

# Livelihood Options for Rural Poor Households in Ghana: A Case Study of the Asutifi District

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#### **Abstract**

About 87 percent to 89 percent of rural households in Ghana engage in small scale farming. However, rural poverty in Ghana is deepest among food crop farmers due to the vulnerable nature of their livelihood. Food crop farmers depend on single weather oriented agriculture and find it difficult to avoid or withstand livelihood stress and shocks such as drought, crop failure, pests and disease infestation among others. This study therefore focused on the need for rural households to develop additional livelihood options to provide vital income diversification, spread risk and provide means to cope when farming and other sources of income fail. Data from 138 heads of household who have adopted either Grasscutter (*Thryonomys swinderianus*), edible Mushroom (*Pleurotus ostreatus*) and edible Snail (*Achatina achatina*) production as an additional livelihood activity to augment their livelihood options in the Asutifi District revealed that these supplementary livelihoods yields more income benefits than farming and other traditional livelihoods. The study concludes that rural households must be assisted to diversify their livelihoods if they are to overcome poverty.

Keywords: Rural Livelihoods, Poverty, Ghana.

#### 1. Introduction

According to Aduse-Poku *et al.* (2003), the concept of livelihood has remained a subject of utmost importance due to its inevitable role to human existence. A livelihood is much more than a job as it covers a whole range of "things" people do to make a living. Carney (1999) also argues that, the livelihoods and quality of life of the rural dwellers in Sub-Saharan Africa is affected or even controlled by a multiplicity of factors or contexts that make life for them almost a struggle for survival. These factors border on economic policies, agro-climate, environment, socio-culture, demography, infrastructure, services, governance and so forth.

Diao *et al.* (2006) state that majority (60-70 percent) of Sub-Saharan Africa's population live in rural areas where poverty and deprivation are most severe. Since almost all rural households depend directly or indirectly on agriculture (in the area of small scale farming), and given the large contribution of this sector to the overall economy, it might seem obvious that agriculture should be a key component of growth and development. However, although agriculture-led growth played an important role in slashing poverty and transforming the economies of many Asian and Latin American countries, the strategy has not yet worked in Africa. In Ghana, the capacity of the food-crop sector alone to continue to sustain the livelihoods of rural households is very much in doubt as dependence upon subsistence farming confronts households with a precarious living, exposing them to adverse contingencies which always make them 'risk-managers' (Dary *et al.*, 2012; Lay *et al.*, 2008; Tandoh-Offin *et al.*, 2013; Butler *et al.*, 2007).

The International Fund for Agricultural Development (IFAD, 2011) asserts that small-scale farmers in Ghana's poor rural areas (which the Asutifi District is part) have very limited access to the assets that would facilitate a shift from subsistence farming to modern and commercial agriculture. It should also be noted that, poverty in the Asutifi District is deepest among rural food crop farmers as a result of the vulnerable nature of their livelihood. A World Bank (2011) report also put the Asutifi District poverty rate at 30 percent, which is undoubtedly higher than the national rate of 28.5 percent as indicated by the Food and Agriculture Organization (FAO, 2012). According to Newmont Ghana Gold Limited (2005), about 77 percent of rural poor households in the Asutifi District usually depend on a single livelihood activity or strategy (that is weather oriented agriculture). These households therefore find it difficult to avoid, withstand or bounce back during times of stress and shocks or recover from the harmful impacts of adverse events such as drought, pests and disease infestation, flooding or general crop failure among others. Rural households in the Asutifi District that rely on subsistence food crop production as a single livelihood strategy for survival often go through cycles of relative abundance and scarcity. The period immediately prior to harvest is a "hungry period". During this period of scarcity, rural households lack sufficient income and resources to meet their needs (Newmont Ghana Gold Limited, 2005).



As a result of the above problems, Newmont Ghana Gold Limited (2005) again believes that traditional small scale farming in the Asutifi District currently falls far short of its potential to secure the necessary employment, income, food supply, and thus to reduce poverty among rural households. This situation poses a long-term threat to farmers' livelihoods and incomes, and encourages rural young men and women in the Asutifi District to leave their villages to the urban centres in search of unavailable jobs, while those who remain in the area resort to illegal small scale mining activities or "galamsey".

Even though many studies have been conducted in the area of livelihoods in Ghana, however, the question as to whether rural food crop farming or traditional livelihoods "alone" can help rural poor households to move out from the claws of poverty still remains a mystery and this is the knowledge gap this study investigated. This investigation is based on the idea that additional livelihood options for rural poor households will provide new coping strategies that will reduce the impacts of unforeseen contingencies on their means of survival. This study therefore assessed the potential of selected alternative livelihoods (Grasscutter: *Thryonomys swinderianus*; edible Mushroom: *Pleurotus ostreatus* and edible Snail: *Achatina achatina* production) as a means of enhancing rural livelihood options in the Asutifi District, *thereby* providing enough grounds or information for policy makers to design more pro-poor policies which will have greater impacts on these livelihood activities as complementary options aimed at helping the rural poor to move out of poverty.

This study provided answers to the following questions:

- What are the traditional livelihood options for rural households in the Asutifi District?
- What are the challenges faced by rural households with respect to their traditional livelihood options in the Asutifi District?
- What is the economic importance of some adopted or alternative rural livelihood options in the Asutifi District?
- What interventions can improve the livelihood outcome of rural poor households in the Asutifi District?

## 2. Conceptual Framework: The Sustainable Livelihood Approach

Livelihood researchers such as Krantz (2001) have noted that the concept of sustainable livelihood is an attempt to go beyond the conventional definitions and approaches to poverty eradication. These conventional approaches had been found to be too narrow because they focused only on certain aspects or manifestations of poverty, such as low income, or did not consider other vital aspects of poverty such as vulnerability and social exclusion. It is now recognized that more attention must be paid to the various factors and processes which either constrain or enhance poor people's ability to make a living in an economically, ecologically, and socially sustainable manner. The sustainable livelihood concept therefore offers a more coherent and integrated approach to poverty reduction (Krantz, 2001).

According to Chambers and Conway (1992), the sustainability of livelihood raises many questions and these fall into two groups: whether a livelihood is sustainable environmentally, in its effects on local and global resources and other assets; and whether it is sustainable socially, that is, able to cope with stress and shocks, and retain its ability to continue and improve. Sustainability is thus a function of how assets and capabilities are utilized, maintained and enhanced so as to preserve livelihoods.

Sustainable livelihoods (for the purpose of this study) are therefore those that can avoid or resist stress and shocks and are able to bounce back when affected.

Thomson (2000) has argued that the Sustainable Livelihood Approach (SLA) has been adopted by a number of agencies and organisations during the 1990s as an integrative framework for thinking about development issues, and in particular for addressing poverty. The framework links the concepts of capability, equity and sustainability, each concept being seen as both a good in itself and an end (Chambers and Conway, 1992).

Thomson (2000) again argue that the SLA has evolved from thinking about poverty as a problem of lack of income, through the basic needs approach, then an emphasis on food security and vulnerability, and finally more recently an approach to poverty programmes which focuses on the provision of health and education services by government. A sustainable livelihoods approach is likely to encompass elements of all these aspects, but focuses on capacities rather than needs, assets and strengths rather than weaknesses and constraints.

## 3. Methodology

This section discusses the research techniques that were adopted for the study including the design, sources of data, sample size determination and data analysis.



#### 3.1 Research Approach

A participatory approach was adopted for this study since the research was conducted with rural households whose life and meaningful actions were under study.

The approach was therefore an interactive process (Bennett *et al.*, 2004), rather than an exercise of extracting information from the people and this increased the effectiveness of the research and any policy recommendation arrived at is likely to make sense to those affected.

## 3.2 Research Design

A cross-sectional design was adopted for the study. Data was collected from selected households to answer questions of interest. Therefore the information needs of this research were provided by the selected population and only households who have adopted either Grasscutter (*Thryonomys swinderianus*), edible Mushroom (*Pleurotus ostreatus*) or edible Snail (*Achatina achatina*) production in addition to their traditional or primary livelihoods to improve their livelihood options were selected and interviewed.

The study focused on the above three alternative activities because they are the most commonly practiced alternative livelihoods in the Asutifi District but it appears that there is no empirical evidence in literature about their income or economic potentials which could impact on policy as a means of addressing rural poverty in the district.

# 3.3 Sources of Data and Research Instruments

The method adopted for this special study involved data collection from both primary and secondary sources. The primary source was the direct data obtained from the field. Apart from the rural households involved in the livelihood activities under study, other stakeholders such as the Bemcom Youth Training and Resource Centre, the Asutifi District Assembly, Asutifi District Agricultural Development Unit and Newmont Ghana Gold Limited were also interviewed. This aspect therefore involved the use standard questionnaires and an interview guide including necessary observations. Relevant literature was also consulted. These data collection instruments were used in order to obtain adequate and relevant data for the study.

# 3.4 Sampling Procedure

The study also employed the simple random sampling method to select a sample of 138 heads of household from a population of 215 households practicing the alternative livelihoods under study. This was to help ensure a higher level of precision and representation.

# 3.5 Sample Size Determination

A quantitative approach was used to determine the sample size using the formula:

$$n = \frac{N}{1 + N(cc)^2} \quad \text{where}, \tag{1}$$

n= Sample Size

N= Sample Frame

∝= Margin of Error

According to the Bemcom Youth Training and Resource Centre (A livelihood training centre in the Brong Ahafo Region) and the District Directorate of the Rural Enterprise Project, a total of 215 households have been trained over the years and assisted to practice the livelihood activities under study in the Asutifi District and therefore with a confidence level of 95% and confidence interval or margin of error of 5%, the sample size was determined as:

$$n = \frac{215}{1 + 215(0.05)^2}$$

Therefore, n= 138: This means that 138 out of the 215 households were interviewed.

## 3.6 Data Analysis

The researcher adopted a combination of quantitative and qualitative approaches in the data collection and analysis.

After the survey, the Statistical Package for the Social Sciences (SPSS) was used to ensure that the relevant portions or the quantitative data were translated into statistical tables and diagrams (such as bar graphs, line graphs and pie charts) to give a picturesque description about the situation which were followed by an interpretation of these statistical tables and diagrams into meaningful information to give ideas and drawing of



inferences and conclusions leading to the realization of the research objectives.

The qualitative data were analyzed by making complete statements and developing policy meanings of the data obtained from the households as in the view of Gerring (2007).

#### 4. Results and Discussion

This section presents an analysis and findings based on the results of the data obtained from the field. The research instruments were designed to collect information that addressed the research questions posed in this study.

4.1 The Traditional Livelihood Options for Rural Households in the Asutifi District

Table 1: Traditional Livelihoods in the Asutifi District

Livelihood Activities	Households	Percentage (%)
Food Crop Farming	105	76
Petty Trading	22	16
Salary Work	3	2
Livestock Rearing	5	4
Others:	3	2

Source: Author's Field Survey, May 2013.

Food crop farming (76 percent) constitutes the major or primary source of livelihood in the Asutifi District, followed by petty trading (16 percent) and livestock rearing (4 percent) (see Table 1). This demonstrate that food crop farming still continue to play a very key role in the livelihoods of rural households irrespective of its shortcomings. Only 24 percent of rural households interviewed have sources of income other than farming. From the study, even though food crop farming constitutes the major livelihood option for rural households in the Asutifi District in view of the fact that about 76 percent of the households are involved, this is obviously not a variation from what exists in the Brong Ahafo region (see Figure 1) and even other rural districts across the country. The Brong Ahafo region is well noted for the production of various food crops such as maize, yam, plantain, cassava and cocoyam; and the same can be said of the Asutifi District based on this study. For example, the Ministry of Food and Agriculture-MoFA (2013) provides an idea that food crop production accounts for about 70 percent of agricultural output of the region. According to Newmont Ghana Gold Limited (2005), about 77 percent of the working population in the Asutifi District is involved in agriculture (food crop production). All these statistics put across by the Ministry of Food and Agriculture (70 percent) and Newmont Ghana Gold Limited (77 percent) compare favourably with the 76 percent based on the results obtained from the field.

Again, food crop farmers, petty traders and households rearing livestock among others are able to "pair" their activities with other additional livelihoods without abandoning their traditional livelihoods. About 79 percent also hope to continue to combine or undertake multiple income sources. Therefore by their nature, rural livelihoods from the study are "complementary" as most livelihoods within the rural area can be undertaken concurrently, and this buttresses the claim in this study that single income sources for rural households (mainly in the area of food crop farming) appears not to be "sufficient" and hence the need for combination of multiple or additional livelihoods.

4.2 The Challenges Faced by Rural Households with Respect to their Traditional Livelihood Options in the Asutifi District

Among the major factors that confront the livelihoods of the rural households in the Asutifi District majority of whom are subsistence food crop farmers (76 percent) include the following:

- Agricultural cycles (relative abundance and scarcity) and commodity pricing
- Crop failure
- Decline in soil fertility
- High cost of labour
- Land tenure arrangements
- Irregular supply of farm produce, improper housing structures for livestock, poor veterinary services and poor financial services and credit.



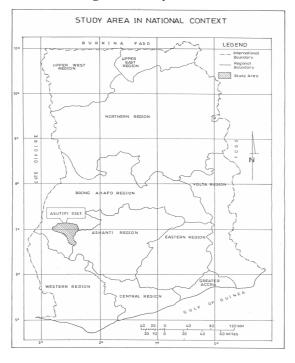


Figure 1: Study Area in Context

Source: Asutifi District MTDP, 2010

It is important to note that, these problems cited in this study go to confirm what already exist in literature. For example, the International Fund for Agricultural Development (IFAD, 2011) argues that food crop farmers in Ghana's poor rural areas experience low productivity and income annually as a result of poor market for agricultural produce, pests and diseases, lack of access to appropriate technology and inputs including fertilizers and seedlings which would increase farm yield. Again, a land ownership and tenure problem cast a darker shadow on small scale farming and food security. Similarly, Stephen (2001) claims that households engaged in farming, experience considerable risks in their income process such as harvest failure and since these farmers do not have a well defined market for their products, they normally suffer from price fluctuations.

Therefore, based on what has been emphasized by IFAD (2011) and Stephen (2001) above, the findings from this study continue to relate to the findings of other previous research and other scholarly works reported in literature.

Judging from the above livelihood problems, it is undeniable that rural households in the Asutifi District find it difficult to avoid or withstand livelihood stress and shocks and thus make them more vulnerable, thereby giving the impression that rural households do not have to depend on only one source of income or livelihood as doing so would continue to put them at risk and must therefore be encouraged and assisted to adopt new or multiple activities to enhance their livelihood options.

## 4.3 The Economic Importance of Some Adopted or Alternative Rural Livelihood Options in the Asutifi District

As a result of the problems that confront the livelihoods of poor people in the Asutifi District, households have adopted other complementary livelihood activities as a means of supplementing their income options. The basic idea expressed here is that, rural households do not need to scrape off their existing livelihoods but must rather secure additional alternatives and hence the success story from these combinations can be replicated among other rural households through policy.



Table 2: Distribution of the Adopted Livelihoods by Households

Adopted Livelihoods	Households	Percentage (%)
Grasscutter Domestication	59	43
Snail Rearing	26	19
Mushroom Production	53	38

Source: Author's Field Survey, May 2013.

About 43 percent of households have adopted Grasscutter (*Thryonomys swinderianus*) domestication, 38 percent in Mushroom (*Pleurotus ostreatus*) production while 19 percent are into edible Snail (*Achatina achatina*) rearing. It can therefore be observed that, all the additional livelihoods practised by the respondents are rural-based employments.

Households have therefore decided to enhance their livelihood options with the adopted livelihoods because they:

- Are easy to be adopted
- ➤ Provide a mechanism for managing risks with respect to their primary livelihoods
- Are able to yield relatively higher income and therefore economically sustainable and;
- ➤ Also require less land and space

Figure 2: Grasscutter (Thryonomys swinderianus) in Captivity



Source: Author's Field Survey, May 2013.

Figure 3: Matured edible Snails (Achatina achatina) Ready for Market



Source: Author's Field Survey, May 2013.



Figure 4: Cultivated edible Mushroom (*Pleurotus ostreatus* )



Source: Author's Field Survey, May 2013.

The income levels of households from their traditional livelihood activities are comparatively low with 74 percent earning GHC100 or less every month. Fewer households, 9 percent earn above GHC 150 up to a maximum of GHC 350. It could also be observed that households belonging to this category (GHC 150+) are the few petty traders, tailors and salary workers. No food crop farmer belonged to this relatively high income category in terms of the traditional livelihoods and this in some way make rural livelihoods especially food crop farming a less economically viable activity by nature and usually undertaken to provide sustenance for households.

However, majority of the households (75 percent) can earn above GHC 150 up to a maximum of GHC 800 every month from their adopted livelihoods (see Figure 5) unlike in the case of the traditional livelihoods. The economic viability or importance of the selected livelihoods under study is made even clearer after comparing the incomes from households' traditional and adopted livelihoods (see Table 3).

Table 3: Comparing Income from Traditional and Adopted Livelihoods

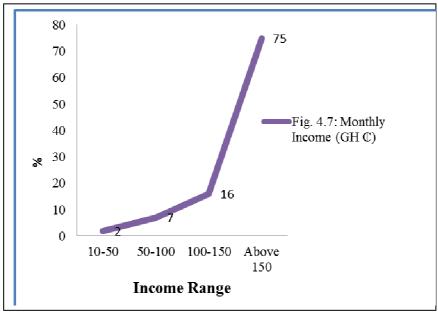
Amount/Income Range (GHC)	Traditional Livelihoods (% of	Adopted Livelihoods
	Households)	(% of Households)
10-50	26	2
50-100	48	7
100-150	17	16
Above 150	9	75

Source: Author's Field Survey, May 2013.

In terms of primary livelihoods, 48 percent receive monthly income of only GHC 50-100 where as in terms of the adopted livelihoods; the greater majority of the households (75 percent) receive monthly income of at least GHC 150 up to a maximum of GHC 800.



Figure 5: Monthly Income (GHC) from Adopted Likelihood



Source: Author's Field Survey, May 2013

Again, households who in the long-run decided to undertake their traditional and adopted livelihoods concurrently have now seen a rise in the level of their income (see Figure 6) and accordingly contributing to the reduction of income poverty among households.

A0
35
30
25
8 20
15
10
5 ONew Income Level (Traditional and Adopted: GHC)

Income Range

Income Range

Figure 6: New Income Level (Traditional and Adopted Livelihoods Combined- GHC)

Source: Author's Field Survey, May 2013

It is also noteworthy that, although the additional livelihood activities adopted by rural households to enhance their livelihood yields more income or economic benefits than their traditional livelihoods in the long-run, care should be taken in order not to completely replace or scrape off the primary or traditional source of livelihood. For example, food production from farming activities in the rural areas can at least provide food security as well as other non-quantifiable benefits for the family to enhance their survival. Therefore, adequate food supply appears to be a prerequisite for rural poverty reduction at the household level.



#### 5. Conclusion

Man, since time immemorial has been battling with poverty, a situation which few rural people can avoid. Poverty even though is sometimes described as a natural phenomenon by certain people or social groups or classes, systematic measures and interventions can help rural people surge out of poverty. This special study therefore focused on establishing the contribution of some selected alternative rural livelihood strategies that are being undertaken by households in the Asutifi District towards the development of the people in the area in terms of their capacity to generate adequate employment, income and reduced vulnerability, lessening poverty and improved wellbeing.

The researcher believe that rural households should therefore be assisted or supported to identify and utilize the full potentials of their natural, social and physical assets available to them to make a living. Therefore, understanding the livelihood opportunities and constraints within the rural area should be the starting point in exploring the potentials of any livelihood intervention or poverty reduction strategy. However, diversification or expansionary decisions by households should not be driven to a large extent by desperation but rather as new opportunities and progressively re-arrange their traditional livelihood portfolio. Activities no longer economically and socially viable have to be complemented or supported with new ones better suiting the context of a more mature market economy. Exploiting additional non-farm or alternative opportunities could offer a pathway out of poverty for the rural poor households in the Asutifi District as households who have already taken such advantage (alternative opportunities) are now benefiting from stable employment, increased income and reduced risk.

It is strongly envisaged that, if the issues raised in this study are not stalled but are acted upon, it will go a long way to see rural households holding on to multiple income sources and improving their livelihoods, and ultimately emerging out of the pigeonholes of poverty.

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