

Developing Agro-Tourism Tours on the Cocoa Sector in Africa: Emerging Issues from Ghana

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Abstract: The need for Africa to diversify its tourism offerings continue to receive research attention. Against this backdrop, this study examined the potential of developing agrotourism, with specific reference to the cocoa sector in Ghana. Ghana has carved a global image for itself as a cocoa production hub. Using a mixed-methodological approach, the study purposively solicited data from respondents in four selected communities that show great potential for cocoa agrotourism business. Semi-structured questionnaires were administered to 120 people selected from the four selected communities. The study also purposively selected and interviewed key informants in the tourism and agriculture sectors. The key findings from the study revealed that cocoa agrotours is a potential avenue to alleviate rural poverty and economic hardships in the country. It must however not be seen as a panacea to rural poverty alleviation. Based on findings, the study concludes that conscious efforts by locals, private and government are needed towards product development, diversification and marketing in the agrotourism niche market.

Keywords: Agrotourism; cocoa agrotours; Ahafo Ano South District; Ashanti Region; Ghana

JEL Classification: Z32

1. Introduction

Globally, tourism is seen as a means for national development through the eradication of poverty, increasing employment opportunities and other options such as earning foreign exchange, improving the balance of payment and infrastructural development (Fennell 2008; Phillip et al., 2010; Barbieri, 2013; Olya et al., 2014). Agriculture is mostly the backbone of the economies of developing countries (Philip et al., 2010). Therefore, combining agriculture and tourism tends to improve the economies of developing countries, including Ghana. In 2013, there were 20,897 agro-tourism farms in Europe, the number increased to 21,744 in 2014 (Eshun & Tettey, 2014). Hamilpurka (2012) affirmed that there are three main tourism niches available in rural areas, inter alia cultural tourism, ecotourism and agrotourism. Phelan and Sharpley (2011), posit there is an increasing diversification in agriculture, and rural landscape offers a great opportunity for tourism development, for example in developing counties, where economic options are often scarce. Some authors further argue that due to increasing global competition for destinations, nation-states are harnessing their unique tourism resources to gain sustainable competitive advantage in the tourism market (Fleischer & Tchetchik 2005; Schroth & Harvey, 2007).

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According to the Ministry of Food and Agriculture (2011), the agricultural-sector employed over 50% of the Ghanaian labour force. Cocoa has contributed immensely to the development of Ghana. Ghana has a comparative advantage in cocoa production considering the cost involved in cultivation as compared to oil palm production (Ghana Review International, 2007). As a result of favourable natural conditions and the topographical nature of the land, cocoa is viable to thrive in the deteriorated soil condition as compared to maize, plantain and cassava (Acquaah, 1999). The cocoa industry is the single largest contributor to agricultural gross domestic product 11.24% and 11.50% in 2008/2009 respectively, while the entire agricultural sector contributes between 35.8% and 37% to Ghana's GDP (Ministry of Food and Agriculture, 2010; Ghana Statistical Service, 2012). It is estimated that about 60% of the country's workforce works either directly or indirectly in the cocoa industry (Ntiamoah & Afrane, 2008). In Ghana, cocoa is grown on small scale and owned by individual and families in the forest zones of Ashanti, Western, Brong Ahafo Eastern and Volta regions (Tweneboah, 2000). Consequently, the livelihood of about 2 million farmers and their dependents, mostly in rural areas depend directly on cocoa (Ghana Review International, 2007; Ministry of Food and Agriculture, 2011). Eshun and Tettey (2014) argue that Ghana must look at agriculture and move the sector from the current productivist paradigm to post-productivist paradigm where tourism must be seen as a key contributor to its offerings.

Agrotourism is a great opportunity to alleviate poverty in Ghana through several ways. For instance, cocoa farms are mostly located in the rural areas where the level of poverty is abject in terms of severity. Ashanti region has an outstanding history of cocoa production, which indicates that cocoa agrotours can be a new avenue for the region's development (Acquaah, 1999; Ghana Review International, 2007; Ministry of Food and Agriculture, 2011). Eshun and Tettey (2014) further state that agrotourism on cocoa farms will offer educational and economic benefits to tourists and farmers respectively, thereby providing extra income to rural communities and other multiplier effects. Currently, the development of cocoa agrotours in Ghana is less known and as such, there is the need for intensive research to that effect to expand the frontiers of the sector. It is against this backdrop that, the study sought to examine the emerging issues associated with cocoa agrotours in the Ashanti region, and the way forward as to the development and growth of the agrotourism niche-market in Ghana.

2. Cocoa Farms and Agrobiodiversity

Cocoa is one of the major agri-perineurial activity in Ghana (Acquaah, 1999; Eshun & Tettey, 2014). Cocoa has contributed immensely towards the economic development of the country. The crop was brought to the colonial Gold Coast now Ghana from Fernando Po; an island off the Coast of Gabon in 1879 and Sao Tome in 1886. Twelve years after cocoa arrived in Ghana, it was exported as a cash crop (Acquaah, 1999). Cocoa production in Ghana employs about 60% and constitutes the main Ghanaian agricultural commodity (Ntiamoah & Afrane, 2008). Cocoa agriculture has played a vital role in the transformation of lowland tropical forest landscapes in Latin America, Asia and Africa over the past centuries and continue to do so today (Schroth & Harvey, 2007). In many producing countries, cocoa has been a drive to deforestation, with cocoa grown in plantations or agroforestry systems replacing the original forest ecosystems. The canopies of cocoa trees provide an in-situ conservation to some species of animals. The avian diversity of shaded cocoa farms and fragment of natural forest in Bocas del Toro,

Panama, determines the role of cocoa agroforests as habitat for local forest and migratory birds. Ntiamoah and Afrane (2008) explain that cocoa and (banana) agroforests have a far greater habitat value than the intensively managed plantain monoculture.

The core of agrotourism is the attraction which is actually the ‘agricultural biodiversity’ (diminutive—‘agrobiodiversity’) which is the ‘toured object’ (Kameri-Mbote & Cullet, 1999). Biodiversity is a universal set of plants and animals in natural habitat. There is an introduction of modern farming practices such as mechanisation, monocultures, hybrid varieties and others. These farming practices have devastated biodiversity all over the planet (Hjalager, 1996). To attain sustainability, there is a call for a paradigm shift from modern agricultural farm practice to agroecology farming systems. Benefits of well-established biodiversity help in cocoa growth (Eshun & Tettey, 2014; Eshun et al, 2014). Some existing research posits that people in professional and managerial positions are three times likely to visit countryside than those who are unemployed or in minimum incomes (Fennell, 2008; Kumbhar, 2012).

3. Methods

Sampling Techniques, Data Collection and Analysis

The study was conducted among four communities namely Mankranso, Nfensi-Adankwame, Pokukrom and Adugyama in the Ahafo Ano South District in the Ashanti Region of Ghana. The study design is a mix of qualitative and quantitative with descriptive, cross-sectional survey approach. According to Denzin and Lincoln (2005), the cross-sectional study is mainly designed to study some phenomena taking data from a representative subset at one specific point in time. Cross-sectional studies are purely descriptive studies and can be used for finding out prevalence of phenomena, situation by taking a sample of the population (Denzin & Lincoln, 2005; Mkono, 2013; Eshun & Manful, 2015). To Riley and Love (2000), while quantification of research results offers some level of data objectivity, qualitative research allows participants to tell their own story in their own words concerning the phenomenon under study.

The researchers purposively sampled respondents in the agriculture and tourism sector in the study areas. This was because purposive sampling technique is a non-probability approach in which decisions concerning the individuals to be included in the sample are taken, based upon a variety of criteria which may include relevance of the subject matter as well as specialised knowledge of the respondents on the research issue (Denzin & Lincoln, 2005; Creswell, 2008; Eshun, 2011; Eshun & Manful, 2015). Eshun and Madge (2012), contend cogently that researchers must strategically and pragmatically explore what methodological approaches are germane for particular research in Africa tourism scholarship.

The study further purposively selected the towns in the district. These communities were selected based on their seeming cocoa agrotourism potentials. The sample size for the study was determined using the formula $\{n=N / \{1 + N (e)^2\}$, where n is the sample size, ‘ N ’ is the target population, $(e)^2$ is the margin of error which is normally estimated at 0.05 (Denzin & Lincoln, 2005; Creswell, 2008;). The data collection was based on a sample size of 120. In all, the selection involved 18 respondents for both farmers and residents in Mankranso, 50 respondents from Nfensi-Adankwame, 32 respondents



Pokukrom and 20 respondents from Adugyama in the Ahafo-Ano district. Pre-coded questionnaires were used to collect the quantitative data. This form of questions was used because it allowed for aggregation of views using frequencies and percentages. The questionnaires were mainly administered to the cocoa farmers in the selected communities.

The study further collected qualitative data to provide further nuance to its findings. The collection of the qualitative data was through interviews. The interviews were based on discussions initiated by four vignettes. Vignettes provide a structure that enables a systematic coverage of topics while being flexible enough to allow respondents to elaborate on their views in a conversational style (Riley & Love, 2003; Denzin & Lincoln, 2005). In total 15 respondents, were purposively selected from people working in the tourism and agriculture sectors in Ghana, specifically, Ministry of Tourism, Ghana Tourism Authority, Ministry of Food and Agriculture and Ghana Cocoa Board (COCOBOD). Each interview lasted between 30 to 45 minutes. All interviews were tape-recorded with consent from the interviewees to ensure social research ethical standards. The quantitative data were analysed with the descriptive and inferential statistical tools in the SPSS Version 20.0. The qualitative data were analysed thematically (Mkono, 2013).

4. Findings and Discussion

Socio-Demographic Characteristics of the Respondents

This section discusses the socio-demographic characteristics of the respondents. This includes the age, gender, marital status, occupation, educational background and length of stay of respondents. The table below summarises the socio-demographic characteristics of respondents from each community in Ahafo Ano South District.

Table 1. Represent the Socio-Demographic Characteristics

VARIABLES	MANKRANSO (18) Respondents	POKUKROM (32) Respondents	ADUGYAMA (20) Respondents	NFENSI- ADANKWAME (50) Respondents	TOTAL (120) Respondents in the four communities
Age					
18-20	2 (11.1%)	2 (6.25%)	1 (5%)	9(18%)	14(11.66%)
21-25	2 (11.1%)	2 (6.25%)	1 (5%)	13(26%)	18(15%)
26-30	5 (27.8%)	14 (43.75)	8 (40%)	7(14%)	34(28.33%)
30 and above	9 (50%)	14 (43.75%)	10 (50%)	21(42%)	54(45%)
Sex					
Male	10(55.55%)	20(62.5%)	12(60%)	22(44%)	64(53.33%)
Female	8(44.44%)	12(37.5%)	8(40%)	28(56%)	56(46.66%)
MARITAL STATUS					
Single	3(16.66%)	10(31.25%)	5(25%)	8(16%)	26(21.66%)
Married	10(55.55%)	16(50%)	10(50%)	30(60%)	66(55%)
Divorced	3(16.66%)	2(6.25%)	5(25%)	6(12%)	16(13.33%)
Widow(er)	2(11.11%)	4(12.5%)	0(0%)	4(8%)	10(8.33%)
Education					
Basic	12(66.66%)	22(68.75%)	15(75%)	39(78%)	88(73.33%)
Secondary	6(33.33%)	6(18.75)	4(20%)	6(12%)	22(18.33%)
Tertiary	0(0%)	1(3.13%)	1(5%)	3(10%)	5(4.16%)
Occupation					
Farming	14(77.78%)	25(78.13%)	15(75%)	45(90%)	99(82.5%)
Driving	1(5.55%)	3(9.38%)	1(5%)	2(4%)	7(5.83%)
Teaching	1(5.55%)	2(6.25%)	0(0%)	3(6%)	6(5%)
Maison	1(5.55%)	1(3.13%)	2(10%)	0(0%)	4(3.33%)
Hairdressin g	1(5.55%)	1(3.13%)	2(10%)	0(0%)	4(3.33%)
Lenght of stay/engagement in cocoa production					
Less than a year	-	-	-	-	-
1-3 years	2(11.11%)	2(6.25%)	2(10%)	4(8%)	10(8.33%)
4-6 years	2(11.11%)	10(31.25%)	6(30%)	8(16%)	26(21.67%)
7 years and above	14(77.78%)	20(62.5%)	12(60%)	38(76%)	84(70%)

The study revealed that majority of the farmers fall within 30 years and above category. Overall there were more males than females. The number of males were 64 representing 53.33% of the respondents while the females were 56 representing 46.66%. The percentage difference between the males and the females is 6.67%. The researchers concentrated mainly on the cocoa farmers because it is believed the cocoa farmers have more details on the cocoa production. Under the marital status, out of 120 respondents, less than two percent did not indicate their marital status. Married people were in the majority with 66 (55%). The educational background of Mankranso and its nearby villages is mixed,

comprising of those with no formal education and those with educational backgrounds ranging from basic, secondary to tertiary levels. Majority 88 (73.33%) of the respondents fell within the basic level category and four percent had no formal education.

These low level of education also lead to high inconsistencies in the responses as most of them could not read nor write. In terms of occupation, it can be deduced that people who said they are cocoa farmers were 99 representing 82.5% of the total number of the respondents. Seven of the respondents representing 5.83% indicated that they are commercial vehicle drivers. Also, four of the respondents representing three percent said they are Maison and finally, three percent said they are hairdressers and finally teachers were five percent. The majority of cocoa farmer-respondents implies that the information needed to achieve the objectives of the study was obtained. The researchers were interested in knowing how long the respondents have stayed in the study area. This is to enable them to obtain clear information as to the status of cocoa cultivation in the area. Majority of the respondents have stayed more than 7 years and above, 84 representing 70%, 26 (21.66%) respondents fall within 4-6 years while 10 respondents fall within 1-3 years representing eight percent. This indicates that the researchers met the locals who know and had experience in cocoa farming activities in those communities. Eshun (2011) maintain, that when respondents provide rich data on research objectives, it increases the validity of the research.

Potentials of Cocoa Agrotours in the Ashanti Region

Agrotourism is alternative business to support farming activities basically in rural areas, this section examines the potentials and other facilities likely to promote cocoa agrotours in the selected communities. It gives a broad idea about whether the future of the agrotourism business in those areas will be bleak or bright depending on the responses by the local residents.

Table 2. Knowledge of Respondents about the Potentials of Agro Cocoa

	Mankranso (18)	Adugyama (20)	Pokukrom (32)	Nfeinsi Adankwame (50)	Total percentage
Do people visit the community all year round					
Yes	12(66.7%)	15(75%)	21(65.6%)	28(56%)	76(63.33%)
No	6(33.3%)	5(25%)	11(34.4%)	22(44%)	44(36.66%)
Are there any accommodation facilities					
Yes	13(72.2%)	15(75%)	20(62.5%)	25(50%)	73(60.83%)
No	5(27.8%)	5(25%)	12(37.5%)	25(50%)	47(39.16%)
Do you own a cocoa farm					
Yes	18(100%)	20(100%)	30(93.8%)	50(100%)	118(98.33%)
No	0(0%)	0(0%)	2(6.2%)	0(0%)	2(1.66%)
What is the size of your cocoa farm					



1-3 acres	3(16.7%)	4(20%)	12(37.5%)	19(38%)	38(31.66%)
4-8 acres	7(38.9%)	8(40%)	9(28.1%)	12(24%)	36(30%)
9 and above acres	8(44.4%)	8(40%)	11(34.4%)	19(38%)	46(38.33%)
What is the ownership status of your cocoa farm					
Family Owned	6(33.3%)	5(25%)	10(31.2%)	18(36%)	39(32.5%)
Commercially Owned	1(5.6%)	3(15%)	6(18.8%)	10(20%)	20(16.66%)
Individually Owned	11(61.2%)	12(60%)	16(50%)	22(44%)	61(50.83%)
How does the ownership status affect your level of measurement					
Easy management	14(77.8%)	11(55%)	27(84.4%)	38(76%)	90()
Difficulty in Management	2(11.1%)	3(15%)	4(12.5%)	6(12%)	15(12.5)
Monetary problem	2(11.1%)	6(30%)	1(3.1%)	6(12%)	15(12.5%)
Would you like to convert your cocoa farm to an agrotourism site					
Yes	18(100%)	20(100%)	28(87.5%)	45(90%)	111(92.5%)
No	-	-	4(12.5%)	5(10%)	9(7.55)
If yes/No provide reason					
Employment	4(22.2%)	4(20%)	3(9.4%)	4(8%)	15(12.5%)
Education	8(44.4%)	9(45%)	14(43.8%)	19(38%)	50(41.66%)
Support	6(33.3%)	7(35%)	14(43.8%)	22(44%)	49(40.83%)
Not necessary (No)	-	-	-	1(2%)	1(0.83%)
Are you aware of agrotourism					
Yes	14(77.8%)	10(50%)	11(34.4%)	20(40%)	55(45.83%)
No	4(22.2%)	10(50%)	21(65.6%)	30(60%)	65(54.16%)

To assess the potentials of cocoa agrotours in Ahafo Ano South District, the researchers inquired about their awareness of tourism activities in their area. At Mankranso, the district capital, 66.7% of the respondents said 'Yes' to indicate that there is some level of tourism activities, while 33.3% who said 'No'. Adugyama had having majority of the respondents indicating 'Yes', 16 (80%) while 10% said 'No'. At Nfensi Adankwame 60% of the respondents' also indicated 'Yes', and 38% responded 'No'. The remaining two percent did not know whether people visit the communities. Similarly, in Pokukrom, the respondents registered 26(81.2%) for 'Yes' and 16% for 'No'. The results indicated that the communities are aware of the existence of tourism activities in the district which include cultural festivals, funerals, local sporting activities as well as hospitality services to visitors in the district capital. An elderly resident in Mankranso mentioned that:

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“It is prudent to note that there are so many activities that can call for people to visit this community, ranging from funerals to health care to education and to events. All of these activities provide a drive to which people visit this community. But upon all, we cannot say that there is tourism in this community because the motive for their visit is not predominantly tourism”.

Furthermore, the respondents were asked to indicate whether there are accommodation facilities that will help to promote tourism in the area. In Mankranso community, 75% said yes while 25% said ‘No’. Again in Adugyama, 72.2% said ‘Yes’ and 27.8% said ‘No’. Similarly, in Nfensi-Adankwame, 50% of the respondents responded ‘Yes’ and 50% responded ‘No’. Views from Pokukrom also indicated that 62.4% said ‘Yes’ and 37.5% said ‘No’. Mankranso, the district capital, has more accommodation facilities such as hotels and guesthouses to support tourism development. Information received from an Agric officer at the area indicated that:

“When it comes to accommodating the guest, it will not be any problem because Mankranso community, there is the existence of hotels, guesthouses etc. which is very good and attractive and tourist will like to be there”.

Also, at Pokukrom respondents indicated that there is an accommodation facility which happens to be the area council. Most visitors who come to the community for any purpose are accommodated in the council. The locals maintained that the council is managed by a committee of the community and that makes it easily accessible to visitors. The other two communities such as Adugyama and Nfensi-Adankwame have similar views to that of Pokukrom. They indicated that there are no hotels and guest houses in the communities, but there are facilities which can be used to accommodate tourists. A farmer at Adugyama substantiated this when he argued:

“Even though there are no accommodation facilities in this area, the tourists can stay in our houses. He went further to say that hospitality is a very important thing the community offers. We are very united, very cooperative and living in a peaceful community where tourists will never have any problem during their stays”.

This supports earlier research that agrotourism includes shared or independent accommodation at the owners’ home (Barbieri, 2013; Flanigan et al., 2014; Eshun & Tettey, 2014). At Mankranso, it was revealed that 45% of the people were willing to use their homes as guest accommodation. This was seen as either good, with 25% endorsing the idea to five percent maintaining that it is bad. One of the Agric officers averred:

“I have ever stayed at either of the guest house or the hotel and it is good and very attractive and peaceful. Their meals are delicious, and they also have a very calmly attitude to guests, the rooms are highly affordable, clean and very nice to stay”.

Proponents of agrotourism indicate that the expectation of agrotourists is not high quality accommodation but rather an expectation of a well-maintained, clean and pollution-free accommodation facility in the countryside (Fleischer Tchetchik 2005; Kumbhar, 2010). Almost all the respondents in the communities confirmed that there are accommodation facilities in the district capital. Still probing more to find out about the potentials of cocoa agrotours in the Ahafo Ano South district, the research sought to find out about the actual number of cocoa farm owners in the communities. The results



showed that all the respondents from all the study communities said ‘Yes’ that they have cocoa farms, representing 100%. The target population of the research were on cocoa farmers. Because the research believe that cocoa farmers are more involved in cocoa cultivation and related activities, they have most of the information about the cocoa cultivation processes, at least to the pre-processing phases of the value chain. A farmer in Nfensi-Adankwame said:

“The dominant activity in this area is cocoa farming. The livelihood of almost all of us depend on cocoa and other farming activities”.

It is estimated that about 60% of the country’s workforce works either directly or indirectly in the cocoa industry (Ministry of Food and Agriculture, 2010). The farmers were asked about the number of acres of farmland they have. This were to obtain the viability of cocoa agrotours in the area. Various sizes were reported from the farmers in the study communities. In Mankranso, 20% indicated that they have farmlands in between 1-3acres, 40% said they have farmland between 4-8 acres and 8(40%) said they have 9 and above acres. Similarly, in Adugyama, 3(16.7%) said they have farmlands in between 1-3 acres, 7(38.9%) said they have in between 4-8 acres while 44.4% said they have 9 and above acres. Notwithstanding, the people of Nfensi-Adankwame also have the majority of the respondents (38%) having 9 and above acres and 1-3 acres respectively. The rest of the people fall within the 4-8 acres, 24%. Also in Pokukrom, 37.5% said they have in between 1-3 acres, 28.1% said they have farmlands in between 4-8 acres while 34.4% said they have farmlands more than 9 acres. Overall the number of respondents 68.33 have cocoa farmlands more in between four and above, this indicates that more than 1/3 of the total farmers have relatively large scale farms, as confirmed by this agricultural officer:

“Among the potentials mentioned, the one which is not to be doubted about island. The area has vast land that can accommodate a lot of activities”.

The availability of land and its size for farmers are cardinal issues in rural development discourses and practice (Hjalager, 1996; Ghana Review International, 2007). The respondents were further asked about the ownership status of their farmland. This was put in either commercial, individual or family own. In Mankranso, 11 respondents representing 55% said their farmlands are owned by themselves, five respondents said the farms are owned by family while three said their farmlands are owned commercially. Also, 55.6% of the people of Adugyama indicated the farmlands belongs to the individual farmers. 33.3% said family and 5.6% said commercial. Similarly, the case of Pokukrom, majority of its farmlands were owned individually 46.9%. About 32% were using family lands, while 18.8% said ownership was commercial. Nfensi-Adankwame also has 42% of the farmers owning their lands individually, with 36% working on family lands while 20% obtained their lands from commercial sources. Overall, individually-owned and managed farms were more than the family-owned and the commercially-owned lands. Indicating that in the case of developing cocoa agrotours, it will not be difficult managing them as individually owned businesses since decision making will be expedited. A respondent added:

“Even though farmlands are mostly inherited, majority of us are natives who happen to own our farms. Also, most of the family-owned farms usually undergo fragmentation if there is difficulty in managing it. The only difficulty that sometimes emerges has to do with monetary issues which is easily resolved. We are ready to undertake cocoa agrotours and you can go ahead and promote it” .



Respondents were further asked whether they will like to convert their cocoa farms into agrotourism sites. All respondents from two out of the four study communities; Mankranso and Adugyama (100%) said 'Yes', In Pokukrom and Nfensi-Adankwame, majority of 87.5% and 90% respectively responded in the affirmative. Overall, 92.5% farmers from all the communities were willing to convert their cocoa farms into attraction sites while less than eight percent were not ready to convert, indicating that it will be easy converting cocoa farms into agrotourism sites in the promotion of this niche tourism market.

The reason behind their readiness to convert farms was the expected support from government and Ghana Tourism Development Company (GTDC) in helping them in their cocoa farming activities, through education and other new methods of farming. This would include the adoption and use of new hybrid varieties of cocoa. Creation of more employment for people in the communities to boost their income level hence will bring about increase in standards of living. The people of Mankranso indicated that the rationale behind converting the cocoa farms is the fact that after harvesting, the cocoa activities go down and farmers virtually do not gain anything from the farm. Similarly, respondents of at Nfensi-Adankwame and Adugyama said that they can combine both the farming activities and the tourism activities, and hence this will increase their strength of diversification, thus, increasing their income. In Pokukrom, the community associated the move with development, since it compels government to facilitate the infrastructural development in building of school, roads portable water etc. which will help improve their standards of living promote rural development.

Respondents were further asked if they are aware of agrotourism and the means to which they obtained their information. This is to enable the researchers know whether the respondents have a fair idea about agrotourism and the measures that would be put in place to boost their knowledge in agrotourism. In Mankranso 55.4% said they are not aware of agrotourism, with 44.6% indicating their awareness. In Adugyama, half of the respondents said they are aware of agrotourism. Similarly, in Pokukrom, majority (65.6%) were not aware of the idea of agrotourism. Again, 60% of respondents from Nfensi-Adankwame maintained that they are not aware of agrotourism. These responses indicate that the number of respondents in all the communities who said they are not aware of agrotourism exceeded those with awareness of the concept. This could be explained to their educational background. The people are not well educated and thus, are limited to source, peruse to fully understand information. Those who were well-informed a, however, claimed they obtained the information from neighboring communities, friends and the media. Many people were making reference to the Adjeikrom cocoa tour facility. An Agric officer at quality control in Mankranso also stated that:

“It is difficult obtaining information like that but we hear from friends that there is something like that in Eastern Region called the Adjeikrom cocoa tour facility. The level of education of the people is low and as such to promote cocoa agrotour it will be essential to train and also educate the people as to the importance of the activity and how they can involve themselves in it”.

Currently, awareness of agrotourism among farmers of Mankranso and nearby villages is low. A correlation test was conducted between the level of education of respondents and their awareness of agrotourism. From the table 3 the results indicated a weak inverse relationship between the level of education and awareness of agro tourism. Thus, it implies that as the level of education increases, awareness of agrotourism decreases. A situation which defies the usual expectation of increasing

awareness with increase education levels. This anomaly could ostensibly be attributed to the heavy bottom lower levels of education among the respondents.

The coefficient of determination (r^2) was also computed and the value was 0.056. This means that 5.6% of the change that occurred in their awareness of agrotourism accounted for by a change in the level of education with the rest, 94.4% attributed to extraneous variables. Statistically, it can be deduced that the level of education of the respondents had little significance on their awareness of agrotourism. This is obvious due to the fact that the majority of the respondents had low level of education which was even not agrotourism in focus.

Table 3. Correlations

		Level of education	Awareness of agrotourism
Level of education	Pearson Correlation	1	-.237*
	Sig. (2-tailed)		.011
	N	115	115
Awareness of agrotourism	Pearson Correlation	-.237*	1
	Sig. (2-tailed)	.011	
	N	115	120

Correlation is significant at the 0.05 level (2-tailed).

Activities of Cocoa Agrotours in the Ashanti Region

Literature on agrotourism shows that there are three main expectations for agrotourists when they visit agrotourism sites namely; they expect there should be something at the site for them to do, something for them to see and something for them to buy (Catalino and Lizardo, 2004; Eshun & Tettey, 2014; Flanigan et al., 2014). These three expectations are referred to as the three principles of agrotourism (Philip et al., 2010), In terms of the methods used in cocoa harvesting, nine percent responded that they use ‘go-to-hell’(about 4.5 metres wooden pole, with a hook at the end, used to harvest cocoa pods) method while 12.5% responded that they use cutlass to harvest their cocoa. In addition, 76.7% said that they use both cutlass and go-to-hell method in harvesting their cocoa. The remaining 2 percent said they use other methods in cocoa harvesting. Results from each community indicated that, in Mankranso, 88.9% said they use both methods, the rest of the percentage was equally divided between those who said they use go-to-hell and cutlass separately. In Nfensi-Adankwame, 50 respondents shared their views on the use of the various methods, 92% indicated they use the combined method, thus go-to-hell and cutlass because it allows easy and faster harvesting, six percent said they use only cutlass and the remaining two percent used only go-to-hell. Also, in Adugyama out of 20 respondents 85% use both methods, 10% use cutlass while five percent said go-to-hell.

A clear result from Pokukrom re-emphasised that combined and cutlass methods recorded the highest responses, of 53.1%, and 28.1% respectively, while six people indicating they use go-to hell representing 18.8% of the respondents. This indicates that one of the activities tourists are likely to do in the cocoa farm is using cutlass and the go-to hell in harvesting cocoa. Many of the respondents established that, it is very attractive and tourists would like to participate in it. Five respondents in Pokukrom and Adugyama shared their views that:

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“Go-To-Hell and cutlass method of harvesting have been a tradition in this locality and that all farmers used either of the method in harvesting their cocoa. We cannot do without any of these methods because the cocoa tress is tall and demands something a farmer can stand on from the ground to harvest. Therefore, the go to hell method is use to enable us get to the cocoa pods which are high above the ground”.

This indicates pick-your-own activities in the cocoa farm where the tourists would be given the chance to participate in using any of the methods in harvesting the cocoa. Phillip et al (2010) further affirm that one of the common activity in an agrotourism farm is pick-your-own activities. Cocoa Producers Alliance (2011), placed emphasis on fermentation as an important activity in cocoa production and quality, the study therefore probed further into the fermentation period of the cocoa beans in Ghana. The most of the respondents (85%) said they use one week for their cocoa fermentation while 10% and five percent responded they use five days and three days respectively to allow their cocoa beans to be fermented. Those who use one week were of the views that anything less than a week would be rejected on the market. They also said that their cocoa become well fermented and this added value to their cocoa. Those who use 3 to 5 days do so when they need to pay their debts and get out of poverty as soon as possible. Farmers’ attitudes, behaviours and knowledge towards the quality, weight and marketability of the cocoa beans were also evaluated in terms of fermentation in each community. Nfensi-Adankwame, out of 50 respondents in the survey 31 (62%) said one week is the ideal fermentation period in the community, while 34% responded for five-day period and four percent use only 3 days.

Overall, the total number of respondents who responded to one week exceeded those who opined for 3 to 5 days. It implies that tourists would fully be educated as to the activities surrounding the fermentation period. Also, farmers can organise farm demonstrations where tourists could be taught the process of fermentation and also to highlight the reasons behind their preference for a particular duration for the fermentation of the cocoa beans. The farmers can also include a chocolate shop to provide opportunity for them to buy some of the products. Okech et al (2012) argued that, in complimentary agrotourism venture, farmers can operate farm shops where tourists can buy farm products. A respondent from Nfensi-Adankwame indicated:

“Seven years ago, we sent 4 bags of cocoa beans to the market but was rejected due to inferiority in quality and weight as triggered by poor fermentation. We then called on some officers from the district capital to teach us the impacts of fermentation period in cocoa processing”. “So we are used to one-week fermentation period” (Interview, 2017).

The trend seems the same in the other communities. In Mankranso community, one-week fermentation period was practiced (38.9%), with (33.3%) for five days and 27.8% used for the bottom line of 3 days. Interview with some respondents in Mankranso were of a different view as one of them opined that:

“Cocoa is everything to us; can you imagine we do almost everything with it ranging from education, accommodation, medication, debts settlement etc. So there is no time to waste for a whole week fermentation before drying it for cash” (Interview,2017).

In Adugyama, 60% of the respondents use one-week fermentation period, 30% use five days and 10% use 3 days as compared to Pokukrom where majority (81.2%) fermented their cocoa beans for one week, 15.6% for 5 days and three percent using 3days. Fermentation and drying are the most interesting



activity on the farm that tourists would like to participate. Respondents were further asked which of the activities would be educative to tourists. Majority of the respondents (95.83%) cited cocoa cultivation, harvesting as well as fermentation and drying as some of the activities that will be educative to tourists. Conversely, about two percent responded that none of the activities mentioned above will be educative to tourists. The remaining three percent were however without any clue as to what activity would present an interesting participatory experience to the tourists.

In Mankranso a total of 77.8% argued that all the activities would be educative to agrotourists, 16.7% said only fermentation and drying while about six percent claimed none of the activities would be of help in terms of knowledge acquisition as far as cocoa agrotours are concerned. Nfensi –Adankwame 70% respondents confirmed that all the cocoa activities would be educative to tourists, 28% claimed that only fermentation and drying with two percent indicating none of the activities. In Adugyama, 75% respondents opined that all the cocoa activities will be interesting; while the remaining percentage said fermentation and drying will present an interesting experience to tourists. At Pokukrom, 22 (68.7%) respondents said all the activities mentioned above will be educative to tourist. A farmer indicated, “There are so many activities on our farms which will be educative to tourists. Ranging from the nursing of the cocoa beans to their harvesting. Every generation of the cocoa requires weeding, pruning, fertiliser application etc. We don’t normally use fertiliser, because it has a negative effect on our cocoa. The only activities we do most is the harvesting, fermentation, weeding and drying”, (Interview, 2017).

In terms of farm activities practiced by farmers on the farm, 12.5% respondents said they weed on the farms while five percent performed pruning. Close to twelve percent did apply fertiliser while 70.8% performed all combined activities. These findings show that tourists would have a lot of activities to ‘DO’ on the farm, when cocoa agrotours are developed and promoted. The Chief Executive Officer of COCOBOD, quality control division at Mankranso said before the cocoa beans are transported to the marketplace, they conduct thorough searches to ensure that quality is maintained. All these efforts will help the farmers to grow the best type of cocoa beans in the areas to support agro tourism initiatives and policies, should there be an opportunity to develop this niche tourism in the district.

Cocoa Agrotours and Poverty Alleviation

The study was structured in a way to find out the degree of poverty in the communities and how best cocoa agrotours can be an avenue to alleviate poverty issues. The focus was on the respondents’ house structures, main source of incomes, and source of medicine and income levels per year. Generally, the outcomes shown that with respect to housing structures, 69.2% responded that their houses were made of cement blocks, 28.3% responded to mud buildings, about two percent have theirs built of wood and the remaining percentage were made of other materials, which was beyond accurate description. This indicates that the respondents are not extremely poor, especially Mankranso, Adugyama and Pokukrom have well-established housing structures. With the exception of Nfensi- Adankwame where some respondents indicated that their houses were inheritance from their great-grandfathers. On their sources of income, currently, 78.3% of the respondents derive the majority of their incomes from farming, 15.8% from trading, about two percent from teaching and four percent derive their main source of income from other activities. In fact, farming, is the mainstay activity in the study communities.

Challenges of Cocoa Agrotours in Ahafo Ano South District

Before the development of Agrotourism at a particular place, four key factors should come to play. These are; the ‘Agrotourpreneur’, the farm, local community and the tourists, (Eshun et al, 2014). The interaction between these components bring about agrotourism development. The development of tourism in a particular place comes with a lot of challenges and agrotourism is not an exception. In view of this, the respondents were asked about the challenges that they face in the course of their cocoa production. This was to enable the researchers to ascertain the viability of the farm in relation to the development of cocoa agrotours. The table below depicts the challenges of developing cocoa agrotours in the Ahafo Ano South District of Ghana.

Table 4. Challenges of cocoa agrotours

Challenge	Mankranso (18)	Adugyama (20)	Pokukrom (32)	Nfensi-Adankwame (50)	Total percentage (100%)
External problems affecting the cocoa production					
Pest and diseases	3(16.7%)	4(20%)	9(28.1%)	12(24%)	28(23.33%)
Capital	3(16.7%)	2(10%)	4(12.5%)	11(22%)	20(16.66%)
Land acquisition	5(27.8%)	6(30%)	7(21.9%)	5(10%)	23(19.16%)
Climatic condition	-	-	2(6.2%)	1(2%)	3(2.5%)
All the above	7(38.9%)	8(40%)	10(31.2%)	21(42%)	46(38.33%)
Diseases affecting cocoa in this locality					
Mistletoe	2(11.6%)	4(20%)	4(12.6%)	9(18%)	19(15.83%)
Black pod	1(5.6%)	2(10%)	5(15.6%)	7(14%)	15(12.5%)
Capsid	1(5.6%)	1(5%)		2(4%)	4(3.33%)
All of the above	14(77.8%)	13(65%)	23(71.9%)	32(64%)	82(68.33%)
Treatment of cocoa diseases					
Pruning	3(16.7%)	2(10%)	12(24%)	7(14%)	24(20%)
Spraying	7(38.9%)	7(35%)	11(22%)	21(42%)	46(38.33%)
Both	8(44.4%)	9(45%)	19(59.4%)	22(44%)	58(48.33%)
Possible dangers to tourists in the communities					
Theft	4(22.2%)	4(20%)	5(15.6%)	10(20%)	23(19.16%)
Diseases	4(22.2%)	4(20%)	8(25%)	10(20%)	26(21.66%)
Others	10(55.6%)	12(60%)	19(59.4%)	30(60%)	71(59.16%)

In Mankranso community, 16.7% said they are affected by pest and diseases, 16.7% also indicated that they are affected by capital and 27.8% indicated that they are affected by land acquisition and with 38% responding that they are affected by all the above problems. Similarly, in Adugyama, 20% were affected by pest and diseases, with 10% being affected by difficulty in capital acquisition, 30% indicated that they are affected by challenges of land acquisition while 40% were affected by all the above problems. The opinion from Pokukrom community, showed that 28.1% were affected by pest and diseases, with 12.5% indicating that they are affected by difficulty in securing capital; Twenty-two percent indicated



that they are affected by challenges to acquire land while 31.2% were saddled by all the above problems. Respondents of 24% in Nfensi-Adankwame indicated that they are affected by pest and diseases, with 22% indicating that they were affected by difficulty to secure capital. About 10% indicated that they were affected by land acquisition. Some indicated climatic change was a challenge while 42% said they were affected by all the problems identified above. Even though 23.3% indicated that they are affected by difficulty in land acquisition, the Agriculture officer interviewed, indicated that land is not a problem with the people. A respondent from Adugyama went ahead to opine that:

“We are affected by all the problems stated, but the most of all is the pest and diseases and capital acquisition. The money from our cocoa cultivation is unable to serve our needs” (Interview, 2017).

The researchers further investigated the possible diseases affecting the cocoa farms. Majority of the respondents said the most common diseases in the locality are mistletoe, black pod and capsid. But as to how it affects their cocoa vary from community to community. In Adugyama, 20% said they are affected by mistletoe, 10% were affected by black pod, with five per cent affected by capsid; while 65% were affected by all the diseases. In Mankranso, 11.1% indicated they are affected by mistletoe, an individual of six per cent said he is affected by black pod, another six per cent also indicated that they were affected by capsid while 77.8% were affected by all the diseases. Similarly, at Pokukrom, 12.5% indicated that they are affected by mistletoe, 15.6% said they are affected by black pod while 71.9% were affected by all the activities. From Nfensi-Adankwame, 18% of the respondents were affected by mistletoe, 14% affected by black pod, four per cent affected by capsid while 64% indicated that they were affected by all the diseases. An Agric officer averred that;

“Cocoa disease causes low yield by cocoa farmers. Disease such as mistletoe have the tendency to destroy the whole cocoa farm if care is not taken. Cocoa farmers take serious measures to control diseases in the farm. Therefore, farm diseases should not be taken lightly if we are to developed cocoa agrotours in the locality” (Interview, 2017).

Respondents were asked as to the methods that would be used to combat the aforementioned challenges. In Mankranso community 16.7% respondents indicated they used pruning to control the cocoa trees affected by mistletoe, 38.9% said they use spraying to control cocoa diseases in their farms while 44.4% used both activities. At Adugyama, 10% said they used pruning, 35% sprayed, while 45% applied both methods to control diseases in their farms. The remaining 10% did not use any of the methods. Also in Pokukrom, nine per cent said they used pruning, 25% said they sprayed their farms and 59.4% used both methods, with six per cent not using any of the methods. At Nfensi-Adankwame, 14% said they used pruning, 42% indicated that they used spraying method to control pests on their farms. Also, 38% said they used both methods while six per cent indicated that they did not apply any of the methods. The old farmers have knowledge on the cocoa diseases; therefore they did not like using chemicals in controlling diseases on their cocoa farms because it destroyed the cocoa beans. The dominant method used by the farmers were the traditional weeding and pruning (Eshun, 2014).

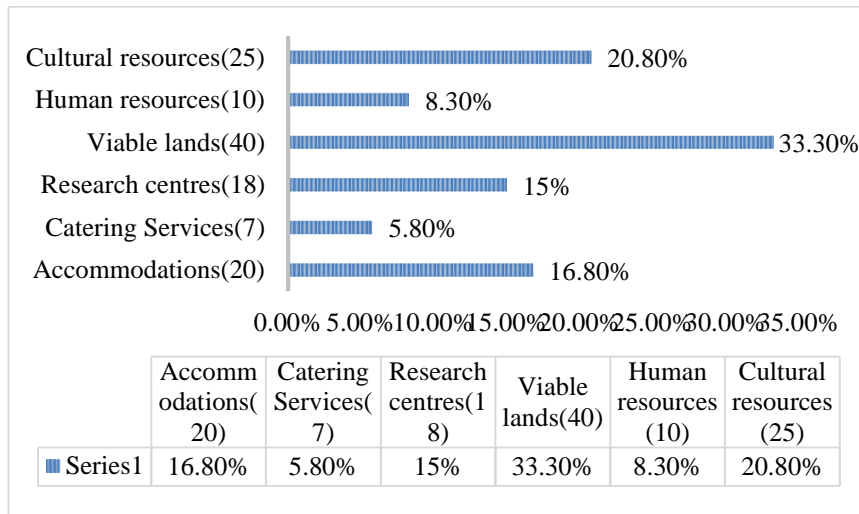


Figure 2. General Statistics on Cocoa Agrotour Potentials in the Selected Communities.

Figure 2 shows the categories of the cocoa agrotours potentials and their associated percentages available for developing and promoting the cocoa tours project. It was later realised and confirmed by some of the locals that the project is worth to be implemented in the area.

5. Conclusion and Recommendations

The study examined the potentials of cocoa agrotours in the Ashanti Region. The study was geared towards assessing activities of cocoa agrotours as well as finding out the extent to which cocoa agrotours can help to alleviate poverty in the Ahafo Ano South District of Ashanti region in Ghana. Furthermore, the study looked at the challenges the District is likely to face in developing and promoting cocoa agrotours. Cocoa agrotours are basically about tours that take tourists to cocoa farms and cocoa farming communities as attractions and focus of activities. Agrotourism is a component of sustainable tourism and like all forms of this tourism; it is supposed to bring benefits to the local community while mitigating the negative impacts to the environment. Consequently, through agrotourism development, the socio-economic lives of destination regions could improve significantly (Catalino and Lizardo, 2004; Eshun & Tettey, 2014). This is usually achieved through providing supplements to regular incomes to farmers, providing employment to surplus labour in farming communities and mobilising farms for community development (Cocoa Producers Alliance, 2011). It was realised that Ahafo Ano South District is endowed with numerous cocoa farms that will help in the development of cocoa agrotours. The study found that the incomes of the communities' members would increase should cocoa agrotour is introduced, and contribute to poverty alleviation in the District. The opportunities that agrotourism presents to the local and national economy abound. As an undeveloped area, the niche market promises to be the next el-dorado of the Ghanaian tourism industry. Therefore, with the needed investment and commitment by all relevant stakeholders, the market would become one of the flagship offerings and avenues of eradicating abject poverty in rural Ghana (Eshun & Tettey, 2014).

The following challenges were identified as the impediments to the development of cocoa agrotours in the study areas namely; inadequate skilled personnel to carry out cocoa agrotours activities in the area; low level of education and entrepreneurial capacity of locals to benefit from agrotourism; inadequate working capital and menace of diseases affecting cocoa farms in the area. Previous research on agrotourism development in Ghana add that agrotourism development in the country is a viable niche in the tourism market, but inadequate accommodation, catering services, start-up cost, technical know-how and lack of marketing and managerial competence remain as glaring challenges to the acceptance of this niche market (Eshun & Tettey, 2014; Eshun et al., 2014). Intensive education and training should be given to locals and Agriculture Officers must be trained on agrotourism so they can offer the right knowledge and training to farmers. Government should give incentives to cocoa farmers to motivate them to become agrotourpreneurs. Furthermore, there should be general rural infrastructure development by government, especially good roads to facilitate cocoa agrotour business. The Ministry of Tourism, Arts and Culture, should work pari passu with decentralised governance. This research re-echoes the standpoint that if Ghana, is to develop a robust agrotourism market, there is the need for sustained research on the area, which should critically unravel and categorise the characteristics of the agrotourists to the country, generating countries, spending power, preferences, length of stay and identifiable behaviours and motivations (Eshun & Tettey, 2014; Eshun et al., 2014). The outputs of such research will go a long way to help in developing appropriate promotional strategies for this niche-market. In sum, the study has shown that there are potentials and challenges associated with developing cocoa farms to become agrotourism sites in the country.

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