



## THE IMPACT OF ORGANIC AND FAIR TRADE PALM OIL FARMING PRACTICES IN THE KWAEBIBIREM DISTRICT IN GHANA

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### ABSTRACT

This study assesses the impact of organic and fair trade oil palm farming practices on the farmers involved in the Kwaebibirem District in Ghana. It contributes to the scanty literature on fair trade and organic farming in Ghana by interviewing farmers who are certified by Serendipalm Company Limited, who practise fair trade and organic farming in the Kwaebibirem District in the Eastern Region. Data collection was carried out through a closed-ended questionnaire. Respondents were selected using the multi-stage sampling approach. Data Analysis show that certified farmers involved in the organic and fair trade practices have gained from the programme. Some of the areas they have benefited include improved income which in turn is used to purchase inputs among others. However, training and certification processes have been hampered by the low levels of education by farmers and unwillingness of the youth to become farmers. It is recommended that massive educational campaign could help improve farmers' knowledge on the practice and attract the youth into farming.

**Keywords:** Farmers, organic farming and fair trade practices JEL: Q18, Q56.

### 1. INTRODUCTION

The last decade has seen an increased number of voluntary private certification programs in the global food production sector for diverse range of crops such as coffee, cocoa, tea, banana, palm oil and flowers. Labels such as organic and fair-trade were developed from the 1980s or earlier for some products; however, only in recent years has certification become an important and mainstream concept for both producers and consumers around the world (Trimarchi, 2014).

This increase in certification is a direct consequence of the rise of ethical consumerism, where people prefer healthier, greener, and more social-friendly production systems, and has rapidly expanded 'ethical trade' in developed countries. Among the 'ethical trade' items, organic food has been one of the most rapidly growing items, having started from a small base in the 1980s and 1990s, global sales of organic food and drink grew to over US\$40 billion in 2006 (Willer, et al. 2008). According to Organic Market Report (2014 and 2016), sales of global organic food increased from about €21.5 billion in 2009 to €45.8 billion in 2013, to over €50 billion in 2015 with over 172 countries participating. The rapid growth of ethical consumerism translates to the direct involvement of the private sector in poverty reduction, and thus can potentially lead to the attainment of the Sustainable Development Goals (SDGs) on poverty reduction.

The process has produced a proliferation of new schemes with their own specific focus and strategy. These increasingly popular initiatives are adopted by producers around the world, especially in developing countries, that adhere to environmental, social and labour standards to distinguish their products from the rest of the market. Sustainable certification labels provide an important service by signalling the adherence to determinate programs, to the consumers they generate important benefits such as the access to new markets and the

payment of premium prices. Consumers in industrialised and emerging countries are increasingly willing to pay more for products that respect the environment and that foster the social and economic conditions of producers (Trimarchi, 2014).

It should be pointed out that the certifications are provided by private organisations such as NGOs, firms or alliances of stakeholders setting a number of standards that producers have to comply to receive the label (see Organic Market Report, 2016). Furthermore they carry on, directly or through independent agencies, regular audit in the certified farms to assess the respect of these standards from time to time. In case of verifying unmet requirements, different strategies are implemented by the programs, from support and consultancy to reintegrate the producers into the scheme up to the complete withdrawal of the accreditation (FLO, 2010).

The rapid increase in the demand for organic and fair trade products has provided new income generating opportunities for poor farmers in developing countries, particularly in the export market. Specific certifications, and the fulfilment of their corresponding certification guidelines, are required in order to participate in such trade. In return for fulfilling the requirements under certifications, producers receive price premiums for their products to help improve their lives, thus, stabilising income of the certified farmers practicing the organic and fair trade. An improvement in agriculture benefits naturally would reduce poverty (FAO, 2009).

To have an idea of the dimension of the phenomenon, suffice to say that by 2008 there were more than 400 sustainability standards, with the number still growing (Giovannucci, 2008). All sustainability standards refer to the three acknowledged pillars of sustainability – people, planet, profit – but by weighing them in different ways and traducing them in different visions and requirements they diversify in front of the producers and the consumers (Trimarchi, 2014).

The growth in organic and fair trade activities is important because majority of the poor worldwide depend upon agriculture for their livelihood. In Asia alone, more than 600 million jobs are related to agriculture (Setboonsarng, 2008). Although, poor farmers can potentially play a major role in providing environmental services while improving their livelihood, they do not do so due to the lack of incentives in the current agriculture trade system. Since the current trading system undervalues the potential social and economic services of products, there is a pressing need to put appropriate incentives into place. The public sector has traditionally provided support for the poor to protect the environment through development assistance projects and programs. However, there have been mixed results and most of the projects are not sustainable beyond the period of implementation. Private sector involvement using market-based instruments which internalise externalities of products has recently been viewed as a more sustainable solution (Setboonsarng, 2008).

In addition, the Export Promotion of Organic Products from Africa (EPOPA) project suggests that 44% of the total benefits from organic agriculture come from farmers' premium (ESCAP, 2001). Also, Harris et al., (2001) estimated that half of the farmers' accrued premiums directly benefitted the farmers themselves. Thus, ethical trade appears to be an effective market-based development strategy which incorporates incentives for the poor to improve their income while potentially contributing to the MDGs (Setboonsarng, 2006).

## 1.2 Motivation for the Study

Despite the broad presence of these interventions, there is still a lack of scientific evidence on the real impact these programs have on the socio-economic and environmental conditions of the farmers involved. Proponents of certification programs have produced numerous efforts to assess the real short and long term impacts of their programs, but results have been contradictory and quality research is still needed.

A key item often missing in this debate is accurate and transparent estimates for the monetary benefits that fair trade provides to participating farmers. The most commonly cited benefit is the difference between the farmers' guaranteed fair trade price and the local market price (Pay, 2009; FLO, 2010). But these price differences alone do not reveal whether organic and fair trade provides meaningful benefits to farmers. For example, the monetary earnings from fair trade might be trivial if farmers earn a small share of their total income from the specific fair trade crop, or sell a small portion of their harvest at the fair trade price. A necessary condition for fair trade's success is that the corresponding monetary benefits are sufficiently large when compared to farmers' normal income levels.

Answers to other crucial questions regarding fair trade remain elusive. How wide is fair trade's current reach among producers of primary commodities in Ghana such as palm oil? How efficiently does the organic and fair trade system transfer consumer spending on related products into payments for these producers? What are the challenges in fair trade activities? This study addresses these questions by assessing the contribution of the fair trade practice to Kwaebibirem farmers' livelihoods

focusing on palm oil production. This paper is first in the series where we find from respondents the extend, benefits, challenges and remedies of the organic and fair trade farming practices. The next paper will expand the sample size to include non-certified farmers for further analysis.

The rest of the paper is organised as follows. The next section focuses on an overview of literature related to organic and fair trade practices. The overview includes highlight of the impact of the organic and fair trade agricultural practices on livelihood of farmers and farming communities where certified organic and fair trade agro-processing units have been set up. Then, Section III presents data sources and collection processes used. This is followed by data analysis and discussion, the benefits and challenges facing the farmers. The last Section provides concluding remarks and offers avenues for further research.

## 2 LITERATURE REVIEW

Agriculture has been one of the foundation of human society and a major activity at the human environment interface (Lélé, 1991). In fact there are almost 1.2 billion people in developing countries relying on agro forestry and farming systems to help sustain agricultural productivity and generate income (Bredberg, 2010). The drive to increase agricultural productivity to sustain a growing population led to the rise of modern agriculture such as mono-cropping, use of chemical fertilizers, high yielding varieties, irrigation, and high mechanisation. In the mid-sixties, this trend was adopted by many developing countries and, in 1968; William Gaud named it Green Revolution (Trimarchi, 2014).

Modern agriculture circuits the evolution process of crops, and traditional systems of cultivation to adapt to local conditions. Furthermore the glamorised benefits of monoculture in terms of yield are misleading as increases are only in one crop, whereas mixed cropping gives a low yield of multiple crops but a high output of food (Madeley, 2002).

### 2.1 Organic Agriculture and Fair Trade

Organic agriculture is a farming system which excludes the use of synthetic chemicals such as fertilisers, pesticides, or antibiotics in both crop and livestock farming; it relies on ecosystem management unlike conventional farming. Some of its techniques are crop rotation, green manure, compost, and biological pest control. Depending on whose definition is used, organic farming uses fertilisers and pesticides (which include herbicides, insecticides and fungicides) if they are considered natural (such as bone meal from animals or pyrethrin from flowers), but it excludes or strictly limits the use of various methods including synthetic petro-chemical fertilisers and pesticides; plant growth regulators such as hormones; antibiotic use in livestock; genetically modified organisms; human sewage sludge; and nano-materials (Paull, 2011).

Organic agricultural methods are internationally regulated and legally enforced by many nations, based in large part on the standards set by the International Federation of Organic Agriculture Movements (IFOAM), an international umbrella organisation for organic farming organisations established in 1972 (IFOAM, 2005). The USDA National Organic Standards Board defines organic agriculture as an ecological production management system that promotes and enhances biodiversity,

biological cycles and soil biological activity. As indicated by Gold (1995), this is based on minimal use of off-farm inputs and more on management practices that restore, maintain and enhance ecological harmony.

Organic farming claims to have the potential to provide benefits in terms of environmental protection, conservation of non-renewable resources, improved food quality, reduction in output of surplus products and the reorientation of agriculture towards areas of market demand (Lampkin, 1990). As such, organic agriculture has developed rapidly and is now practised in more than 172 countries. As at the end of 2007, almost 32.2 million hectares of land were being managed organically all over the world by 1, 219,526 farmers, the majority of which (43.5 percent) is in Africa (Carimentrand and Carimentrand, 2010).

Increasing food safety and climate change concerns have led to a growing demand for socially and environmentally produced food such as organic food. Osei-Asare (2009), asserts that there are several motivating factors for organic production world-wide. Since consumers cannot visually distinguish between organic agricultural products and chemically-grown products, a certification system is required. The organic certification systems may be classified as first party, second party and third party certifications. First certification emphasised on local face-to-face relationships and trust rather than formal certification. The second type is where NGOs and traders who continued to maintain close contacts with farmers act as trading agents, and provided consumers with information about farmers and their production processes to consumers. Third party is a developed efficient process of providing information across borders, and in so doing, reduced time and costs.

Fair trade focuses on exports from developing countries, most notably handicrafts, palm oil, coffee, cocoa, sugar, tea, bananas, honey, wine, fresh fruits, chocolate, flowers and gold (Bowes, 2010). Also, the term is recognised as a social movement that aims to help producers in developing countries to make better trading conditions and promote sustainability. It advocates for the payment of higher price to exporters as well as higher social and environmental standards. Studies on the income of fair trade certified farmers yield conflicting results. For example, Jaffee (2007) found a marginal improvement in farmers' lives, but Bacon (2005) and Lyon (2006) found otherwise. The presence of co-operatives have probably accounted for this. However, the lack of knowledge of farmers on fair trade has negative impact. The long waiting periods between when fair trade produce is harvested and when farmers are paid by the co-operative have been cited as drawbacks to participation in cooperatives, whereas local middlemen pay farmers on the spot for their produce (Jaffee, 2007; Harris, 2005; Renard, 2008).

Moreover, farmers often do not receive 100 percent of the fair trade price premium, which is a common misconception among fair trade consumers. Instead the premium is paid to the co-operative, which then distributes money to its members according to the volume of export-quality produce they provided (Bacon, 2005; Jaffee, 2007). Jaffee (2007) in Mexico, and Lyon (2006) in Guatemala, found that fair trade certified farmers were not familiar with the concept of fair trade.

However, our a priori investigation suggests farmers at Kwaebibirem have dynamic perspectives on fair trade's meaning. The introduction of fair trade certification specifies "minimum requirements," which producers must comply with in order to be certified as fair trade, and "progress requirements," which contain conditions that producers are encouraged to improve over time. Organic certification mostly involves the technical aspects of production, with the main objective of ensuring safe food production while improving the environment.

In addition, fair trade certification has strong pro-poor features, having been developed based on the needs of small farmers in developing countries. Fairtrade certification strives for long term benefits for poor communities. For instance, fairtrade requires that producers organize themselves into democratic groups and associations, which allow them a higher level of collective action and bargaining power. It also provides a guaranteed free-trade price premium that must be reinvested at the community level and not at the individual household level. Also, it addresses the challenges of high certification costs for small-scale farmers by providing financial support during the start-up period (see Setboonsarng, 2008 and Meuninck, 2009 for more benefits).

Thus, organic and fair trade certifications seem to complement each other, and the combination of certain aspects of both could more effectively contribute to the achievement of socio-economic goals. The potential for achieving the highest premiums is maximised when farms have both organic and fairtrade certification (ESCAP, 2002). However, small-scale farmers in remote areas with minimal infrastructure, rampant market and institutional failures, and unsecured land tenures, lack the technical knowledge needed to comply with complex certification requirements. Together within adequate facilitators are major challenges to fairtrade certification (Bacon, 2005; Jaffee, 2007; and Setboonsarng, 2008).

### 3 DATA SOURCE

Data was collected from certified palm oil farmers in the Kwaebibirem District, one of the 26 Districts in the Eastern Region in Ghana. They were given the certification by Serendipalm-Danieama Sustainable Palm Oil Project (SEDASPOP). The SEDASPOP was founded in 2007, aimed to create economic opportunities for women in rural settings. It offers certificate to farmers who meet the standards to practice organic and fair trade farming. It has registered 650 fair trade certified farmers (at the time of the interview), these formed population for the study (Serendipalm, 2016).

A sample size of 196 respondents – 138 certified farmers and 58 employers of Serendipalm – were selected for data correction. In doing this, multi-stage sampling technique was used. A list of communities where registered farmers are found was obtained from Serendipalm. The locations were sampled randomly. Scheduled dates were communicated to the communities selected and visits made to conduct the survey. Farmers present at the meeting were then selected randomly. Data collection was carried out in May and June 2015 using three research assistants for the questionnaire administration. The workers were selected using convenient sampling at the officers and in the communities. This was because they visit the

communities regularly, so as and when we met them, they were interviewed at their wish. Before any interview, the purpose of the study was explained to each participant, and have to give us the permission to administer the questionnaire, they were also told of the right to withdraw at any point during the research without any consequences and whatever information provided will not have any negative effect on their life in any way.

**4 RESULTS AND DISCUSSIONS**

In analysing the data, two questionnaires each from the farmers and the employees were rejected for incompleteness; hence are not part of the analysis. Also, some respondents did not answer some questions and may reduce the sample size for that analysis. There were three distinct categories of respondents namely farmers, opinion leaders and employees, it was noted that all the opinion leaders were farmers and treated as such, unless key distinctions emerge in the parameters under review that they may be referred to. The categories of respondents who made up the sample are shown in Table 1 which also indicates demographic characteristics.

From the table, 55.1 percent of the respondents were male and 44.9 percent female. The male dominance could be explained by the fact that farming and allied activities is male-dominated due largely to its strenuous nature. Even though, the aim of SEDASPOP was to help women in rural communities, our data support otherwise. In terms of age, the data analysis suggests that farming is for the aged, since over 90 percent of the farmers were over 40 years and about 56 percent over 50 years. However, for the employees, less than 37 percent were over 40 years, and only about 10 percent were over 50 years. Unlike other characteristics, education level was somehow balanced. Though 18 percent of farmers and 5 percent employees have no formal education, a good number of respondents were found to possess secondary education. About 24.1 percent of the employees and 14.5 percent farmers reported they have pursued some form of tertiary education. Tertiary education here refers to a formal and recognised post-secondary education that increases the knowledge and qualification of the individual and is being offered by institutions like training colleges, polytechnics or universities.

**Table 1: Demographic Characteristics of Respondents**

Categories	Gender	Sample	Percentage (%)
Farmers	Male	60	61.2
	female	38	38.8
	<b>Total</b>	<b>98</b>	<b>100.0</b>
Opinion leaders	Male	28	70.0
	Female	12	30.0
	<b>Total</b>	<b>40</b>	<b>100.0</b>
Employees	Male	20	34.5
	Female	38	65.5
	<b>Total</b>	<b>58</b>	<b>100.0</b>
All	Male	108	55.1
	Female	88	44.9
	<b>Total</b>	<b>196</b>	<b>100.0</b>
<b>AGE</b>	<b>EMPLOYEES</b>	<b>FAMERS</b>	

Description	Frequency	Percentage(%)	Frequency	Percentage(%)
18 – 29	24	41.4	2	1.5
30 – 39	13	22.4	9	6.5
40 – 49	15	25.9	50	36.2
Above 50	6	10.3	77	55.8
<b>Total</b>	<b>58</b>	<b>100</b>	<b>138</b>	<b>100</b>
<b>MARITAL STATUS</b>				
Single	22	37.9	5	3.7
Living Together	3	5.2	14	10.2
Married	21	36.2	90	65.7
Divorced	12	20.7	18	13.1
Widow	-	-	10	7.3
<b>Total</b>	<b>58</b>	<b>100.0</b>	<b>137</b>	<b>100.0</b>
<b>EDUCATION</b>				
No education	3	5.3	25	18.1
Basic education	29	50.8	58	42.0
Secondary	11	19.3	35	25.4
Tertiary	14	24.6	20	14.5
<b>Total</b>	<b>57</b>	<b>100.0</b>	<b>138</b>	<b>100.0</b>

**4.1 Income distribution**

In examining the organic and fair trade practice among the farmers, we asked their income group during the survey, this was compared with the income group of the workers. The table below portray the responses from that question.

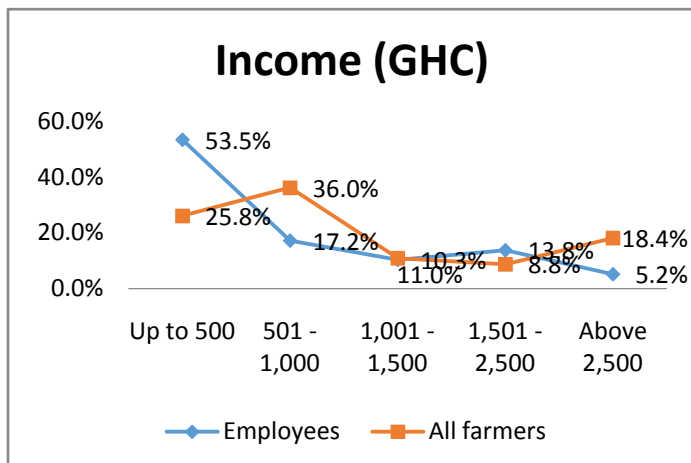
**Table 2 Distribution of Income between Farmers and Workers**

Income (GHC) <sup>1</sup>	Employees		All farmers	
	Frequency	Percentage (%)	Frequency	Percentage (%)
Up to 500	31	53.5	35	25.8
501 - 1,000	10	17.2	49	36.0
1,001 - 1,500	6	10.3	15	11.0
1,501 - 2,500	8	13.8	12	8.8
Above 2,500	3	5.2	25	18.4
<b>Total</b>	<b>58</b>	<b>100.0</b>	<b>136</b>	<b>100.0</b>

As can be seen, though, there is a wide disparity in the income level of respondents; the farmers appear to enjoy higher income than the workers. The chart below shows most farmers are in the higher income group than the workers. Indeed, the live styles of the farmers (though not analysed here) do confirm this. Close to 71 percent of the workers earn up to GHC1000.00 a month, this contrast with less than 63 percent of the farmers in that income group. A comparative chart is shown below.

<sup>1</sup>At the time of the survey, \$1.00 = GHC3.80

**Figure 1: Comparing Income of Farmers and Workers**



to the farmers. However, 7.6 percent said no, and 9.2 percent said they do not know whether it is a good farming practice or not. The details are shown in Figure 3. The findings support the work of Set boonsarng (2008) who observed that organic and fair trade practices offer strong pro-poor features, as it was developed based on the needs of small farmers in developing countries like Ghana.

Fair trade certification strives for long term benefits for the poor in society.

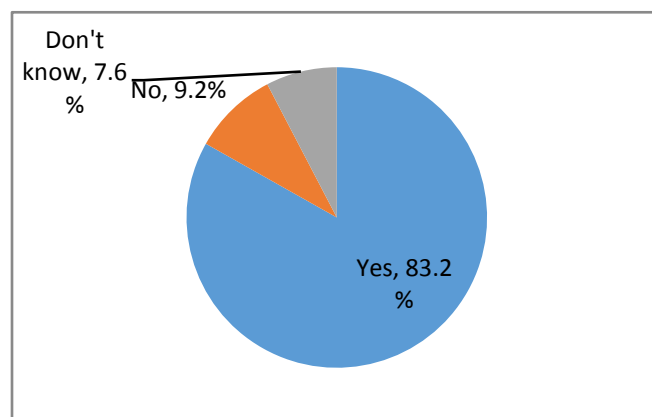
Also, ESCAP (2002) found that organic and fair trade certifications complement each other and the combination of certain aspects of both, effectively contribute to the achievement of socio-economic goals. Moreover, the potential for achieving the highest premiums is maximised when farms have both organic and fair trade certification.

**4.2 Contribution of Organic and Fair Trade Farming to Livelihood**

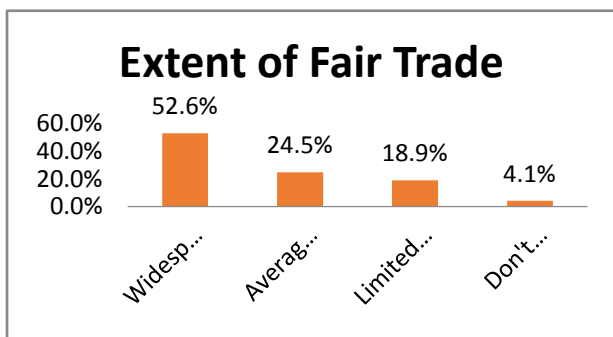
We examined the extent of the organic and fair trade farming operations in the area, its effects on the livelihoods of the people and poverty levels in the communities. The study found that farming activities in general and the practice of organic and fairtrade farming in particular were practiced by the people in the district.

The presence of organic and fair trade farming was very notable in the district. From the analysed responses, 52.6 percent of the study sample indicated that the operations of organic and fair trade farming are widespread in the district. Only 4.1 percent reported that they did not know of the extent of organic and fairtrade activities in other parts of the district. The result is presented in Figure 2. This was expected and confirms the widely held view of the widespread adoption of organic and fairtrade activities in the district.

**Figure 3: Do Organic and Fair Trade Farming Benefit Farmers?**



**Figure 2: The Extent of Organic and Fair Trade Activities in the Kwaebibirem District**



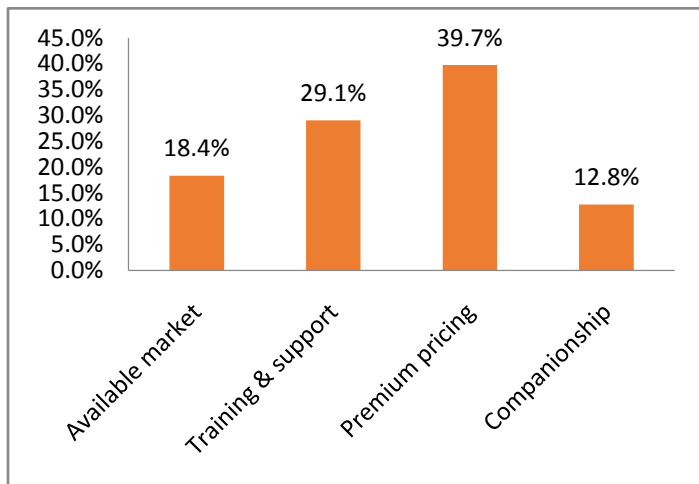
Following this, the study specifically asked respondents to state how the operations benefit farmers. Data analysed showed that 39.7 percent said they benefit immensely from premium pricing from the farming practice, 29.1 percent said the training and support is beneficial to them. The responses are detailed in Figure 4.

This outcome was expected as it supports the works of many other research works. For instance, Osei-Asare (2009) found that though there are several motivating factors for organic production world-wide the availability of premium is the most attractive. The reason is that the premium is in high demand for fair trade and organically produced agricultural produce on the international market, especially in Europe and the USA. Diver et al. (1999) estimated that organically produced agricultural products attract high premium which is estimated between 10 to 300 percent.

**4.2.1 Benefits of Organic and Fair Trade Farming**

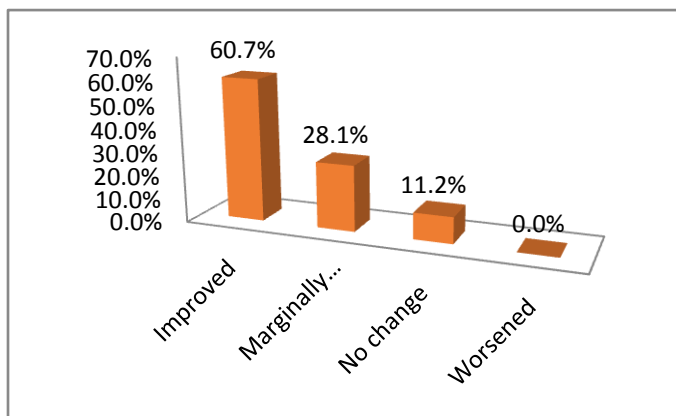
Many benefits of the organic and fair trade methods of farming are well documented. From coffee and many other cash crops, the benefits of this system of farming are believed to be many. Respondents were, therefore, asked to indicate if, in their own assessments, the organic and fair trade system of farming as implemented by Serendipalm Company Limited is beneficial to the farmers. From the analysis, 83.2 percent feel that the organic and fairtrade oil palm farming practices are beneficial

**Figure 4: Specific Benefits being received by Farmers**

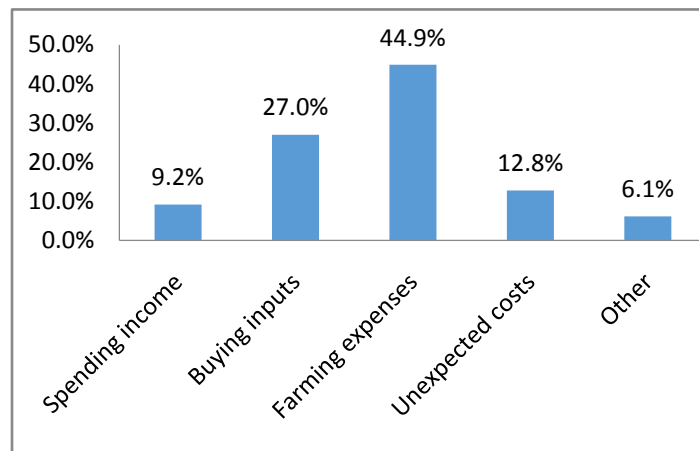


In addition to the above questions on the issue of benefits, respondents were further asked to state specifically their view of the overall impact of Serendipalm Company Limited on their livelihoods. This was asked in a bid to establish if the company, through the organic and fair trade operations, has had any impact on the people. From the analysed, 60.7 percent claimed to be better off through the operations of Serendipalm, 28.1 percent reported only marginal improvements in their overall impact, and 11.2 percent indicated their livelihoods have not changed. This is depicted in Figure 5. The uses of the premium proceeds follow in Figure 6

**Figure 5: Overall Effect of Farming Practice on Livelihood**



**Figure 6: Cost Centres for Premium Receipts**



As already established, the premium paid to certified farmers is one key parameter that sets organic and fairtrade farming above other conventional practices. The fee is important to farmers and is usually applied by different farmers to varied applications. Previous interactions with farmers revealed that the premium received from Serendipalm is as important as the market fee for the produce. This study, therefore, tried to evaluate what premiums paid to farmers are used for. We found that 44.9 percent spend their premium on farming expenses (labour), 27 percent purchase farm inputs and allied items, only 6.1 percent of the farmers spent their premium on land lease agreements which was treated as 'Other'. The detailed expenditures are shown in Figure 6.

The concept has been embraced by many farmers and opinion leaders owing to the many benefit enjoyed by participants. These benefits include the general improvement in the quality of life of participating farmers and their dependants. This result supports the findings of Bowes (2010) who pointed out that organic and fair trade activities offer a variety of help to producers in developing countries to make better trading conditions and promote sustainability. Fair trade advocates for the payment of higher price to exporters as well as higher social and environmental standards. Fair trade focuses in particular on exports from developing countries (Bowes, 2010). The result also backs FTI (2011) who observed that fair trade is widely adopted because it is seen as a strategy for poverty alleviation and sustainable development. It creates opportunities for producers and workers who may be economically disadvantaged or marginalized by the conventional trading system.

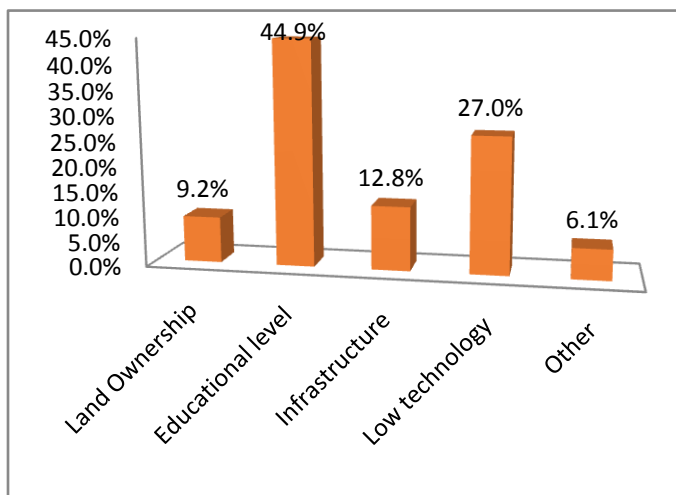
In relation to other studies, Kavin et al. (2007) indicated that conventional agriculture has negative impact on the environment and human health as compared to organic production. Brummond (2001) observed that producers of organic and fair trade agricultural products are people among others seeking better environment

Also, other studies have already established the livelihood enhancements brought about by organic and fair trade farming through massive improvements in the environment (see Setboonsang, 2008; and Granstedt and Kjellenberg 2008).

### 4.3 Challenges

The study evaluated the factors working against the organic and fair trade operations in Ghana. Just like many other activities, organic and fair trade farming have many challenges. To get a practical view of these challenges, respondents were asked to identify challenges in their operations as shown in the figure below.

**Figure 7: Challenges in Adoption Organic and Fair Trade Practices**



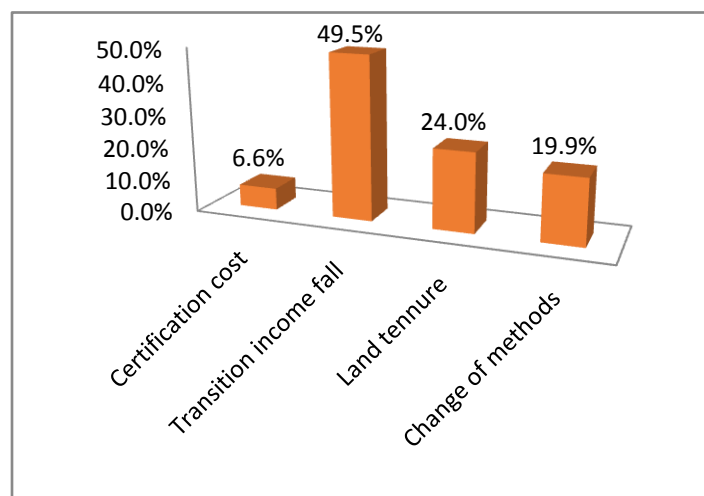
From the figure, the level of education of participants (farmers) is seen as the main challenge to the implementation and adoption of the fair trade and organic farming practices. Thus, 44.9 percent think education is a major challenge, 27.0 percent said ‘lack of or limited technical knowledge’ (treated as low technology on chart). The two can be said to be “technicalities of the practice”. Other identified factors include land ownership, infrastructure and lack of youth participation in farming. The details are shown in Figure 7.

From this result, it is seen that though not a key requirement for farming, lack of or limited education is hampering farmers who want to adopt new practices. The adoption and implementation of organic and fair trade practices requires farmers to go through many training programmes and complete change of farming practices. These training and orientation for the new process are relatively easier when applicant have some form of basic education. Additionally, the possession of some form of technical knowledge about farming processes and procedures make it easy to replace conventional methods with more sustainable, environmentally friendly and profitable techniques. For instance, the adoption and use of biological processes to control pests is easily accepted when the people involved have some appreciation and understanding for scientific methods. The complex and, sometimes, unique land acquisition procedures in Ghana along with the nature of infrastructure are all disadvantages of the adoption of modern farming practices. The limited youth interest in the age-old profession of farming is also a serious threat to the adoption of these new methodologies.

In view of the limitations, respondents were further asked to indicate the challenges they faced after adopting the organic and fair trade methods of farming on their oil palm farms. Data analysis shows that the main problem commonly encountered

by farmers at post-adoption and implementation phase is the fall in income during the transitional period. Thus, 49.5 percent were of this view, 24 percent indicated cumbersome land acquisition or ownership was their main problem. The processes involved in changing from the traditional farming methods to the new, technically advanced practices of the organic and fair trade farming was also identified by some respondents as a problem. For instance, some farmers who have been planting their seeds in specific way for decades usually face an arduous task of switching to new methods overnight. Though, certification cost was also identified, farmers have the option of letting their umbrella companies fund it at the initial stage. These responses are shown below.

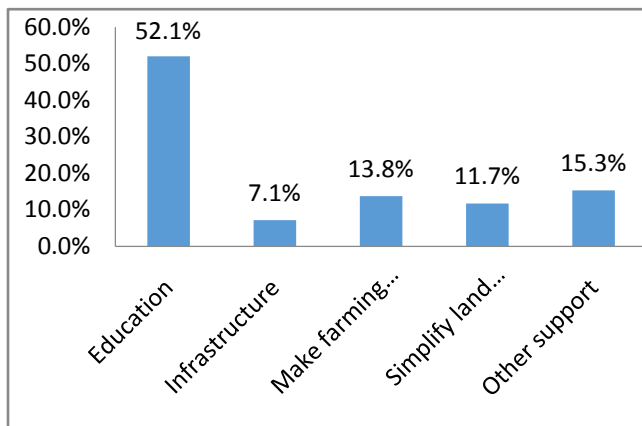
**Figure 8: Post-Implementation Challenges**



### 4.4 Remedies

With the challenges facing farmers in the adoption of the fair trade and organic practices, respondents were asked to suggest remedies to the challenges. The results from this question are displayed in Figure 9. From the figure, it is seen that education is the most important parameter. Over 52.0 percent feel that educating people about organic and fair trade practices and farming in general would go a long way to help people. Respondents see education as offering help to people who are yet to embrace the concept through the creation of awareness about the multiple benefits of organic and fair trade farming. Through the same education, it is envisaged that those who have already adopted the concept and are in the implementation stage would be able to plan and mitigate the effects of transition. Also, respondents suggested providing other forms of support (15.3%) to farmers during the transitional period as well as making farming more attractive to attract the youth (13.8%) could help arrest the problems listed above.

**Figure 9: Suggestions to Improve Organic and Fair Trade Practices Farming**



## 5 Concluding Remarks

The study examined the practices of organic and fair trade farming activities of Serendipalm Company Limited on the livelihoods of farmers in the Kwaebibirem District. We found that some farmers have direct relationships with the company towards the adoption and implementation of the organic and fair trade farming practices. Those already enrolled are in various stages of implementation and have enjoyed most of the benefits that come with the operations.

Data analysis has shown that organic and fair trade farming is indeed beneficial to farmers and communities as a whole. The important benefits include premium prices received for the goods produced. This premium, the study established, was largely used to cater for farms through the procurement of inputs and labour. Thus, Serendipalm Company Limited, the manager of the organic and fair trade farming has helped to improve their overall livelihood.

The benefits notwithstanding, the organic and fair trade farming practices in the Kwaebibirem district is not without challenges. The study found level of education and unwillingness of the youth to take to farming as a limitation to the growth and expansion of the practices. The limited knowledge of farmers and “technicalities” of farming processes and procedures were also identified as a challenge. These limitations and others, the study found, makes it difficult for people to go through the necessary trainings and procedures required to get certification. In addition, even after the adoption, farmers have to contend with a slump in income as the wheels of training and certification turn.

The following recommendation may be of help to the organic and fair trade practices. More educational campaign will help farmers to understand the benefits and how to be involved in the practice. The education can highlight the benefits which can also attract the youth to take to farming. Avenue for future study emanates from the limitations of the study. It is seen that we did not interview non-certified farmers. Hence, the next study will expand the sample size to include non-certified farmers to analysis the impact of organic and fair trade practices on the farmers.

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