

## CONTRIBUTIONS OF CHILDREN'S INVOLVEMENTS IN FARMING ACTIVITIES TO THE HOUSEHOLD WELL-BEING IN SELECTED AGRICULTURAL ZONES IN OYO STATE

<sup>1</sup>Emmanuel, F. O., <sup>2</sup>Adebayo, O. O. and <sup>3</sup>Adeniyi, R. T.

<sup>1</sup>Cocoa Research Institute of Nigeria, Ibadan, Nigeria.

<sup>2</sup>Department of Agricultural Extension and Rural Development, Ladoke Akintola University of Technology, Ogbomoso, Nigeria.

<sup>3</sup>Ajayi Crowther University, Oyo, Nigeria

Correspondence: femfun76@gmail.com

### ABSTRACT

Agriculture is characterized by high levels of child labor, as noted by the International Labour Organization (ILO). Therefore, this study examined contributions of children's involvements in farming activities to the household well-being in selected Agricultural Zones in Oyo State, Nigeria. The study was conducted in Oyo State. A multistage sampling procedure was used to select 128 respondents from cocoa farming households in the study area. The research instrument was validated and tested for reliability. Data were collected based on the set objectives in the research instruments. The tools for data analysis were both descriptive (frequencies, percentages and mean) and inferential statistics ((Pearson Product Moment Correlation PPMC) were used for the study. The findings revealed that majority of respondents were in their middle age, with 43.7% aged over 60 years with 66.4% of respondents being male, 60.2% married with 54.7% of respondents having between 1-5 children involved in cocoa farming and 25.2 years being mean year of experience. More than the average (63.8%) of the respondents were on the high level of involvement in the households' wellbeing of cocoa farmers while around 36.2% of the respondents had a low level of involvement. PPMC revealed a positive and significant relationship was observed between the number of children involved in cocoa farming ( $r = 0.277$ ,  $p = 0.002$ ) and years spent in cocoa production ( $r = 0.208$ ,  $p = 0.018$ ). Most of the cocoa farmers' children that engaged in farming activities have high contribution to the household well-being. Therefore, cocoa farmers should encourage their children to involve actively and efficiently as part of farm labour force in other to enhance their contribution to the household well-being.

**Keywords:** Children involvement, cocoa farmers, income, household size and years of experience

### INTRODUCTION

Agriculture contributes to food security, rural employment, and non-oil export revenue for the developed and developing nations (ILO, 2018). It has been a source of livelihood and way of life for millions of women, men, and children; despite the fact that Agriculture has been said to be the most universal informal and hazardous sector of the economy where child labour is most prominent when compared with other sector as asserts by International Labour organisation (Ben-Chendo *et al.*, 2014). Agricultural sector holds great potential in economy of a country, it saves life and contribute to livelihoods, support rural households, provide decent employment and alternatives to child labour which it is the worst of all (ILO, 2018). Despite the fact that Agriculture provides food security and nutrition programming for children, yet it is essential to study the way agriculture has contributed to the issues around child labour (Arellano, 2020). All over the world, boys and girls were known for giving helping hand around the home for both non-Agricultural and Agricultural activities. Some of their agricultural activities includes looking after animals, and picking fruit and

vegetables even from the child's early age (Ofuoku *et al.*, 2017).

Many of these activities though are for short periods and in safe for them which could be encouraged, because they are beneficial to a child's personal and social development. Some of the activities do help them acquire a sense of responsibility and learn new skills are carriers and knowledge that will benefit them later in life, when such activities are carried out it is not child labour (Francisco, 2020). In Nigeria, like most developing economies, agriculture is still in the hands of the rural poor farmer who cannot afford mechanized farming but depends on manual labour from their family (their children inclusive) (Akinagbe, 2020). Many children actively participate in agriculture as a contribution to their family income level or overall productivity and this is invariably considered as child's work. The family labour (which includes adults and children) contribute immensely to the production of cocoa.

Some Cocoa farm activities that children participates in rural community includes cocoa seedlings planting and clearing, chopping, burning, stumping, lining and pegging, planting holing, planting of plantain suckers, carrying of

seedlings, holing for seedlings, planting of seedlings and farm maintenance like weeding and thinning, carrying water for spraying, spraying of insecticides applying fungicide / other chemicals, farm sanitation like pruning, Removal of Mistletoes (Akinagbe, 2020), Harvesting, Gathering of pods/ Heaping of pods, Pod breaking and fermentation, Scooping of cocoa beans from pod. Post-harvest activities like spreading of fermented beans to drying area, Drying and sorting of beans and Carrying of dry beans (Ofuoku *et al.*, 2017).

The low status of the well-being is characterized by poverty which is the main cause of child labour in agriculture. Added to this is the limited access to quality education, inadequate agricultural technology and access to adult labour, high hazards and risks, and traditional attitudes towards children's participation in agricultural activities (ILO, 2010). It is important to distinguish between light duties that do no harm to the child and child labour, which is work that interferes with compulsory schooling and damages health and personal development, based on hours and conditions of work, child's age, activities performed and hazards involved (Ofuoku *et al.*, 2017).

Objectives of the study:

1. Describe socioeconomic characteristics of respondents in the study area.
2. Determine the level of contributions of children's involvements in farming activities to the household well-being of the respondents.

Hypothesis of the study:

There is no significant relationship between selected socioeconomic characteristics of respondents and the contribution of the children's in farming activities to the household well-being.

## METHODOLOGY

This study was carried out in Oyo State, Nigeria. Oyo State approximately has a land area of 28,454 kilometres, with coordinates 7°58'N, 3°36'N, 7.967°N, 3.600°E. It was one of the three states carved out of the former western state of Nigeria in 1976. The landscape consists mostly of old hard rocks and domed shaped hills. It lies between latitude 8°11N and longitude 3°E. It has an estimate total population of 6,617,720 (National Population Commission, 2007) with a population density of

211 people per square kilometre and its population makes 4% of Nigeria's total population. Oyo State is one of the six states that make up the south west geopolitical zone of Nigeria. It shares an International boundary with the republic of Benin to the west, Interstate boundaries with Osun state to the east, Kwara state to the North and Ogun State to the south. Figure 1 show the map of Oyo state.

The population of this study is all household heads (or representative) and the children in all cocoa growing areas of Oyo State.

Purposive sampling technique was used to select respondents for this study because the respondents should be sampled from communities where there is concentration of cocoa farmers and their cocoa farms. Oyo State is divided into four (4) agricultural zones which are Ibadan/Ibarapa Oyo, Ogbomoso and Saki zones.

STAGE 1: This involves the purposive selection of Ibadan\Ibarapa and Ogbomoso agricultural zone

STAGE 2: This involves the purposive selection of Ogo-oluwa and Surulere in Ogbomoso agricultural zone and Oluyole and Akinyele in Ibadan\Ibarapa agricultural zone.

STAGE 3: The 3<sup>rd</sup> stage involved purposively selection of five of the villages in the selected LGAs

STAGE 4: This involved the simple random selection of the 40% of the registered cocoa farmers in the selected villages.

Descriptive Statistics was used to analyze the specific objectives. Also, Pearson Product Moment Correlation (PPMC) was used to determine the relationships and association between the variables in the null hypothesis.

## RESULTS AND DISCUSSION

### Socioeconomic characteristics of respondents

Table 2 shows the measured socioeconomic characteristics of the respondents. 43.7% of the respondents were more than 60 years of age, 36.0% of the respondents were between the age brackets of 51-60, and 13.3% of them were between the age brackets 41-50 years of age. However, 5.4% of the respondents were between 31-40 years while 1.6% were less than 30.

The mean age of the respondents was 58.8 years. This result implies that the household heads in the sample area were in their middle age and can actively manage social welfare especially when it requires which members of the household to engage when matters pertaining to households livelihoods arises. This conforms with the findings of Philips (2011) who opined that, that household heads when at mid-age seem to be calmer, more capable of managing emotions, and better able to negotiate social situations as regards household members involvement in cocoa farming which could also help in effectively upholding social norms.

More than average (66.4%) of the respondents were male while 33.6% of them were female. The statement suggests a significant gender disparity in the contribution of children to cocoa production, with a much larger proportion of male respondents compared to female respondents. This could imply that there may be societal or cultural factors influencing the involvement of children in cocoa production, potentially favoring males over females.

The result findings revealed that 62% of the respondents were married, 23.4% were widowed and 10.9% of the respondents were divorced. However, few (5.5%) of the respondents were single. The high percentage of married respondents suggests that marriage is a prevalent social norm within the surveyed population. This could imply that the married household could have ample number of children as farm labour.

The distribution of respondents by the children involved in cocoa farming showed 54.7% of the respondents had between 1-5 children working on their cocoa farm, 5.% of the respondents had between 6-10 children partaking in the activities related to cocoa farming and around 1.6% of the respondents had no child working on their farm in the study area. The high percentage of respondents being between 1-5 children involved in cocoa farming implies that family labor is a significant component of agricultural activities in the study area. This suggests that children are often integrated into the agricultural workforce from a young age, potentially impacting their education and overall well-being.

Just, 38.3% of the respondents had a secondary school education, 25.0% of them had a primary school education. And 23.4% of the respondents had no formal educational. However, 13.3% of the respondents had a tertiary education. The distribution of respondents across different levels of education highlights significant disparities in educational attainment within the surveyed population. While a portion of respondents have achieved tertiary education (13.3%), substantial proportions (23.4%) have had no formal education. This indicates unequal access to educational opportunities, potentially influenced by factors such as socioeconomic status, geographical location, child labour and cultural norms. This result disagrees with the view of Edeoghon *et al.* (2008) that a good number of older people who had low level of education are left to farming activities in Nigeria.

Most (87.5%) of the respondents were farmers, 6.3% of them were into business, 5.9% were artisans, and 3.1% of the respondents were civil servants. This implies that farming is the primary livelihood activity the surveyed population are engaged with. This suggests a strong reliance on agricultural production for income generation, food security, and overall livelihoods.

Years spent in cocoa production revealed that 28.2% of the respondents had between 15-24 years in cocoa production, 25.7% of them between 25-34 years of experience, 22.7% had more than 35 years while 12.5% of them had between 5-14 years of experience in the cultivation of cocoa. The mean years spent in cocoa production was 25.2 years. This suggests a significant number of individuals who have dedicated a large portion of their lives to cocoa production, potentially indicating a generational involvement in the industry serving as a pointer to a generally high level of experience among respondents.

A little bit below the average (49.2%) of the respondents had a household size between 4-6 members, 37.5% of the respondents had 7-10 members, 8.6% of them had between 1-3 members while 4.7% of the respondents had more than 10 members in their household. The majority of respondents, 49.2%, have a household size between 4-6 members.

The mean household size was 6 members in the study area. This suggests that a significant portion of cocoa farmers operate within medium-sized households, which may have implications for resource allocation, labour availability, and decision-making dynamics within the family unit. Household size can significantly influence the availability of labour for cocoa farming activities. Larger households may have more hands available for farm work, while smaller households may need to rely on external labor sources or adopt different labor-saving strategies.

The distribution of respondents by income per period from cocoa production. The majority (65.6%) of the respondents generated their income from cocoa production annually, 33.6% had their income generated from cocoa production monthly while 0.8% of the respondents' generated income from their cocoa farm weekly. The implication of this finding is that the fact that a large proportion of respondents generated their income majorly from cocoa production annually. This suggests that the majority of cocoa farmers receive their earnings on a yearly basis. This annual income cycle may be influenced by factors such as the seasonal nature of cocoa cultivation, harvest timing, and market dynamics.

### **Level of contributions of children's involvements in farming activities to the household well-being of the respondents**

Table 3 shows the distribution of respondents' level of contributions of children's involvement in the households' well-being of cocoa farmers. The distribution showed that more than the average (63.8%) of the respondents' children were on the high level of involvement in the households' wellbeing of cocoa farmers while around 36.2% of the respondents had a low level of involvement. This implies that a high percentage of respondents rely heavily on children's contributions to household well-being. This suggests that children's labour and participation are integral to the household economy, directly impacting the financial stability and daily functioning of cocoa farming families. Households with a low level of children's involvement may have alternative sources of income or labour.

This could indicate better economic stability, access to adult labour, or utilization of agricultural technologies that reduce the need for child labour. This is in line with the findings of International Labour Organization (2020) observation in the research on the issues and challenges in child involvement in agricultural labour.

### **Test of hypothesis**

**H<sub>0</sub>:** There is no significant relationship between the selected socioeconomic characteristics of the respondents and the contribution of children to the well-being of cocoa farmers in the study area.

Table 4 shows a positive and significant relationship was observed between the number of children involved in cocoa farming ( $r = 0.277$ ,  $p = 0.002$ ) and years spent in cocoa production ( $r = 0.208$ ,  $p = 0.018$ ). The positive and significant relationships between the number of children involved in cocoa farming and years spent in cocoa production suggest the interplay between family dynamics and farming experience within cocoa farming households. As households gain more experience in cocoa production over time, there tends to be a higher likelihood of involving a greater number of children in farming activities. This may be due to the passing down of knowledge, skills, and farming traditions from one generation to the next, as well as the need for additional labour to support cocoa farming operations. This aligns with that of **Gebremedhin et al. (2016)** who noted that in rural settings, agricultural knowledge is largely passed down through generations as a means of sustaining livelihoods and farming practices.

However, the age and the income of the respondents showed a negative but significant relationship with the contribution of children's involvement in cocoa farming. This implies that the households facing financial constraints, children may be relied upon to contribute to farming activities as a means of supplementing household income, filling labour gaps, and supporting cocoa production efforts. Also, Younger children may be more willing and able to engage in physical labour, learn new skills, and adapt to the demands of cocoa farming tasks, contributing positively to overall farm productivity. **ILO (2017)** reported that in many

cocoa-growing regions of West Africa, the reliance on child labor is sometimes linked to household financial constraints. The more years a family engages in cocoa farming, the greater the economic dependency on child labor for increasing productivity.

Studies have shown that long-term involvement in agriculture often leads families to integrate their children into farming activities as a way of maintaining productivity and reducing labor costs (Food and Agriculture Organization, 2020). **Oduro-Abreu et al. (2019)** highlighted that cocoa farming, which is labor-intensive, commonly relies on family labor, including that of children, to meet the high labor demands during the planting and harvesting seasons. This reflects your findings where experience in cocoa production over time necessitates greater child involvement

Moreover, this involvement is often driven by economic pressures and cultural norms that view children's labor as a necessary contribution to the household. In many rural cocoa-producing areas, children's participation is seen not just as a means of supporting the family's immediate economic needs but also as a way of training them to eventually take over farming responsibilities (International Cocoa Initiative, 2021). However, while this practice may contribute to the household's economic resilience, it raises concerns about the impact on children's education and overall development, as their involvement in farm work often competes with schooling and other formative activities.

#### CONCLUSION AND RECOMMENDATIONS

Most of the cocoa farmers' children that engaged in farming activities have high contribution to the household well-being. Therefore, cocoa farmers should encourage their children to involve actively and efficiently as part of farm labour force in order to enhance their contribution to the household

#### REFERENCES

Akinagbe O.M. (2020). Adoption level of cocoa rehabilitation programme in South West in Nigeria. *Coffee and Cocoa Research Journal*, 36(1): 1-12.

- Arellano, F. C. (2020), *Child Labour in Agriculture - International Community and the Holy See in favor of the joyful impulse of hope*, ISIDORIANUM 29 / 2 (2020) 127-144, ISSN: 1131-7027 ISSN-e: 2660-7743
- Ben-Chendo, G. N., Lemchi, J. I., Nwosu, F.O., & Ehirim, N. C. (2014). Millenium development goals and combating agricultural child labour in Nigeria. *African Journal of Marketing Management*, 6(6), 75-81.
- Cocoa Research Institute of Nigeria (CRIN) (2010): Scientific survey report of the cocoa production hectare in Nigeria .Unpublished report submitted to the National Cocoa Development Committee. December, 2008.
- Francisco M. P. M. (2024). Child Labour and Health: Evidence from Tanzania, *Child Indicators Research*, 10.1007/s12187-024-10199-2.
- Gebremedhin, B., Jaleta, M., & Hoekstra, D. (2016). Intergenerational transfer of knowledge and skills in agriculture: A study on smallholder farmers in rural Ethiopia. *Journal of Agricultural Education and Extension*, 22(5), 449-465.
- International Cocoa Initiative. (2021). "Addressing Child Labour in Cocoa Communities." Retrieved from International Cocoa Initiative Website
- International Labour Organisation ILO, (2010) Accelerating Action Against Child Labour - Global Report under the Follow up
- International Labour Organization (ILO). (2017). Rooting out child labor from cocoa farming: Achievements and challenges. *ILO Publications*.
- International Labour Organization. (2018). Ending Child Labour by 2025: A Review of Policies and Programmes, Geneva, 2018.
- International Labour Organization. (2020). "Health and Safety Risks for Child Labourers in Agriculture." Retrieved from ILO Website
- Oduro-Abreu, C., Yeboah, F. K., & Agbenyo, F. (2019). Family labor and child involvement in cocoa farming in Ghana: A case study of smallholder farmers. *Agricultural Systems*, 176, 102665.
- Ofuoku Albert Ukaro and Magdalene Nneka Ugbechie, (2017). Influence of agricultural child labour experience on students' decision to study agriculture in delta state, Nigeria.2017. *International Journal of community and cooperative studies*, Vol.5 No3 ,pp.11-24
- Phillips, M. L. (2011). The Mind at Midlife. American Psychological Association. Retrieved from <http://www.apa.org/monitor/2011/04/mind-midlife.aspx>

**Table 1: Sampling Procedure and Sample Size**

<b>Number of agricultural zone</b>	<b>Purposive selection of two agricultural zones</b>	<b>Selected LGAs in the selected zone</b>	<b>Number of selected villages in selected LGAs</b>	<b>The Selected villages</b>	<b>Number of registered cocoa farmers</b>	<b>40% of selected respondents</b>
4	Ibadan/ Ibarapa zone	Akinyele	3	Agbegi	36	14
				Latayo	29	12
				Onidundu	25	10
		Oluyole	3	Onipe	50	20
				Aba agbo	25	10
				Onikoko	30	12
	Ogbomoso Zone	Ogooluwa	3	Ikire Ile	15	6
				Alaro	18	7
				Paku	25	10
	Surulere	3	Iwofin	28	11	
			Ajase	15	6	
			Abogunde	25	10	
<b>Total</b>					<b>321</b>	<b>128</b>

Source: CRIN (2010)

**Table 2: Distribution of respondents by socioeconomic characteristics**

<b>Socioeconomic characteristics</b>	<b>Frequency</b>	<b>Percentage</b>	<b>Mean</b>
<b>Age of the household head (years)</b>			
≤ 30	2	1.6	
31 – 40	7	5.4	
41 – 50	17	13.3	
51 – 60	46	36.0	
Above 60	56	43.7	58.8
<b>Sex</b>			
Male	85	66.4	
Female	43	33.6	
<b>Marital status</b>			
Single	7	5.5	
Married	77	60.2	
Divorced	14	10.9	
Widowed	30	23.4	
<b>Number of children involved in cocoa farming</b>			
0	2	1.6	
1 – 5	65	54.7	
6 – 10	06	5.0	2.8
<b>Educational level</b>			
Primary	32	25.0	
Secondary	49	38.3	
Tertiary	17	13.3	
No formal education	30	23.4	
<b>Primary occupation</b>			
Farming	112	87.5	
Business	8	6.3	
Civil servant	4	3.1	
Artisan	4	5.9	
<b>Years spent in cocoa production</b>			
5 – 14	16	12.5	
15 - 24	50	28.2	
25 – 34	33	25.7	
≥ 35	29	22.7	25.2
<b>Household size</b>			
1 – 3	11	8.6	
4 – 6	63	49.2	
7 – 10	48	37.5	
Above 10	6	4.7	6
<b>Income per period from Cocoa production</b>			
Weekly	1	0.8	
Monthly	43	33.6	
Annually	84	65.6	

Source: Field survey, 2023

**Table 3: Distribution of respondents by Level of Contributions of Children's involvement in the Households' well-being of Cocoa Farmers**

<b>Categorization levels</b>	<b>Categorization index</b>	<b>Frequency</b>	<b>Percentage</b>
High	$\geq 163.49$	47	63.8
Low	$< 163.49$	81	36.2

Grand mean = 163.49

**Table 4: Correlation Analysis showing the significant relationship between selected socio-economic characteristics of the respondents and the contribution of children's involvement in cocoa farming in the study area**

<b>Socioeconomic characteristics</b>	<b>Correlation coefficient (r)</b>	<b>p-value</b>	<b>Remark</b>	<b>Decision</b>
Age of the respondents	- 0.176	0.048*	Significant	Accept Ho
Number of children	0.277	0.002**	Significant	Accept Ho
Years spent in cocoa production	0.208	0.018*	Significant	Accept Ho
Household size	0.108	0.227	Not significant	Reject Ho
Income of the respondents	-0.205	0.020*	Significant	Accept Ho

Source: Computed data, 2023.

•= Significant at 5% level      \*\* = Significant at 1% level