

**PERCEIVED IMPACT OF FARMER BUSINESS SCHOOL APPROACH ON SMALLHOLDER
COCOA FARMERS IN ONDO AND OSUN STATES, NIGERIA**

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ABSTRACT

This study was designed to investigate the perceived impact of Farmer Business School (FBS) approach on smallholder cocoa farmers in Ondo and Osun States, Nigeria. One hundred and sixty (160) selected cocoa farmers were used for this study, using a multistage sampling procedure. Data retrieved were subjected to both descriptive and inferential statistics. The results of the study indicated that the majority (87.5%) of the respondents confirmed that they benefited in marketing skills to a large extent after participated in FBS. Many FBS cocoa farmers experienced increment in their income after getting involved in FBS approach in the year 2011 to 2013. Majority (63.3%) of the respondents strongly disagreed and 33.7% disagreed respectively with the statement that FBS approach had not promoted their interaction/friendship among themselves. There was a significant difference between respondents' income before the year 2010 and income after intervention of FBS in year 2011 ($t = -2.613$, $p = 0.028$), year 2012 ($t = -3.012$, $p = 0.016$) and year 2013 ($t = -3.012$, $p = 0.022$), respectively. The study recommended that FBS' cocoa farmers should be sensitized on the importance of group formation among themselves.

Keywords: Approach, Cocoa farmers, Farmer-Business-School (FBS), Perceived impact

INTRODUCTION

Cocoa, (*Theobroma cacao* L.), is native to the deep tropical regions of Central and South America (Motamayore *et al.*, 2002). Cocoa (*Theobroma cacao*) is an important cash crop in the world economy. Cocoa, being a tropical tree grown mostly in zone that extends 15 degree south of the equator, its largest production area has been West Africa where about 60 percent of the world's cocoa is grown (Akinbola, 2001). However, Central and South American countries account for only about 14% of the current (2016, latest available data) world cocoa production compared to those from African countries (2/3 of world production) (FAOSTAT, 2018). Global cocoa production is estimated at 4.59 million tonnes for 2017/2018 (ICCO, 2018). In 2016, the annual

production of cocoa, in decreasing order, by the eight largest cocoa producing countries were Côte D'Ivoire, Ghana, Indonesia, Nigeria, Ecuador, Cameroon, Brazil and Malaysia. These countries together produced about 4.23 million tonnes, representing 95% of the world production (ICCO, 2015).

The four major West Africa cocoa producers are Ivory Coast, Ghana, Nigeria and Cameroon. In West Africa, cocoa is an essentially a smallholder crop: cultivated on 1.2 to 2.8 hectares and employing about 10 million people (Padi and Owusu, 2008). Nigeria as a developing country was once rated the second largest world producer of cocoa in the 1960s (Amos, 2007). Nigeria was ranked second largest exporter of cocoa (Abolagba *et al.*, 2010). Currently is the fourth largest producer after Cote D'ivoire, Ghana and Indonesia contributing 12% of total production (ICCO, 2014). Cocoa is an important source of raw materials, as well as source of revenue to government of cocoa producing states (Olowolaju, 2014). The main agricultural subsector which contributes immensely to Nigeria's GDP is cocoa. Cocoa contributes about 15% to the total Nigerian export in 1970 (Adebile and Amusan, 2011). For instance, Nigeria earned ₦142billion from cocoa export in 2012 (Aganga, 2013).

In Nigeria, cocoa is grown almost entirely on small holdings and each farm is usually less than one hectare. Most of the cocoa plantations were established more than four decades ago and very old villagers and tenants are farmers involved in cocoa production (Adegeye, 2000). Commercial production of cocoa in Nigeria started in the first decade of the 19th century and Nigeria rose to become one of the world major producers by her independence in 1960 (ICCO, 2003). The 1950s and 1960s were decades of glory for cocoa as it was the most important foreign exchange earner for Nigeria. Production peaked at 220,000 metric tonnes in 1970. However, the oil boom of the 1970s resulted in the Dutch disease 'expressed in the neglect of the agricultural economy while focusing on oil which became almost the sole foreign exchange earner. In response to the neglect, cocoa farmers abandoned their farms and shifted

focus to other areas. This behavior adversely affected cocoa industry; in the area of yield, marketing and price of cocoa hence most cocoa plantation in Nigeria is characterized by the presence of old cocoa trees having very low yield (Vos and Krauus, 2004; Ojo, 2005). However, the production of this crop has suffered a reduction in recent years in the country owing to a number of factors such as low yield, inconsistent production patterns, disease incidence, use of simple farm tools, pest attack etc. The growth of cocoa-sub sector depends on the readiness of the various stakeholders that is, the government, cocoa marketers and farmers to take up the challenge of improving the sector. Such activities necessary for the increase in cocoa production include provision of up to date farm tools and equipment, the adoption of improved high yielding cocoa seedlings and farming practices, use of improved agrochemicals, proper involvement of men and women in policy making and other farming decisions and encouraging youths to be involved in agriculture. The government, in responding to the situation, became more actively involved in various innovative agricultural production, inputs supply and marketing, in addition to allocation policies in favour of agriculture on a large scale, production was not quite commensurate with the efforts, hence, the production of some of the agricultural commodities has not increased to the desired level (Ruma, 2008). However, Extension Services are organized and delivered in a variety of forms, with the ultimate aim of increasing farmers' productivity and income. The question is how farmers can gain access to knowledge and information on improved practices along the value chain to adopt in order to increase yield and income. The success of extension in achieving this will however depend on the extension approach that is being used to reach or communicate with farmers. The use of school innovative approaches and strategies like Farmer Business School to increase coverage is therefore a concern for all involved in agricultural extension and advisory services (Food and Agriculture Organisation, 2008). FBS is to help cocoa farmers in building business knowledge and skills to make their farms more profitable. In Nigerian Agriculture, many farmers do not know much on how to increase their income by taking advantage of market opportunities required of them to become better decision maker and better at competing in the new environment. Poor communication channels make it difficult to access market information and thereby make farmers vulnerable to exploitation by middlemen. Monopoly of market spaces makes it virtually impossible for local farmers to enter their public markets. Lack of organizational skills and established farmer organizations and cooperatives mean that the road to collective marketing of produce is long and that Farmer Business School (FBS) interventions need to build strong organizational and management skills

along with technical skills. Therefore FBS is an idea designed with the purpose to help farmers build knowledge and skills to make their farms more profitable, to as well learn about business. They will do this by learning about business where they live. According to Oloruntoba (2011), Farmer Business School (FBS) is a Cocoa Livelihood Programme (CLP) coordinated by German International Cooperation called (GIZ). It is specifically designed to train farmers on business skills. GIZ is one of the development partners that is interested in developing the business skills of small holder Cocoa farmers in Nigeria and three other West African countries namely; Ghana, Cameroon and Cote d'Ivoire. The other development partners operating in Nigeria in partnership with GIZ are; International Institute for Tropical Agriculture/ Sustainable Tree Crop Productions (IITA/STCP), SOCODEVI and Thecnoserve. The FBS programme takes the school to the farmers. Dramatic changes are taking place in farming worldwide as a result of globalization, liberalization, and rapid urbanization. Farmers are intensifying their farm enterprises in an attempt to improve their livelihoods and technical know-how is not enough. In order to be competitive and take advantage of the new opportunities that are arising, farmers increasingly have to adapt their farm business to market changes and improve efficiency, profitability and income (Kathan and Steven, 2009). However, it is needed to keep cocoa farmers abreast of latest development in production innovative skills that involve trainings and programmes like Farmer Business School (FBS).

Objectives of study

The broad objective of this study was to determine the perceived impact of Farmer Business School approach on smallholder cocoa farmers in Ondo and Osun States, Nigeria.

The specific objectives of the study were to:

- i) describe the socio-economic characteristics of respondents in the study area;
- ii) examine the benefits derived by the respondents from FBS approaches' introduced innovative skills;
- iii) ascertain the income level of the respondents before and after the FBS' intervention in the study area; and
- iv) determine the perception of respondents on FBS approach.

METHODOLOGY

The Study Area

The study was conducted in Ondo and Osun States, Nigeria. This was considered on the first phase of FBS implementation years (2011-2013). Ondo State is one of the 36 states of Nigeria and was carved out of the old Western States on 3rd February 1976. This state is one of the six Yoruba speaking states in the south-west of Nigeria. The state is made up of 18 Local Government Areas with total population of 3.4

million inhabitants (National Population Commission, 2006). Osun State is located in the south west part of the Nigeria and lies within latitude 7⁰ and 9⁰ North of Equator and Longitude 2.75⁰ and 6.75⁰ East of Greenwich Meridian. Osun State is made up of 30 Local Government Areas (Federal Office of Statistics, 2007).

Population of the study and Sampling Procedure

A multistage sampling procedure was used for this study. The target population comprised cocoa farmers that were involved in FBS approach training. Firstly, Ondo and Osun State were purposely selected out of the six states that constitute southwest of Nigeria, because FBS approach had fully carried out in the two states. In the second stage, purposive selection of Local Government Area with highest cocoa production capacity and of which FBS based approach had been utilized in each of the two states. These were Idanre, Odigbo, Ondo East, Ose in Ondo State and Atakumusa-West, Ayedade, Obokun, Oriade in Osun State. The third stage involved purposive selection of ten (10) cocoa growing communities that have the lists of FBS groups in each of the Local Government, this gave a total of (80) communities that were used for the study. Altogether at the fourth stage, in each community, two FBS cocoa farmers were simple randomly selected and interviewed. A total number of 160 FBS cocoa farmers were used.

Method of Data Analysis

Primary data were generated through the use of questionnaire. Data were analyzed by using tables, figures, means and percentages. T-test was used to test the hypothesis for significant differences in that order, through IBM SPSS Statistics v23.

RESULTS AND DISCUSSION

Socio-economic characteristics of the respondents

Data presented on Table 1 shows that the majority (55.1%) of the FBS farmers were below 50 years of age. The mean value is 48 years. This implies that farmers in the study area are middle aged and are still strong to participate effectively in cocoa production. This is contrary to Adetunji *et al.*, (2007) and Gray (2001) who observed that cocoa farmers in West Africa countries in general have an average age of 60 years and above. And, this could pose a serious problem for cocoa production in the areas in the nearest future.

The finding from the table also shows that 63.1% of the respondents were male while 38.8% were female.

The dominance of the male (63.1%) over the female may be attributed to the fact that more male are involved in cocoa production. This further buttress the fact that Nigerian agriculture is still male dominated, implying that men have more access to the resources and information required to produce crops more efficiently than their female counterparts (Fasoranti, 2006; Otitoju and Arene, 2010). In addition, the result showed that majority (85.0%) of the FBS cocoa farmers was married. This simply implies that marriage is highly cherished in the rural areas; most of these farmers were responsible and had a family to maintain. This result is consistent with Bammeke (2003) who states that individuals who undertake agricultural activities are married. Furthermore, it shows that the majority (80.1%) of the respondents had secondary school education and below. It is noted that educated farmers tend to be more efficient in production and readily accept new innovation when compared to uneducated ones that rely on their experience (Enete & Igbokwe, 2009; Martey *et al.*, 2013). This means that adaptation to FBS approach would not be a major challenge in relation to education.

In addition, it is shown that most of the respondents representing 57.5% of FBS farmers had family size of six to ten people, as this is justified with the mean household of 7 people. The implication of this is that most of the respondents have more people to work on their farms. These findings indicate that the household size of respondents was relatively large. Adegbite *et al.* (2007) cited in Omoare and Oyediran (2015) reported that large households' size is an important factor in any rural communities because it provides the manpower for farm and other household activities. Banmeke (2003) cited in Ebewore *et al.* (2013) also asserted that household size is an important index in any rural development intervention which can affect the outcome of such intervention.

It could be seen from the result that the majority (80.0%) of the respondents had farm size between 0.1 – 2.5 hectares. The low average farm sizes were found to have been as a result of land tenure problem and lack of credit facilities to increase farm sizes. The result supported the findings of Olagunju and Ogunniyi (2005) that majority of the farmers in Southwestern Nigeria cultivate small scale land area. This may likely limit the cocoa output of the respondents and discourage adoption and acceptance of new cocoa technologies and innovative skills.

Table 1: Distribution of respondents according to their socio-economic characteristics (n-160)

Variables	Frequency	Percentage %	Mean
Age (in years)			
Less than 30	10	(6.3)	48.4
30-49	78	(48.8)	
50-69	64	(40.0)	
70 and above	8	(5.0)	
Sex			
Male	98	(61.3)	
Female	62	(38.8)	
Marital Status			
Single	16	(10.0)	
Married	136	(85.0)	
Divorced	4	(2.5)	
Widow (er)	2	(1.3)	
Separated	2	(1.3)	
Level of education			
Completed tertiary school.	26	(16.3)	
Attempted tertiary school.	6	(3.8)	
Complete secondary school.	52	(32.5)	
Attempted secondary school.	12	(7.5)	
Completed Primary school.	34	(21.3)	
Attempted primary school.	14	(8.8)	
Non formal education.	16	(10.0)	
Household size			
1-5	60	(37.5)	6.5
6-10	92	(57.5)	
11-15	8	(5.0)	
≥16	0	(0.0)	
Farm size (Ha)			
≤0.1-2.5	128	(80.0)	3.07
2.51-5.0	28	(17.5)	
Above 5	4	(2.5)	

Source: Field Survey, 2019

Distribution of respondents according to the benefits derived by the respondents from FBS' introduced innovative skills

Data in Table 2 revealed the reactions of respondents to a set of FBS' innovative skills at the three levels of Likert Scale of benefit of "Not at all", "To a lesser extent", and "To a large extent". The table revealed that majority (87.5%) of the

respondents confirmed that they benefited in marketing skills to a large extent after participated in FBS. Participation in FBS had allowed them to know the right market to follow for their cocoa beans. In addition, profit/financial management skills which is the core center of FBS according to Kathan and Steven (2009), who stated that FBS is full of business and financial management skills. About

85.0% of the respondents claimed that they benefited to a large extent of the innovative skill after getting involved in FBS. They have learnt how to plan, how to calculate whether they do good or bad business, and how to manage their profits.

Also, taking farming as a business as compared to their old mentality when regarded farming as a hobby accounted to about 83.8% of the respondents who said that they benefited to a large extent after

getting involved in FBS. In other way round, about 46.3% of the respondents said that they did not benefit from cooperative formation skills at all, while 32.5% also said that they did not benefit from group formation and participation skills at all. This is contrary to the findings of Zadeh and Ahmed (2010) that group participation is being involved in the decision made to choose a project for the community, plan, implement, manage and control it.

Table 2: Distribution of respondents according to the benefits derived by the respondents from FBS' introduced innovative skills (n=160)

S/N	Benefits	Not at all		To a lesser extent		To a large extent	
		F	%	F	%	F	%
1.	Group formation and participation.	52	(32.5)	22	(13.8)	86	(53.8)
2.	Cooperative formation.	74	(46.3)	16	(10.0)	70	(43.8)
3.	Added value from quality cocoa.	8	(5.0)	64	(40.0)	88	(55.0)
4.	How to get good financial services.	40	(25.0)	24	(17.5)	90	(56.3)
5.	Diversification of agricultural enterprises.	4	(2.5)	38	(23.8)	118	(73.8)
6.	Get correct information about market prices of cocoa and other crops.	22	(13.8)	48	(30.0)	90	(56.3)
7.	Risk management.	42	(26.3)	6	(3.8)	112	(70.0)
8.	Land measurement-know your unit, know your asset.	64	(40.0)	10	(6.3)	86	(53.8)
9.	Ensure the measurement of their farm produce.	18	(11.3)	50	(31.3)	92	(57.5)
10.	Nutritional knowledge (balance diet).	6	(3.8)	62	(38.8)	92	(57.5)
11.	Taking farming as a business.	8	(5.0)	18	(11.3)	134	(83.8)
12.	Marketing skill.	8	(5.0)	12	(7.5)	140	(87.5)
13.	Profit/financial management skill.	0	(0.0)	24	(15.0)	136	(85.0)
14.	Planning/future forecasting skills.	26	(16.3)	26	(16.3)	108	(67.5)
15.	Record keeping skills.	20	(12.5)	10	(6.3)	130	(81.3)
16.	Pruning of cocoa trees.	2	(1.3)	52	(32.5)	106	(66.3)
17.	Group inputs procurement and group sales of cocoa.	42	(26.3)	4	(2.5)	114	(71.3)
18.	Installation of plantain as shaded plants.	4	(2.5)	76	(47.5)	80	(50.0)
19.	Establishment of cocoa nursery.	12	(7.5)	66	(41.3)	82	(51.3)
20.	Planting distance between cocoa (3m by 3m).	18	(11.3)	10	(6.3)	132	(82.5)
21.	Post harvesting operation.	2	(1.3)	62	(38.7)	96	(60.0)

Source: Field Survey, 2019

Income in (Naira) of the respondents from before FBS (2010), and after FBS (2011, 2012, 2013)

Data in Figure 1 shows the distribution of income (₦) of the respondents. This shows the trend of increment in income witnessed by the farmers from

2010- 2013 in the study area. About 38.8% of the respondents with the mean value of $\bar{X}=106,875.03$ realised an income less than ₦100,000 before the introduction of FBS in the year 2010. The trend increased to 55.0%, 12.5% and 17.5% of the respondents with mean value of $\bar{X}=218,750.29$

within the range of ₦100,001- ₦300,000 , ₦300,001- ₦500,000 and above ₦501,000, respectively, experienced increment in income on their cocoa production after getting involved in FBS approach in

the year 2013. The resultant considerable increased income could be as a result of knowledge gained through FBS’ innovative skills disseminated.

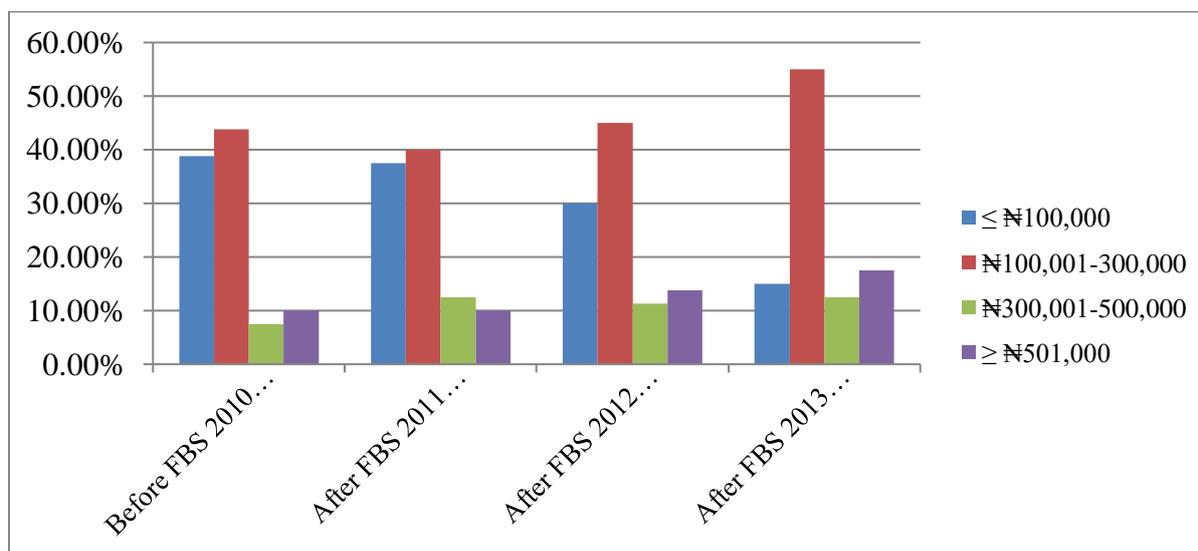


Figure 1: Distribution of respondents according to their level of income (Naira) from before FBS (2010), and after FBS (2011, 2012, 2013). (n=160)
 Source: Field Survey, 2019

Distribution of respondents according to their perception about FBS approach

Information on Table 3 shows the perception of FBS respondents towards selected variables. The grant mean is $\bar{X}=3.98$. The mean values of perception statement of $\bar{X}=3.98$ considered undecided, above $\bar{X}=3.98$ considered favourable and less than $\bar{X}=3.98$ considered unfavourable perception. Based on this categorization, majority (63.3%) of the respondents strongly disagreed and 33.7% disagreed respectively with the statement that FBS approach had not promoted their interaction/friendship among themselves. The mean value is $\bar{X}=4.66$. This indicates that all the sampled respondents believed that FBS approach had increased their inter-relationship in the study area. Moreover, 61.3% of the respondents strongly disagreed and 38.8% disagreed with the statement respectively that FBS programme had not upgraded their business knowledge. The mean valued is $\bar{X}=4.61$. This shows that all the sampled respondents believed that FBS programme had increased their business knowledge in the study area. Fifty seven percent of the respondents with their final decision strongly agreed

that they were very proud after participated in FBS training; they have learnt how to plan, how to calculate whether they did good or bad business, and how to manage their revenues. The final decision ($\bar{X}=4.54$) showed that they cultivated favourable perception towards the statement. In addition, 53.7% of the respondents with the mean value of $\bar{X}=4.54$ strongly agreed that through participation in FBS their incomes, profits and standard of livings have increased in the study area. The final decision shows that they developed favourable perception towards the statement.

Inversely, About 43.8% of the respondents with the mean value of $\bar{X}=2.74$ agreed that participation in FBS had not made them to join group sales of cocoa beans and group purchases of cocoa inputs .The final decision showed that they established unfavourable perception towards the statement. In addition, 37.5% of the respondents agreed that FBS programme had not facilitated easy access to fertilizers and agro-chemicals. The mean value is $\bar{X}=2.85$. This implies that they unfolded unfavourable perception towards the statement.

Table 3 : Distribution of respondents according to their perception about FBS approach (n=160)

S/N	Perception	SA F %	A F %	U F %	D F %	SD F %	Mean \bar{X}	Remark
1.	I had become more enlightened on the appropriate techniques to deploy on my farm and post harvest practices that guarantee quality cocoa. (P)	80 (50.0)	70(43.8)	4 (2.5)	6 (3.8)	0 (0.0)	4.40	Agreed
2.	I have learnt how to accurately measure my farm land. (P)	32 (20.0)	52(32.5)	30(18.8)	40(25.0)	6 (3.8)	3.40	Undecided
3.	The training has opened my eyes to the profitability of agric business and agriculture generally using the right practices. (P)	74 (46.3)	76(47.5)	10 (6.3)	0 (0.0)	0 (0.0)	4.40	Agreed
4.	I made sure I recorded the payment I made to hired labour and inputs, so that I can deduct it from money that comes from my crops at the end of the season, thereby knowing my profit (P)	34 (21.3)	62 (40)	2 (1.3)	50(31.3)	10 (6.3)	3.39	Agreed
5.	Through FBS our community had grown into a small closely knitted group with common interest and it has created a feeling of belong among the farmers. (P)	46 (28.8)	58(36.3)	46(28.8)	10 (6.3)	0 (0.0)	3.88	Agreed
6.	I am very proud after this training. I have learnt how to plan, how to calculate whether I do good or bad business, and how to manage my revenue. (P)	92 (57.5)	62(38.8)	6 (3.8)	0 (0.0)	0 (0.0)	4.54	Strongly agreed
7.	No more need to suffer. I will bring my money to the bank to avoid spontaneous spending... and take it when I need it. (P)	78 (48.8)	68(42.5)	12 (7.5)	2 (1.3)	0 (0.0)	4.39	Agreed
8.	Our children, the future leaders of our farms, have to learn how we produce our crops and that agriculture is business. (P)	52 (32.5)	56(35.0)	52(32.5)	0 (0.0)	0 (0.00)	4.00	Agreed
9.	I have wasted my time and money because I have not known these methods before. (P)	70 (43.8)	82(51.3)	6 (3.8)	2 (1.3)	0 (0.0)	4.38	Agreed
10.	If I plan and if I follow the technical	0 (0.0)	16(10.0)	32(20.0)	98(61.3)	14 (8.7)	3.69	Disagreed

	recommendations, even those that have small farm will not do good business in agriculture. (N)							
11.	Through FBS my income. Profit and standard of living have increased. (P)	86 (53.7)	74(46.3)	0 (0.0)	0 (0.0)	0 (0.0)	4.54	Strongly agreed
12.	Participation in FBS has not made me to join group sales of cocoa beans and group purchases of inputs. (N)	8 (5.0)	78 (45.8)	22(13.8)	52(32.5)	0 (0.0)	2.74	Undecided
13.	Participation in FBS had not allowed me to know the right market for my cocoa beans. (N)	6 (3.8)	48(30.0)	40(25.0)	62(38.8)	4 (2.5)	3.06	Undecided
14.	FBS has not facilitated easy access to loan. (N)	20 (12.5)	26 (16.3)	26(16.3)	76(47.5)	12 (7.5)	3.21	Undecided
15.	FBS has not promoted extension services. (N)	0 (0.0)	0 (0.0)	4 (2.5)	70(43.8)	86(53.8)	4.51	Strongly disagreed
16.	FBS had not upgraded my business knowledge. (N)	0 (0.0)	0 (0.0)	0 (0.0)	62(38.8)	98(61.3)	4.61	Strongly disagreed
17.	FBS has not facilitated easy access to fertilizers and agro-chemicals. (N)	16(10.0)	60 (37.5)	24(15.0)	52(32.5)	8 (5.0)	2.85	Undecided
18.	FBS has not encouraged the registration of farmers' group. (N)	0 (0.0)	0 (0.0)	0 (0.0)	76(47.5)	84(52.5)	4.53	Strongly disagreed
19.	I have not taught through FBS on how to diversify my cocoa farm. (N)	0 (0.0)	0 (0.0)	0 (0.0)	96(60.0)	64(40.0)	4.40	Disagreed
20.	FBS has not promoted interaction/friendship among farmers. (N)	0 (0.0)	0 (0.0)	0 (0.0)	54(33.7)	106(63.3)	4.66	Strongly Disagreed

Source: Field survey, 2019. Grand mean = 3.98. N= Negative statement, P = Positive statement. SA= Strongly Agreed, A= Agreed, U= Undecided, D= Disagreed, SA= Strongly Disagreed

Hypothesis Testing

There is no significant difference between respondents' income before and after intervention of FBS.

Data on Table 4 depicted that there is significant difference between respondents' income before and after intervention of FBS; before 2010 and after 2011 (t = -

2.613, p = 0.028), before 2010 and after 2012 (t = -3.012, p = 0.016) and before 2010 and after 2013 (t = -3.220, p = 0.022) Hence the null hypothesis is hereby rejected. This means FBS is centered on business orientation and marketing skills that influenced the increment in income of FBS cocoa farmers in the study area as justified by their mean

Table 4: T-test analysis result showing the difference between respondents' income before and after intervention of FBS.

	Mean Income (₦)	Mean	Standard deviation	Standard error mean	t-value	Df	p-value	Remark
Income Before (2010) Income After (2011)	113,125.13	-0.24881	0.48278	0.10535	-2.613	22	0.028	Significant
Income Before (2010) Income After (2012)	144,375.12	-0.26452	0.50122	0.11243	-3.012	26	0.016	Significant
Income Before (2010) Income After (2013)	218,750.29	-0.31242	0.34412	0.12160	-3.220	31	0.022	Significant

Source: Field Survey, 2019

CONCLUSION AND RECOMMENDATIONS

On the issue of benefits of FBS approach' introduced innovative skills, majority of the respondents confirmed that they benefited in marketing skills to a large extent after participated in FBS, whereas considerable number of the respondents said that they did not benefit from cooperative and group formation skills at all.

In conclusion, majority of the cocoa farmers agreed that through participation in FBS their incomes, profits, yield and standard of livings had increased in the study area. FBS approach further enhanced their business knowledge and marketing skills, and thus increased their income and production in Ondo and Osun States.

It was therefore, recommended that the provision of agricultural inputs (fertilizer and agro-chemicals) to participating FBS' farmers at subsidized rate should be adequately incorporated into the programme through the concerned authority. Also,

FBS' farmers should be sensitized on the importance of group formation among themselves and in their communities in order to have access to various developmental programmes, information, credits and other inputs needed by them.

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