households. Eighty nine percent of the household heads are married while 11.10percent are unmarried. This indicates that most of the respondents provide food for members of their households.

The distribution of respondent by household size is also shown in table 1. Sixty percent of the households have 6 to 10 members, 20.37percent have 11 to 15 members, 3.26percent have more than 15 members and 16.58 percent have 1 to 5members. This reveals that most of the households have more than 5members. The mean of the household size is 8. It indicates that most of the household have an average of 8 members. This large household size could help provide labour for farming households thus increasing the quantity of crop produced by the households thereby reducing the level of poverty among the households. Table 1 also showed the distribution of educational level of the household heads among the respondents. It revealed that 32.25percent of the respondents have no formal education, 22.45percent have primary education level, 23.50percent have secondary education and 21.80percent have tertiary education. This reveals that most of the respondents have no formal education which could be a factor that may hinder or reduce the ability of the households to obtain well-paid jobs that could provide sufficient income to meet the needs of the members of their households. This could further affect the overall wellbeing of their household members. Twenty one percent have access to credit while 78.59percent do not have access to credit. This could hinder the farming households from getting additional resources to expand the scale of operation in their livelihood activities thereby reducing income available to the respondents which may increase the level of poverty among the respondents. This can be a propelling factor for further use of child labour.

Table 1. Household Socioeconomic Characteristics

Socioeconomic Characteristics	Frequencies	Percentages	Mean(SD)
Gender of household head			
Male	686	89.56	
Female	80	10.44	
Total	766	100	
Age of household head			
>25	15	1.96	
26-35	126	16.45	
36-45	282	36.81	45.96±11.63
46-55	195	25.46	
56-65	92	12.01	
>65	56	7.31	
Total	766	100	
Marital status of household head			
Married	681	88.90	
Unmarried	85	11.10	
Total	766	100	
Household size			
1-5	127	16.58	
6-10	458	59.79	8.47±0.52
11-15	156	20.37	
>15	25	3.26	
Total	766	100	
Educational level of household head			
No formal	247	32.25	
Primary	172	22.45	
Secondary	180	23.50	
Tertiary	167	21.80	
Total	766	100	
Credit access			
No	602	78.59	
Yes	164	21.41	
Total	766	100	

Source: computations from GHS 2015/2016

4.2 Determinants of Child Labour use among Farming Households in Nigeria

Table 2 below presented the result of the logit regression model used to examine the determinants of child labour in farming households in Nigeria. Child labour use formed the dependent variables as 0 and 1 respectively while 20 explanatory variables were considered in the model. Thirteen variables were statistically significant at various levels. They are years of education, marital status, per capita income,

food expenditure, credit access, membership of cooperative society, distance to road, household size, Geo-Political Zone and place of residence. A p-value of 0.0000 revealed that the model is statistically significant at 1%. Pseudo-R2 was 0.2244; that is, 22.44% of child labour use was explained by the selected explanatory variables. The value of this pseudo-R2 suggests a reasonable efficiency of the model. A positive sign on a parameter indicates that the higher the values of the variable, the higher the use of child labour. Similarly, a negative value of the coefficient implies that the higher the value of the variable the lower the use of child labour.

The determinants of child labour among households are shown in Table 3, as years of education increases, there would be a decrease in use of child labour by 0.0407. It indicates that as years of education increases, the use of child labour is likely to decrease among farming households. This may be due to the fact that education brings knowledge and understanding which exposes the harm associated with child labour. This agrees with Adeoye *et al* (2017), Okpukpara and Chukkwuone (2007) found out that increase in years of education of household head leads to decrease in use of child labour among the households in Nigeria. Table 2 shows that household heads that are unmarried would use less of child labour by 2.1787 compared to household heads that are married. It revealed that household head that are unmarried are less likely to engage in the use of child labour compared with household heads that are married. In table 3 a unit increase in household size will lead to 0.0741 increase in the use of child labour by the households. This shows that as household size increases, the use of child labour by the household head increases. This may be due to the assumption that households that have more members demand and consume more food and this may make households to want more money by engaging their children in economic activities to supplement the income made within the home. This agrees with Adeoye *et al*., (2017) and Azeez and Nwauwa (2014) who found that increase in household size leads to increase in use of child labour among the households in Nigeria.

Table 2: Determinants of Child Labour use among farming households in Nigeria

Variables	Coefficient	Standard Error	Marginal effects
Year of education	-0.0407*	0.0215	-0.0035*
Marital status (b:married) unmarried	-2.1787**	1.0685	-0.1060**
Household size	0.0741*	0.0463	0.0063*
Farm size	0.0820	0.0857	0.0070
Per capita income	0.0005*	0.000027	3.94e-06*
Age	0.0056	0.0779	0.0005
Age square	0.0002	0.0007	0.0000
Food expenditure	-0.0001**	0.0001	-9.16e-06**
Credit Access(No)	-0.5816**	0.2726	-0.0550**
Membership of Cooperative	0.8321*	0.4761	0.0850*
Distance to Road	0.0354**	0.0128	0.0031**
Geopolitical zone (b: North Central) North East	1.4534**	0.5349	0.1181**
North West	1.4837**	0.5248	0.1218**
South East	1.3268**	0.6281	0.1032**
South South	-1.4512	1.158	-0.0395
South West	-1.908*	1.209	-0.0444*
Place of residence (b: Urban) Rural	0.7519*	0.4505	0.0553*
Probability	0.0000		
Pseudo R^2	0.2244		

 Source: Author's computation, GHS (2015/2016).

***p < 0.01 significant at 1%, **p < 0.05 significant at 5%, *p < 0.1 significant at 10%.

Also, a unit increase in per capita income will lead to 0.0006 increase in the use of child labour among the households. This implies that as per capita income increase among the households, the use of child labour increases because higher per capita income may induce the households to use more of child labour in order to earn more income. In addition higher per capita income means the household head will have more money to give children that they employ for economic activities. This agrees with Amao (2013) who found out that increase in income of household head leads to increase in the use of child labour among households in Osun State Nigeria. Table 2 revealed that a unit increase in food expenditure will lead to a decrease in child labour by 0.0001. This may be because as food expenditure increases, less income is available for household head to pay for children employed for economic activities resulting in a reduction of the use of child labour by rural households.

As shown in table 2, households with no access to credit made use of child labour compared to household with access to credit. This implies that households that could not obtain credit are more likely to engage in use of child labour for farming and other economic activities compared with households that have access to credit. An increase in households that are members of cooperatives will lead to increase in use of child labour by 0.8321 compared to household that do not belong to any cooperative society. This implies that households that belong to one cooperative society or the other are more likely to engage in use of child labour for farming and other economic activities compared with households that do not belong to any cooperative society or association. A unit increase in distance of farm to road will lead to 0.0354 increase in the use of child labour among the rural households as shown in table 2. This indicates that as the distance to road increases, the use of child labour is likely to increase among farming households. This agrees with Adeoye *et al*., (2017) who found that proximity to road lead to increase in the use of child labour.

Households that are in the North East are likely to use child labour by 1.4534 compared to households that are in the North Central part of Nigeria. This indicates that households in the North East are more likely to engage in the use of child labour compared to the households in the North Central. The high rate of poverty among households in the North East fostered by endless crisis and conflict may drive households in the region to engage in the use of child labour in order to increase income derived from their farming activities. In the North West the use of child labour increases by 1.4836 compared to households that are in the North Central part of Nigeria. This indicates that households in the North West are more likely to engage in the use of child labour compared to the households in the North Central. In the South East, the use of child labour increased by 1.3268 compared to households that are in the North Central part of Nigeria. This indicates that households in the South East are more likely to engage in the use of child labour compared to the households in the North Central. In rural areas the use of child labour increased by 0.7518 compared to the households that are in the urban areas. This implies that households in the rural areas are more likely to engage in use of child labour than households that are in the urban areas. This may be accounted for by the high rate of poverty among households in rural areas, as well as, lack of awareness of the serious adverse effect of the use of child labour on the health of the children.

Table 2 also presented the marginal effects of the explanatory variables on the use of child labour.

Years of education: An increase in the years of education of the household head by one year would reduce the likelihood of child labour use by 0.35%. As household heads get more educated they see the danger involved in using children as labour and so they reduce its use.

Household size: Table 2 also shows that the marginal effect of household size was positive and significant at 10% level (p< 0.01). This means that increase in the household size by one adult would increase the likelihood of using child labour by 0.63%.

Credit access: Also in table 2 an increase in access to credit would reduce the likelihood of use of child labour by 5.5%. This implies that as household heads have more access to credit they would use less of child labour due to the fact that they have more money to employ labour to carry out activities on the farm.

Distance to road: An increase in the distance that the household needs to cover to get to the road has the likelihood of increasing child labour use by 0.31%. As the more the distance they need to to cover the more will they use children to carry load to the road and do other activities.

Geo-Political Zones: The marginal effects for North-East was positive and significant at 5% (p<0.05) for the use of child labour. For households in the North-East, the likelihood of child labour use would increase by 11.8%. This is as against women in the North-Central region. The marginal effects for households in the North-West were positive and significant at 5% (p<0.05) for child labour use. The likelihood of using child labour would increase by 12.2%. This is as against households in the North-Central region. In the northern region in Nigeria, almajari boys are prevalent, they don't go to school. They go around begging and in the process they are used for labour and thuggery. The marginal effects for South-East were positive and significant at 5% (p<0.05) for child labour use. For households in the South-East, the likelihood of using child labour would increase by 10.3% as against the North-Central region. In the south East, an average household head have a farm with his wives and children being used as labour on the farm and further used to move produce home and then to the markets to sell.

Place of residence: The marginal effects for rural area place of residence was positive and significant at 10% (p<0.1) for child labour use. For households in the rural area, the likelihood of using child labour would increase by 5.53% as against the North-Central region. Farming is the common occupation in Nigeria where children are engaged in the use of labour.

5. **SUMMARY AND CONCLUSIONS**

The study revealed that the more educated the household head is, the less the use of child labour. In addition, findings from the study showed that household heads that are unmarried are less likely to engage in use of child labour compared with household heads that are married. Similarly, it was found out that as household size increases, the use of child labour by the household head increases. This may be because higher household size implies that there will be higher food demand within the household and it may induce households to seek for more money by engaging their children in economic activities to supplement the income made within the home. Furthermore, it was shown that as per capita income increases among the households, the use of child labour increases. Higher per capita income may induce the households to use more of child labour in order to earn more income, in addition higher per capita income means the household heads will have more money to give children that are employed for economic activities.

Increases in food expenditure lack of credit access, all contribute to decrease in use of child labour among the households. Increase in food expenditure means less income or resources that are available for meeting household consumption and other needs as a result, a decline in the use of child labour. Similarly lack of access to credit means that the households will not be able to expand their farming operation and other economic activities which could lead to reduction in the use of child labour. Distance to farm is found to increase the use of child labour among the households. Membership of cooperatives could provide additional source of revenue for households to expand their farm operations and thus household heads may need to increase the use of child labour. Long distance to farm leads to increase in use of child labour because children are used to carry loads to and from the farm. Also, they are often compelled to employ children within the households or within the community for their farming activities. Use of child labour in households in the North east, North West and South East are found to increase the use of child labour compare to households in the North Central. This may be due to the fact that there is high rate of poverty particularly in the North East and North West while when further compared to South West it is insignificant.

Lastly, being resident in rural areas was found to increase the use of child labour compared to households that reside in urban areas. This may be because households in the rural areas are mostly engaged in farming activities which often result in a high demand of labour hence the higher use of child labour than households that are in the urban areas. Sensitization programmes are needed for households on the effect of child labour. Also, government should also enforce laws that discourage this practice

REFERENCES

Adekola, O. (2002). Determinants of Child Labour Participation in Ibadan, Oyo State. Unpublished M.Sc. Thesis, Department of Agricultural Economics, University of Ibadan.

Adeoye, S.O.; Agbonlahor, M.U.; Ashaolu, O.F. and Ugalahi, U.B. (2017). Analysis of Child Labour Dimensions and Causes in Rural Farm Households of Ogun State, Nigeria. *Afr. J. Food Agric. Nutr. Dev.* 17(3): 12198 – 12214.

Amao, J.O. (2013). Determinants of Child Labour among Households in Egbedore Local Government Area of Osun State, Nigeria. *World Applied Sciences Journal. 25(4):607-614.*

Azeez, K.A., &Nwauwa, L.O.E. (2018).Determinants of child labour and academic performance in high schools in Ibadan, Nigeria. *Current Journal of Applied Science and Technology,* 30(1), 1 – 7.

Bass, L. E. (2004). Child labour in sub-Saharan Africa. Boulder: Lynne Rienner Publishers.

Bassey E.N., Baghedo M. and C.A. Otu (2012). Child Labour in Nigeria and its Economic Implications: A case Study of Calabar Municipality. *Journal of Research on Humanities and Social Sciences. 2:149-159.*

Betcherman, G; Fares, J, Luinstra, A. and Prouty, B. (2004). Child Labour, Education and Children's Right. A social Protection Discussion Paper Series. Social Protection Unit, Human Development Network, The World Bank. No. 0412.

Bhalotra, S. (2000), "*Is Child Work Necessary?"*, University of Bristol, unpublished manuscript.

Bhalotra, S. and Heady, C. (2001). Child farm labor: the wealth paradox, Department of Economics, University of Bristol, England.

Bhalotra, Sonia. (2007). Is Child Work Necessary? Oxford Bulletin of Economics and Statistics.

Bhalotra, S. and Heady C. (2003). Child Farm Labor: The Wealth Paradox. World Bank Economic Review.

Canagarajah, Sudharshan; Helena Nielsen. (2001). Child Labor in Africa: A Comparative Study. Annals of the American Academy of Political and Social Science.

Cdc.gov. Atlanta, Georgia: Child Maltreatment: Consequences; 2014. [Last updated on 2014 Jan 14; Last accessed on 2014 Dec 06]. Available from: http://www.cdc.gov/violenceprevention/childmaltreatment/consequences.html

Diallo, Y., Hagemann, F., Etienne, A., Gurbuzer, Y. and Mehran, F. (2010) *Global child cabour developments: measuring trends from 2004 to 2008*. Geneva, Switzerland: International Labour Office, Statistical Information and Monitoring Programme on Child Labour (SIMPOC).

Edmonds, E. (2002). Does Globalization Increase Child Labor. Evidence from Vietnam. NBER Working paper series. Working Paper 8760. http://www.nber.org/papers/w8760

Fluitman, Fred. (2001). Working but Not Well: Note on the Nature and Extent of Employment Problems in Sub-Saharan Africa. Occasional papers. International Training Centre of the International Labour Organization, Turin, Italy.

Friedrich H. (2008). Child Labour and School Attendance: Evidence from MICS and DHS Surveys, Seminar on Child Labour, Education and Youth Employment.

Hagemann, F., Diallo, Y., Etienne, A. and Mehran, F. (2006) *Global Child Labour Trends: 2000 to 2004*. Geneva, Switzerland: International Labour Office, Statistical Information and Monitoring Programme on Child Labour (SIMPOC).

ILO/IPEC/SIMPOC, 2002, Every Child Counts – New Global Estimates on Child Labour, April, available at http://www.ilo.org/public/english/standards/ipec/simpoc/others/globalest.pdf

ILO-IPEC (2002). Time Bond on Worst Form of Child Labour in Tanzania. Summary of Preliminary Results. Rapid Assessment on the Worst Forms of Child Labour, ILO.

ILO. (2002a). A Future Without Child Labour. Geneva: ILO. ILO. 2008. Child labour statistics: 18th International Conference of Labour Statisticians. Geneva: ILO, ICLS/18/2008/III.

ILO (International Labour Organization) (2002b), "Every Child Counts: New Global Estimates on Child Labour", IPEC.

ILO(International Labour Organization) (2002c). International Programme on the Elimination of Child Labour International Labor Organization ILO. Child Labor Surveys: Results of Methodological Experiments in Four Countries, 1992-3. Geneva: ILO.

ILO-IPEC (2002). Hazardous Child Labour in Agriculture: An Overview. ILO-IPEC. Geneva. Safety and Health Fact Sheet, 2004. See www.ilo.org/ipec.

ILO (International Labour Organization) (2006). The end of Child Labour: Within Reach. Global Report under follow-up to the ILO Declaration on Fundamental Principles and Rights at Work.

Iversen, Vegard. (2000). "Child labour in bargaining peasant households in sub-Saharan Africa". Unpublished paper. School of Development Studies, University of East Anglia, UK.

Moyi, P. (2011). Child labour and school attendance in Kenya: *Educational Research and reviews6.1:26-35.*

Nwaru, J.C.; Odoemelam, L.E. and Egbulefu, I. (2011). Determinants of child labour among urban and rural farm households in Abia State, Nigeria. *European Journal of Social Sciences 23(2): 311-317.*

Ofuoku A.U, Idoge D.E and Ovwigho B.O, (2015) Child Labor in Agricultural Production and Socioeconomic variables among Arable Farming Households in Nigeria. *Journal of Rural Social Sciences*, 29(2), 2014, pp. 67–81.

Okpukpara, B.C. and Chukkwuone, N.E. (2007). Child schooling in Nigeria: The role of Gender in Urban, Rural North and South Nigeria. A study on School attendance performance in Nigeria founded by African Research Consortium, Abuja, pp 1-6.

Okafor, E.E. and A.S. Bode–Okunade (2003): Institutional Collapse and Child Labour: The Pervasive Problem of Street Hawking in Nigeria. In: Jike VT (Ed). The Scourge of Child Labour in Nigeria. A book of Reading Lagos: NIS Publication 2003:90-102.

Oloko, S.B.A. (2004): Child Labour in Nigeria: Continuities and Transformation. Inaugural Lecture Delivered at the University of Lagos, Lagos: University of Lagos Press 2004.

Olujide P. D. (2007). Involvement of Farmers Children in Farming Activities in Lagos State. Annual Conference of Children on Agricultural Programme. pp153-157.

Owate, T. G. (2002). Child Labour in Lagos Metropolis. Unpublished B.Sc. Project, Department of Agricultural Economics, University of Ibadan.

Ravallion, M. and Wodon, Q. (2000). Does Child Labour Displace Schooling? Evidence on Behavioural Responses to an Enrollment Subsidy, *The Economic Journal*, 110.462:158–175.

Ray, R. (2000). "Analysis of child labour in Peru and Pakistan: A comparative study". *Journal of Population Economics*, 12: 3-19.

Robinson, E. (2004). Children at Work in Rural Northern Nigeria: Patterns of Age, Space and Gender. *Journal of Rural Studies*, 20: 193-210.

Siddiqi, F. and Patrinos H.A.(1995). "Child labor: Issues, causes and interventions". Human Resource Development and Operation Policy Working Paper Series No. 56. The World Bank, Washington, D.C.

UNICEF (2005). Information Sheet; Child labour; UNICEF Nigeria 2006: Nigeria Country Programme, UNICEF, March, 2005.

UNICEF. (2006). Child Labour in Nigeria: Information Sheet. Abuja, Nigeria: UNICEF Nigeria.

World Bank. (2006). Nigeria: Country Brief. Retrieve from the World Bank websites http://web.worldbank.org/website/external/countries/africaext/nigeriaextn/