

## Analysis of Labour Utilization on Cocoa Production in Akamkpa Local Government Area, Cross River State, Nigeria

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### Abstract

This study was conducted in Akamkpa Local Government Area of Cross River State, Nigeria to analyse the labour utilization in cocoa production. The major objectives of the study were to; ascertain the socio- economic characteristics of cocoa farmers in the study areas, analyzed the different types of labour utilized by cocoa farmers in the study area, analyzed the different cocoa production activities carried out by men, women and children and identify the factors influencing the supply of labour among farmers in the study area. A multi-staged sampling technique was used to select 150 respondents for the study. The data generated from the questionnaire were analyzed using descriptive statistics such as frequency counts, percentages and means. The results showed that a higher proportion, 86.0% of the farmers were males, a higher proportion, (46.6%) of the farmers were between the ages of 51-60years, majority (66.7%) were married and 53.3% of the farmers had no formal education. Results also showed that share cropping was the most utilized form of labour for cocoa production with the mean of (3.48). Also, most of the strenuous task in cocoa production were carried out by men such as nursery site preparation, (80%) clearing of planting site (80%), etc. Results also showed that among the factors influencing the supply of farm labour, labour payments ranked 1st with a mean of 3.5. The study therefore recommended that there should be increase in farm wages to make up for the poor labour remuneration.

**Keywords:** Analysis, labour, utilization, farmers

### Introduction

Agriculture is an important sector in the Nigerian economy and accounts for one third of the total gross domestic product worldwide, Food and Agricultural Organisation of the United Nation (FAO) (2020). Agriculture has been recognized as the main source of food in most developing countries and approximately sixty percent (60%) of the world's population depend on Agriculture for survival (Lennzen *et al.*,

2020).

In Nigeria, Inusa *et al.* (2018) opines that Agriculture is a major contributor of the Gross Domestic product, a source of foods, foreign exchange earnings, employer of labour and driver of industrialization. Since majority of the Nigerian population live in the rural areas and depend on agricultural production both for domestic food consumption and as a source of income, the

supply of Agricultural labour is imperative in the development of Agriculture (Ogunlele and Makhtar, 2009).

Labour is a primary factor of production and a key asset for small holder households in rural areas, thus considered to be very important not only in its productive purpose but also in the activation of other factors of production such as land, capital and entrepreneurship (Akani and Dada, 2012). Labour availability according to Oluyole *et al.* (2013) has been found to be significant on planting precision, weeds control, timely harvesting and crops processing. Human labour is the only main source of labour available to small holder farmers in Nigeria, who contribute over eighty percent (80%) of domestic agricultural output making human it the main contributor of domestic food supply in Nigeria (Oluyole *et al.*, 2013). Therefore, the unavailability or scarcity of human labour at production periods can serve as a threat to cocoa production.

According to Makarau *et al.* (2013), Nigeria farmers crops yields fall below global standards and the low yields has been attributed to a decline in the unit output from the different agricultural inputs such as land, labour, and capital. They added other constraints to include poor soils, pest, soil borne diseases, poor and inadequate planting materials, high cost of labour, labour intensive operations and poor marketing of the products (Abdulrahman and Yahaya, 2009). Agricultural production in Nigeria is highly labour intensive and the different types of labour employed in Nigeria agriculture according to Echiebiri and Mbasor (2023) in their study on rural age

distribution and labour supply in food crops production systems in Abia State include family labour, hired labour, friends and relatives, exchange labour and share cropping.

The cocoa industry is a vital sector in many economies, particularly in West Africa where it provides the livelihood of millions of smallholder farmers and their farm families. Labour is a critical input in cocoa production accounting for a significant proportion of total production cost however, labour utilization in cocoa production faces serious challenges, including labour shortage, high labour cost and inadequate labour management practices. The unavailability of labour for cocoa production can be attributed to factors which include the migration of able bodied youths from the production areas to urban areas in search of white collar jobs, drudgery of farm work, lack of social amenities in rural areas, poor farm income and the general low life expectancy in rural areas (Gill, 2010). Consequently, the scarcity and unavailability of labour during production periods serves as a threat to cocoa production which is highly labour intensive (Echiebiri and Mbasor, 2023).

The cultivation of Cocoa in Cross River State started in the 1950s with the establishment of a cocoa plantation in Ikom by the late Michael Okpara (Daramola *et al.*, 2003). Thereafter, Cocoa was introduced and cultivated throughout the state. In Cross River State, Cocoa is cultivated in seven local Government Areas namely Etung, Ikom, Boki, Obanlika, Obubra, Akamkpa, and Obudu. Cross River

State is the second largest cocoa producer in Nigeria after Ondo State with over 60,000 hectares cultivated and an annual production capacity of over 50,000 metric tonnes (Ministry of Agriculture and Natural Resources (MANR) (2008). Cocoa cultivation in Cross River State is mainly carried out by small holder Farmers who utilize manual labour. This study is therefore investigating labour utilization for Cocoa production among small holder farmers in Akamkpa Local Government Area, Cross River State, Nigeria. The study addressed the following specific objectives;

1. describe the socio-economic characteristics of cocoa farmers in the study area
2. ascertain the different types of labour utilized by farmers in the study area
3. analyze the different cocoa production activities carried out by men, women and children
4. identify factors influencing the supply of farm labour among respondents in the study area.

### Materials and methods

This study was carried out in Akamkpa Local Government area which is one of the eighteen (18) Local Government Areas in Cross River State comprising of ten (10) wards with its headquarters in Akamkpa town. It is located between latitude 5° 00' and 5° 48' north of the equator and between Longitude 08° 00' East of the Greenwich meridian. It is bounded by the North with Etung and Yakurr Local Government Area, South with Odukpani Local Government

Area, East with Akpabuyo Local Government Area and the Republic of Cameroon and by the West with Biase Local Government Area (National population Commission, (NPC) (2006). The Local Government has an approximately landmass of about 2032 km and the inhabitants are predominantly the Ejagham speaking people and some minorities speak Efik and Dissang-lyong. The local Government is within the rain forest zone of Cross River State with an annual rainfall between 2500-3050 mm per annum. The area has two distinct seasons, the dry season which starts from November to February and the Rainy season which starts from March to October with an annual temperature of 26°C.

Cocoa is the major cash crop produced in Akamkpa, other crops produced include plantain, banana, cassava, maize, oranges, pineapple and a lot more. Farming is the predominant occupation in the study area but some people engage in other occupations such as civil service, trading, mining and quarrying of limestone, teaching, etc.

A multi-staged and a simple random sampling were adopted in selecting the respondents. The first stage involved the use of simple random sampling to select five wards namely (Ikpai, Eku, Ojuk south, Ojuk North and Awi) from the ten wards that make up Akamkpa block. The second stage involves the simple random selection of one cell from each of the selected wards as follows: Mfaminyen from Ikpai, Osomba from Eku, Aningeje from Ojuk South, Mfamosing from Ojuk north and Awi II from Awi respectively. The third stage involved the selection of thirty respondents

which were randomly selected from each of the selected cells giving a total of one hundred and fifty (150) respondents. Data collected from the field were analyzed using descriptive statistics such as frequencies, percentages, and means.

## Results and discussion

Table 1 show the percentage distribution of farmers based on their socio-economic characteristics. The results revealed that (86.6%) of the farmers were males while (13.3%) were females showing that men dominated cocoa production in the study area. This result is consistent with that of Adams and Quadiri (2016) who had males making up the majority of Cocoa farmers in Ondo state (74%) while the women were just (26%). The high proportion of males in cocoa production is unconnected with the labour intensive nature of cocoa farming and land tenure systems which confers permanent land ownership on males. Women were involved as helpers and suppliers of labour during the weeding, processing, marketing and planting operations, Table 1 also shows that (46.67%) farmers were within the age bracket of 51-60 years of age indicating that majority of the farmers were not within the economically active age group which could have an influence on cocoa production. The result in Table 1 further reveals that (66.7%) of the respondents were married indicating that married people have family members under them constituting a source of family labour supply. The findings are similar to those of Job *et al.* (2015) who discovered in their study that most cocoa farmers were

married. Results further revealed that (53.3%) of the farmers had no formal Education, this has a negative impact on productivity as educated farmers have a high inclination to adopt new cocoa technologies than the uneducated ones. This study is in line with that of Ebewore and Emuh (2013) who discovered in their study that most of the farmers were non-literates.

On farm size, it was revealed that (58%) of the respondents had farm sizes ranging from 1-6 hectares showing that cocoa farming was done on large farms confirming the findings of Baffoe-Asari *et al.* (2013) that cocoa farmers cultivated on relatively large hectares of land and a farming experience of more than twenty years, indicating that they have long been involved in cocoa farming thus gained a lot of experience, knowledge and information gathering. Results in Table 1 further revealed that (70%) of the respondents had between six to ten people living together, a direct implication on family labour supply. This result confirms that of Olujide and Adeogun (2015) who observed that the availability of family labour depends on household size and its age structure. On annual income, it was observed that (66.7) of respondents had an annual income above two million five hundred thousand (2,500,000) indicating that a large proportion of the farmers were well to do and this could be attributed to their large farm sizes and farming experience. This conforms to the result of Nwaobiala *et al.* (2016) who reported that farmers mean farm income was very high. Results further shows that respondent's main source of income was from personal savings (53.3%). Other sources of income

include cooperative loans, (13.3%), commercial banks, (5%), Private money lenders, (16.7%) and from family and friends (13.3%).

Table 2 shows the different types of labour used for cocoa production in Akamkpa Local Government Area for cocoa production. The result shows that share cropping was ranked first as the most utilized form of labour with mean of (3.48). Contract labour also called farm renting by the indigenes ranked 2nd with a mean of (3.33). Hired labour, family labour and reciprocal labour with mean of 3.0, 2.8, and 2.7 ranked 3rd, 4th and 5th respectively showing that farmers in the study area utilized mostly share cropping as a source of labour for cocoa production. This result is similar with the findings of Oluyole *et al.* (2013) who discovered that share cropping was the most utilized form of labour for cocoa production in Nigeria.

Table 3 shows the various farming operations associated with cocoa production and the key individuals carrying out different activities. Results show that cocoa production involves a lot of activities and most of the strenuous task are carried out by men such as nursery site preparation (80%), clearing of planting site (80%), pegging of planting site (87.6%), planting of cocoa seedlings (86%) clearing of cocoa field, (90%) pruning of extra branches, (100%), spraying with fungicides (96%), manure fertilizer application (100%), harvesting of ripe pods, (93.3), breaking of pods. (86.7%), bagging and storage, (86,7%), marketing of crops, (93.3%), and transportation of the crops (53.3%). This result is in line with that

of Akani and Dada (2012) who confirms that Adult male accounted for the largest portion (69%) of the total labour used in all cocoa producing regions while women and children only constituted (13%) and (16%) respectively. Results further shows that women are mostly involved in activities such as the weeding of the nursery site (73%) while the children were mostly involved in the filling of polythene bags with loamy sell (83.3%). Results also indicated that the drying of cocoa seeds was a joint activity involving men, women and children.

The results are also in line with that of Oluyole *et al.* (2013) in their study on farm labour structure and its determinants among cocoa farmers in Nigeria who confirm that most farm activities in cocoa production such as farm clearing, seedling planting, fertilizer application and fungicides spraying, are carried out by men due to their tedious nature. Furthermore, the use of children for cocoa production covers only specific operations that are not tedious such as the filling of polythene bags with loamy soil (85.356), and the watering of cocoa seedlings (53.3%). All other activities are predominantly carried out by the men. Children during holiday periods are mostly at home and constitute part of the family labour. These findings are in line with the International labour organization (2022) recommendation that under aged children should not be used for cocoa production.

Table 4 shows the mean distribution and ranking based on factors influencing labour supply in the study area. It was observed from the results that labour payments, seasonal migration and off farm

employment were the major factors influencing labour supply in the study area as they ranked first, second and third respectively. This result is similar to the findings of a research conducted by Nmandu and Akinola (2015) who revealed that migration and wage rate were the major factors influencing supply of labour. The results are also in line with that of Akani and Dada (2012) who discovered in their research that labour payment, seasonal migration and schooling of children with percentages of 39%, 33.0% and 14.0% were the main factors inhibiting the supply of labour for cocoa production in South Western Nigeria.

### Conclusion

Cocoa production in Akamkpa local government area is mostly done by men, even though women and children also constitute part of the family labour. The difficult aspects of the labour is carried out by men, share cropping is the most utilized form of labour utilized in the study area and labour payment is the greatest factor influencing its availability.

### Recommendations

Based on the findings of this study, the following recommendations have been made;

1. There should be an increase in farm wages to make up for the poor labour remuneration in terms of wages because farmers make a lot of money from cocoa farming. This will make farm labour readily available and reduce migration of workers to urban areas.
2. More women should be encouraged

to go into cocoa production by granting them access to land through inheritance for cocoa cultivation.

3. Instead of the use of sharecropping, cocoa farmers should manage their plantation themselves as this will be more profitable.
4. Rural areas should be made attractive through the provision of social amenities. Thereby reducing the rate of rural-urban migration consequently increasing the labour strength.

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Table 1: Socio-Economic Characteristics of Farmers

Variables	Frequency	Percentage
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SEX	Male	130	86.7
	Female	20	13.3
	Total	150	100
Age (years)	<30	13	8.7
	31-40	20	13.3
	41-50	30	20
	51-60	70	46.7
	>60	17	11.3
	Total	150	100
Marital status	Single	30	20
	Married	100	66.6
	Divorced	10	6.7
	Widowed	10	6.7
	Total	150	100
Educational qualification	No formal education	80	53.3
	FSLC	30	20
	SSCE	20	13.3
	Tertiary education	20	13.3
	Total	150	100
Farm size	<1 hectare	3	2
	1-6 hectares	87	58
	7-11 hectares	40	26.7
	>11 hectares	20	13.3
	Total	150	100
Farming experience	< 5 years	8	5.3
	6 – 11 years	17	11.7
	11-15 years	23	15.3
	16-20 years	15	10
	> 20 years	87	58
	Total	150	100
Household size	<5	15	10
	6-10	105	70
	11-15	15	10
	16-20	10	6.7
	>20	5	3.3
	Total	150	100
Annual income	<500,000	5	3.3
	600,000-1,100,000	10	6.7
	1,200,000-1,800,000	15	10
	1,900,000-2,400,000	20	13.3
	>2,500,000	100	66.7
	Total	150	100
Source of finances	Cooperative loans	20	13.3
	Commercial banks	5	3.3
	Private money lenders	25	16.7
	Family/friends	20	13.3
	Personal savings	80	53.3
	Total	150	100

Table 2: Types of Labour used for cocoa production

Variables Types of labour	SA(4)	A(3)	D(3)	SD(1)	Cumulative Frequency	Mean	Rank
Contract(farm renting)	80(320)	50(15 0)	10(20)	10(10 )	500	3.33	2 <sup>nd</sup>
Share cropping(work and divide)	100(400 )	30(90)	12(24)	8(8)	522	3.48	1 <sup>st</sup>
Hired labour	70(280)	30(90)	30(60)	20(20 )	450	3.0	3 <sup>rd</sup>
Family labour	60(240)	30(90)	30(60)	30(30 )	420	2.8	4 <sup>th</sup>
Reciprocal labour(jange)	50(200)	35(10 5)	35(70)	30(30 )	405	2.7	5 <sup>th</sup>

SA = strongly agreed, A = agreed, D = disagreed, SD =strongly disagreed

Table 3: The different types of labour activities carried out by men, women and children in cocoa production

Farming operation	Men %		Women %		Children %	
Nursery site preparation	120		20		10	
	80		13.3		6.7	
Filling of polytene bags with soil	10		15	10	125	
	6.7				83.3	
Planting of seeds in nursery bags	80		50		20	13.3
	53.3		33.3			
Watering of cocoa seedlings	40	26.7	30		80	
			20		53.3	
Weeding of nursery site	10		110		30	
	6.7		73		20	
Clearing of planting site	120	80	10		20	13.3
Pegging of planting site	130	87.6	6.7		10	6.7
Planting of cocoa seedlings	129	86	10		10	6.7
Clearing of cocoa field			6.7			
Pruning of extra stems	135	90	11		10	6.7
Spraying with chemicals	150	100	7.3		—	—
Manure/fertilizer application	145	90	5		—	—
	150	100	3.3		—	—
Harvesting of ripe pods			—		—	—
Gathering of harvested pods	140	93.3	1	0.7	—	—
Breaking of pods to remove beans	70	46.6	—	—	50	33.3
Drying of fermented beans	130	86.7			—	—
Bagging and storage			10	6.7		
Marketing of dried beans	50		30	20	50	33.3
Transportation	33.3					
			20	13.3	10	6.7
	130	86.7				
	140		50	33.3	30	20
	93.3					
	80	53.3	10	6.7		
			10	6.7		
			40			
			26.7			

Table 4: Distribution of farmers based on factor influencing labour supply in cocoa production

Factors influencing labour supply	Total score	Mean score	Rank
Seasonal migration	479	3.2	2 <sup>nd</sup>
Off season employment	462	3.1	3 <sup>rd</sup>
Low farm wages	440	2.9	4 <sup>th</sup>
Schooling of children	380	2.5	6 <sup>th</sup>
Labour payments	528	3.51	1 <sup>st</sup>
Farming experience	320	2.1	7 <sup>th</sup>
Household size	280	1.9	8 <sup>th</sup>
Non availability of adult	415	2.8	5 <sup>th</sup>