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A case study of Income of Cocoa farmers and educational achievement of their children in Akure South west local government, Ondo state southwestern Nigeria

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Abstract

Any lucrative occupation must be able to bring job satisfaction, cater for the basic needs of life of the worker and increase his standard of living beyond poverty line. Cocoa farming is assumed to be a lucrative occupation in south western Nigeria. Hence, A field survey was carried out to assess the Income of Cocoa farmers and educational achievement of their children in Akure South west local government, Ondo state, southwestern Nigeria. A three stage random sampling technique was used to select cocoa farmers for the study. The first stage was a purposive selection of the study area. The second stage was a random selection of six villages each from the local government area making a total number of one hundred and twenty farmers. The third and final stage was a random selection of 20 farmers from each of the selected villages. More male (80%) participated in growing cocoa than the female (20%). The age of farmers who engaged in cocoa production were 50 years and above with no or minimal educational qualification (no formal education 25% and primary six 45%). Average of the respondents cultivate less than one hectare of land (50%). The result showed that the higher the level of education, the lower the number of children that participated. More cocoa grower farmers attended public schools than private schools. The result showed that 79% of the sampled farmers engaged in mixed farming while 11% engaged in petty trading especially during off seasons. The estimated income of cocoa farmers ranged between N200,000 – 5 million naira per annum on cocoa production alone. There is need for cocoa farmers to evaluate their management practices in order to boost their income.

Keywords: Farming practices, hectares of land, institutions attended, certificates attained, income

Introduction

Nigeria is the fourth largest producer of cocoa after Cote D'ivoire, Ghana and Indonesia contributing 12% of total world production (ICCO, 2014) ^[6]. About 70% of farmers in South Western Nigeria are cocoa farmers. Many grow cocoa on large hectares of land. Some either mixed cocoa production with arable crops. Cocoa is a golden crop that is expected to produce yield that can increase the standard of living of the farming community. It is a cash crop that serves as export crop for Nigeria.

Cocoa has been a major source of income for many Nigerian and a major source of foreign exchange earnings for the country. However, its production has been experiencing a declining trend in recent times Agriculture has a unique impact on the standard of living of human being and economic growth of a country but because of social factors like erection of buildings for residential purpose which has reduced the chances of land availability for agriculture which include the use of land for roads and building of industries.

In Nigeria, farmers engage in cocoa production both at subsistence and large scale levels. Cocoa farming is believed to be the major source of livelihood for rural people in the areas where cocoa farming is their dominant occupation. Ondo state is one of the major states in Nigeria where cocoa is produced in large quantities. Among the towns in Ondo state where growing of cocoa is the major

occupations are Idanre, Akure, Ondo, Owo and some parts of Akoko.

The little soil that remain for agriculture are no more fertile due to the fact that farmers have no sufficient land for farm practices like shifting cultivation, crop rotation and bush fallowing which replenish lost nutrients from the soil. Farmers are expected to be able to finance their children education with no stress. Due to the poor soil fertility, age of the cocoa growers and cocoa output calls for the attention of researchers to evaluate the performance of cocoa at increasing the standard of living of its growers. The objective of this study was to assess the financial disposition of cocoa farmers to finance their children education up to University level within the limit of income generated from cocoa farming.

Hypothesis of the study

1. Cocoa farming is lucrative enough to finance the growers' children education to their level of satisfaction.
2. There is no significant relationship between parents' farm size and their children's academic pursuit.

Materials and method

Location of the study area

Akure south local government is located in Ondo State, southwestern Nigeria. Ondo State is bounded in the North by Ekiti and Kogi states in the East by Edo state, in the West by Osun and Ogun states, in the South by the Atlantic

Ocean. There are rivers, creeks and Lakes in and around Ondo state with very prominent rivers like Ala, Oni, Ose and others. Ondo state has a land mass of about 14788.723 square kilometers (km²) and it geographically lies entirely in the tropical belt (<http://en.m.wikipedia.org>).

Akure South Local Government is located between latitude 7°21'N and 7°50'N and Longitude 5°50' and 7°25'; 250m absl (Omotayo, 2018) [14]. The climatic conditions and soil properties are suitable for growing cash crops such as cocoa, kolanut and coffee. The major occupation of the people is farming.

Sample and sampling technique

A three stage random sampling technique was used to select cocoa farmers for the study. The first stage was a purposive selection of Akure South local government area of Ondo state due to being the Headquarters of Ondo state, its large number of cocoa farmers and also the center of business in Ondo State. The second stage was a random selection of six villages each from the local government area making a total number of one hundred and twenty farmers. The third and final stage was a random selection of 20 farmers from each of the selected villages. The sampled villages were Oda, Ipogun, Igbatoro, Ijare, Ilara, and Igbara-Oke. Ballot paper was used to select towns and villages used for the research. The questionnaire was self-administered to non-literate farmers and the literate farmers were allowed to fill the questionnaires themselves. The sampled cocoa farmers were asked to supply information on the academic qualifications of their children. The child who obtained the highest academic qualification among the children in each family was used as yardstick for data collection, meaning that; cocoa farmer supplied information on academic performance of their children but the child that had the highest academic qualification was selected. The sampled farmers were also interviewed on the mode of sourcing fund for sponsoring their children.

Data Analysis

The data collected were analyzed using frequency counts, percentages and charts.

Results and discussion

The selected demographic characteristics of the respondents are shown in Table 1 below. In Akure South Local Government Area, more males participated in cocoa production than the female. Most of the women in the selected areas might have engaged in other businesses. This might be as a result of the tedious nature of cocoa production that they are not capable of doing.

It could be seen that people above the middle age were mostly involved in cocoa production. This could be as a result of lack of support for farmers including access to cocoa seedlings, price risk management and pest control training. These in turn lead to a decrease in the number of cocoa farmers. The fact that majority of the respondents were 50 years and above, implies that, they were mature farmers with experience in cocoa production and were expected to be aware of their level of performance and challenges in cocoa production (Akinngbe and Ajayi, 2012) [3].

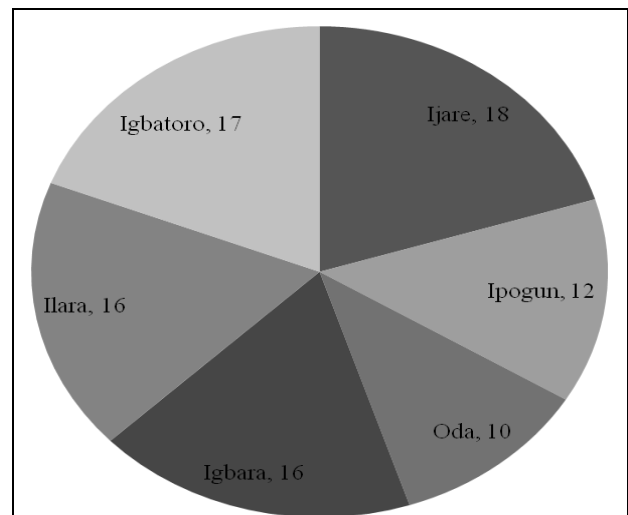
Table 1 also shows that 25% of the respondents had no

formal education, 49% had Primary education, 22% had Secondary education while only 4% had tertiary education. This implies that the farmers have a relatively low educational background. Most of them are educationally half-baked. They are likely to rely on the experiences of what they learnt from their parents who were equally uneducated. This might in turn affect modern farming techniques such as appropriate fertilizer and pesticides application which might indirectly caused low crop yield, and; crop yield is directly proportional to income. This corroborates with the assertion of Fadipe *et al.* (2012) [4] that the low level of education of farmers could contribute to the poor adoption of new and improved technology necessary for improvement. The numbers of youths that engage in cocoa production were very few according to the data collected from the field. Federal Republic of Nigeria, (2007) adduced the reason to the urbanization which attract young people to the cities; while Iremiren (2011) [7] adduced the reason of old people domination coca farming to low yield, ageing trees, and inadequate and proper agricultural equipment.

Table 1: Demographic Characteristics of Respondents

Characteristics	frequency	%
Gender		
Male	106	88.3
Female	14	11.7
Total	120	100
Age		
Below 20	0	0
21 – 30	3	2.5
31 – 40	15	12.5
41 – 50	43	25.8
50 and above	59	49.2
Total	120	100
Level of Education		
No formal education	30	25
Primary education	59	49
Secondary education	26	22
Tertiary education	5	4
Total	120	100

Source: Field survey, 2020



Source: Field Survey, 2020

Fig 1: Highest educational attainment of sampled Cocoa farmer's children on town basis

Figure 1 shows the highest educational attainment of the sampled cocoa growers' children in Akure South Local Government Area of Ondo State. Nearly all the children of cocoa growers had formal education especially the primary education and secondary education. The children were expected to have obtained primary school leaving certificate because most of them attended secondary school. Majority of them attended tertiary institutions especially in Ijare and Igbatoro.

Table 2 shows the highest educational attainment of the sampled cocoa growers' children in Akure South Local Government Area of Ondo State. Nearly all the children of cocoa growers had formal education especially the primary education and secondary education. The children were expected to have obtained primary school leaving certificate because most of them attended secondary school. Majority of them attended tertiary institutions especially in Ijare and Igbatoro.

Table 2: Highest educational attainment of sampled cocoa farmer's children on town basis

Town	No formal education	%	Primary education	%	Secondary education	%	Tertiary education	%
Ijare	0	0	20	100	20	100	18	90
Ipogun	0	0	20	100	16	80	12	60
Oda	0	0	20	100	19	95	10	50
Igbara	1	5	19	95	19	95	16	80
Ilara	2	10	18	90	16	80	16	80
Igbatoro	0	0	20	100	20	100	17	85

Source: Field Survey, 2020

Table 3 shows the categorization of highest certificates attained by the children of cocoa growers in Akure South Local Government of Ondo State. The data shows that higher number of cocoa grower children attended schools of

technology than the University, especially in Ipogun, Oda and Igbatoro while there are more graduates in Igbara and Ilara.

Table 3: Categorization of Certificate obtained by the children of the sampled cocoa growers in Akure South Local Government

Town	N	A	Total Respondents	Sub Degree	%	Degree	%
Ijare	2	18	20	12	66	6	34
Ipogun	8	12	20	10	84	2	16
Oda	10	10	20	6	60	4	40
Igbara	4	16	20	6	38	10	62
Ilara	4	16	20	4	25	12	75
Igbatoro	3	17	20	12	71	5	29

NB: N: Farmers children who could not attend Tertiary Institutions

A: Farmers children who attended Tertiary Institutions

Source: Field survey, 2020

The data in table 4 indicates the categories of Diploma obtained by the cocoa growers' children in Akure South Local Government of Ondo State. The cocoa farmers obtained HND as the highest Diploma certificate. This shows that most of the cocoa growers' children in Akure South Local Government of Ondo State attended OND courses before HND courses because OND is the pre-requisite for admission into HND programmes. Few students obtained National Certificate of Education. This

might be because Polytechnics and Monotechnics are nearer to the town than the College of Education in Ondo State. Federal College of Agriculture that runs OND and HND programmes are located in Akure the capital city of Ondo State that is very close to the towns where this research was investigated. The students might prefer Diploma certificate to National Certificate of Education, hence, the need for them to attend Diploma awarding institution. Only one student obtained Post Graduate Diploma certificates.

Table 4: Categorization of types of diploma obtained by sampled cocoa growers children in Akure south local government area

Town	NA	A	Total respondents	OND	%	HND	%	PGD	%	NCE	%
Ijare	8	12	20	9	75	2	17	1	8	0	0
Ipogun	10	10	20	4	33	3	25	2	17	1	
Oda	14	6	20	6	100	0	0	0	0	0	0
Igbara	14	6	20	2	33	1	17	0	0	3	50
Ilara	16	4	20	4	100	0	0	0	0	0	0
Igbatoro	8	12	20	7	58	0	0	0	0	5	42

NB: OND= Ordinary National Diploma, HND= Higher National Diploma, PGD = Post Graduate Diploma, NCE = National Certificate of Education

NA: Farmers children who could not obtain sub degree a: Farmers children who were able to obtain sub degree

Source: Field Survey, 2020

It was observed that few cocoa farmers children attained the highest academic qualification i.e. PhD in Akure South

Local Government Area of Ondo State (Fig.1). Many of the graduates stopped at first Degree B.Sc./B.Tech/B.A. There

was decrease in the level of academic achievements as the level of the Degree increased i.e. 1st Degree > 2nd Degree > 3rd Degree. This might be as a result of financial disposition of their parents, academic performance at lower level or no cognizance reason for many people terminating their education at 1st Degree level is financial constraints. Many cocoa growers mixed arable crops with cocoa production.

This means sole production of cocoa as a means of livelihood is not guaranteed in the study area. This might be as a result of low income generated from cocoa due to farm small scale size, inability to adequately control pests and diseases, varieties of cocoa grown poor processing and poor marketing of cocoa.

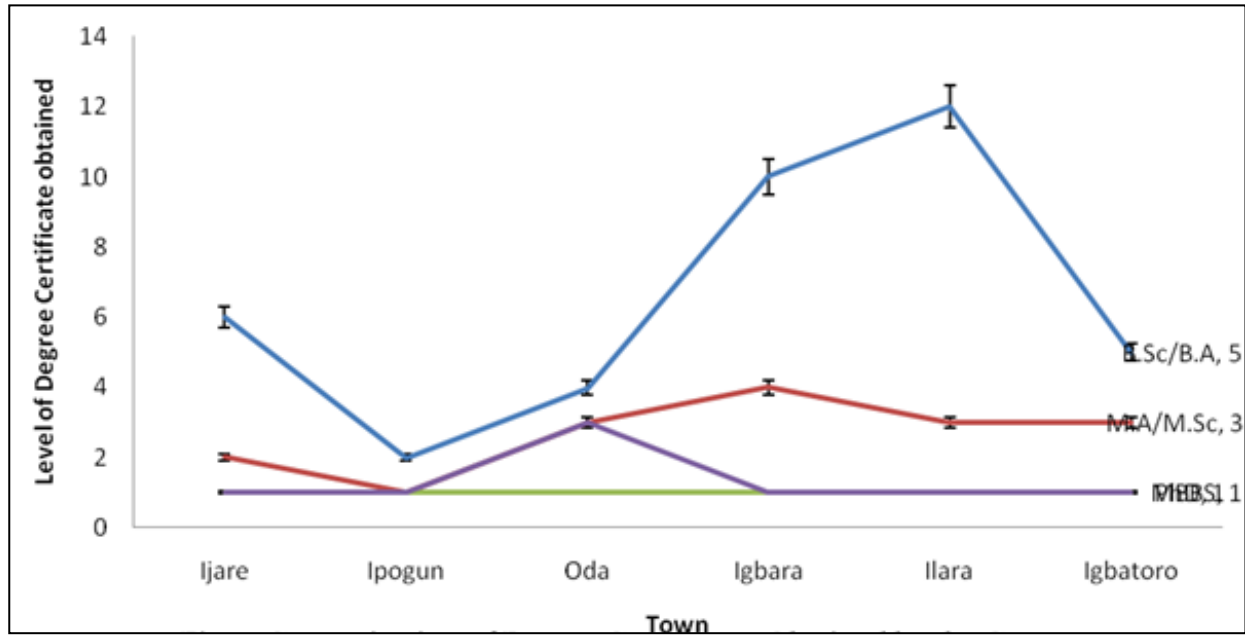


Fig 1: Categorization of degree certificates obtained by the cocoa growers' children in Akure south local government area

The data in Table 5 below showed the type of school the cocoa farmers were able to send their wards to attend. In Ijare, Ipogun, Igbara and Ilara, more children attended public institutions than private institutions up to University level.

In Oda town, more children attended private primary school than the public school. The result showed that the higher the institution, the lower the number of children of cocoa growers that attended private schools. The reasons why the

children of cocoa growers attended public schools than the private schools might be as a result of lower school fees paid in public schools than the private schools. Proximity of the school to the children might also contribute to the children attending public schools than the private school. For example, Ilara and Igbara are nearer to Joseph Ayo Babalola University located along Akure-Ife Road than Ijare, Ipogun, Oda and Igbatoro.

Table 5: Assessment of Type of Primary School Attended by Cocoa Growers' Children

Town	PuPs	PrPs	Total	PuSs	PrSs	Total	PuT	PrT	Total
Ijare	14	6	20	12	8	20	20	0	20
Ipogun	10	10	20	13	7	20	20	0	20
Oda	7	13	20	14	6	20	19	1	20
Igbara	15	5	20	16	4	20	18	2	20
Ilara	12	8	20	9	11	20	16	4	20
Igbatoro	10	10	20	16	4	20	20	0	

PuPs = Public Primary School
 PrPs = Private Primary School
 PuSs = Public Secondary School
 PrSs = Private Primary School
 PuT = Public Tertiary Institution
 PrT = Private Tertiary Institution
 Source, Field Survey, 2020

The distribution of the respondents according to the size of the farm in figure 2 below shows that 10 farmers made use of less than 1 acre of the farm land. 6 made use of 1 – 5 acre of land for cocoa production and 3 made use of 6 – 10 acre

of land for cocoa production and while only 1 had above 10 acre of the farm size. This is in line with the assertion of ADMCR (2017) [2] that an analysis of labour-use patterns among small holder farmers in South-west Nigeria showed that 80% of cocoa growers cultivate 5 hectares and 1% cultivate 10 hectares for cocoa. The problem of land tenure system and low capital might have contributed immensely to the small acreage of farm size. The data also shows that most of the farmers interviewed were subsistence farmers who might have little capital. Reasons elicited for the reduction in production included; less emphasis on agriculture, inadequate government program on agricultural

input subsidy such as chemicals and planting materials, small farm sizes, inadequate capital, inadequate labour

availability and most importantly, change in global climate (Oduwole, 2004) [11].

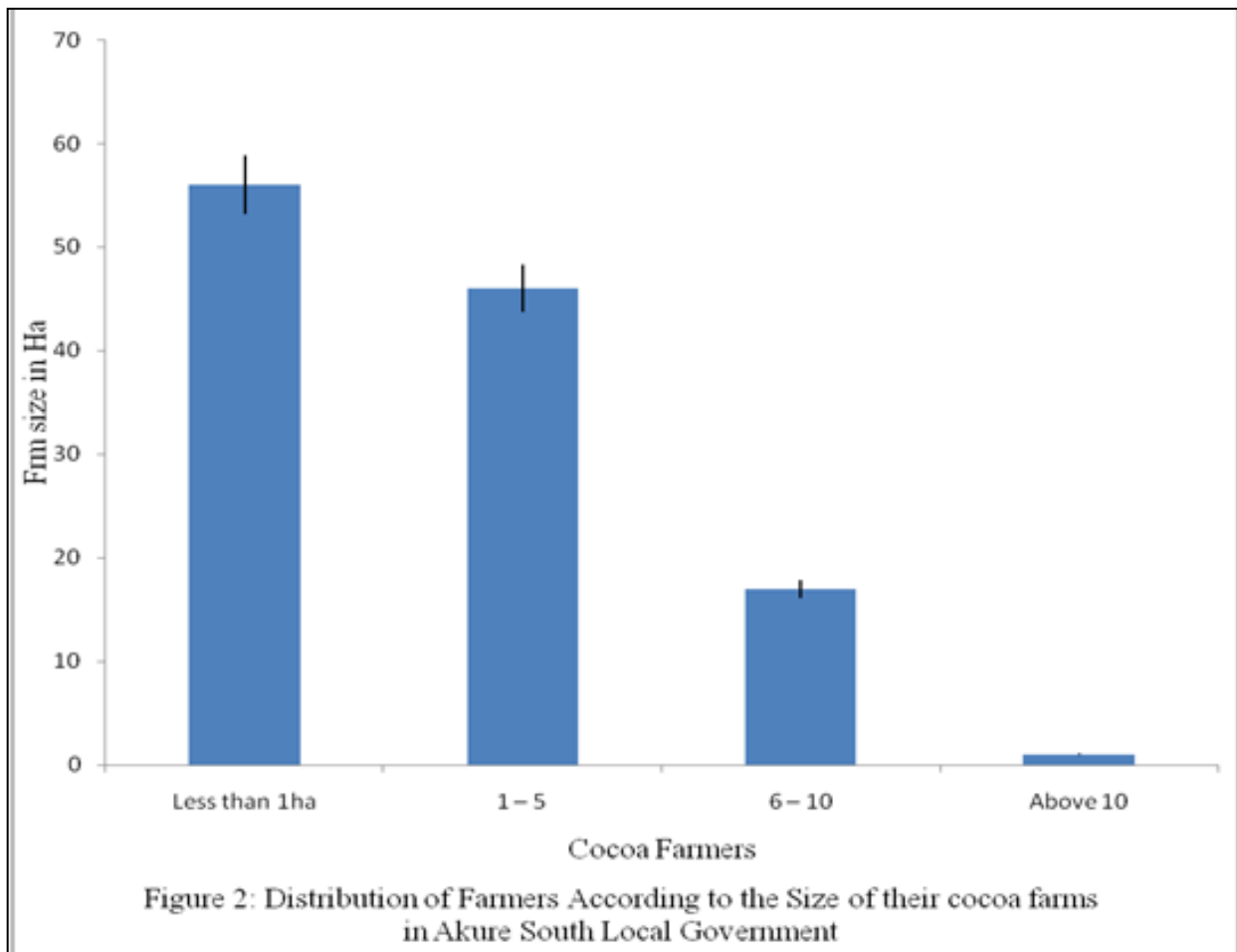


Table 6 showed the estimated annual income derived from cocoa production. In Ijare, Ipogun, Oda, Igbara and Ilara, largest income of cocoa farmers ranged 1 to 5 million naira while Igbatoro ranged between N200,000 to N500,000. Compared with other household expenses, the financial disposition of cocoa growers in financing their children

education up to PhD level may be low if the farmers depend solely on income derived from cocoa. Fasipe (2012) stated that there is positive relationship between the size of the land and the amount of cocoa harvested, i.e. the larger the land, the higher the money realised by the cocoa farmer.

Table 6: Cocoa growers estimated annual income from cocoa production

Town	No Idea	%	Btw 200,000-500,000	%	1 – 5m	%	6 – 10m	%	>10m	Total
Ijare	3	15	4	20	12	60	1	5	0	20
Ipogun	2	10	6	30	7	35	5	25	0	20
Oda	0	0	7	35	8	40	4	20	0	20
Igbara	0	0	4	20	7	35	6	30	0	20
Ilara	0	0	10	50	8	40	2	10	0	20
Igbatoro	1	5	15	80	3	15	1	5	0	20

Source: Field Survey, 2020

Cocoa farmers estimated annual income from external sources

The Table 7 below showed the estimated annual income of cocoa farmers from other sources apart from money realized from cocoa production. The estimated income of the farmers falls within N200,000 - N500,000. In South Western Nigeria, many cocoa farmers grow arable crops like maize, yam, cassava and some vegetables to complement money realized from cocoa production. There is off season in cocoa

production. Farmers might have engaged in other businesses during the off season periods. Adeniyi and Ogunsola, (2014) [2] maintained that most farmers have other sources of income generation apart from cocoa farming. Some of the farmers still engaged in production of arable crops such as cassava, maize and plantain in addition, oil palm and/or orange plantations. Other sources of income identified included civil service, carpentry, tailoring and merchandize

Table 7: Cocoa Farmers Estimated Annual Income from External Sources

Town	No Idea	Btw 200,000-500,000	1 – 5million	6 – 10million	>10million
Ijare	3	17	0	0	0
Ipogun	2	18	0	0	0
Oda	14	6	0	0	0
Igbara	14	6	0	0	0
Ilara	13	7	0	0	0
Igbatoro	15	5	0	0	0

Source: Field Survey, 2020

Conclusion

A field survey was carried out to assess the financial disposition of cocoa farmers in sponsoring their children education up to tertiary institutions in Ondo State. One hundred and twenty farmers were randomly selected from six villages in Akure South Local Government area. A well structured questionnaire was administered to individual sampled cocoa farmer. The result showed that the higher the level of education, the lower the number of children that participated. More cocoa grower farmers attended public schools than private schools. The result showed that 79% farmers engaged in mixed farming while 11% engaged in petty trading especially in off seasons. The estimated income of cocoa farmers ranged between N200,000 – 5 million naira per annum on cocoa production alone. There is need for cocoa farmers to evaluate their management practices in order to boost their income.

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