### AN EXPLORATORY SURVEY OF SMALL SCALE OFF-FARM ECONOMIC ACTIVITIES AND SUSTAINABLE HOUSEHOLD LIVELIHOODS IN THE BONGO DISTRICT OF GHANA

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#### **Abstract**

Small scale off-farm economic activities are believed to be a potential frontier for generating additional livelihoods support to sustain the farm household in rural Ghana. Despite this general belief, very little has been done to provide adequate information that might be utilized by policy makers and practitioners for possible intervention. The purpose of this exploratory survey is to examine the potential of small scale off-farm economic activities in sustaining household livelihoods, using three communities in Bongo District in the Upper East Region of Ghana as a case study. The data for this study is derived from a larger survey, covering a wide range of issues including small scale off- farm economic activities, conducted in the eastern portion of the district - Bongo-Soe, Adaboya and Apatanga communities. The key findings are that, although their operations remain at a low level, small scale off-farm economic activities contribute between 3.2 and 14.6 per cent to household incomes. The incomes from these operations serve strategic livelihood purposes, especially in sustaining the household during the excruciating lean season, when households habitually run out of all food stock. The incomes earned also serve other useful social and economic functions, such as the payment of bride price, funeral performance, the purchase of agricultural inputs and investment in livestock and human capital. It is therefore recommended that, development agencies like the Non Governmental Organisations, the District Assemblies and financial institutions consider supporting households to improve their skills, expand operations, and improve the product quality since this will enhance the livelihood chances of poor households in a derelict environ sent.

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**Key words:** Bongo, Ghana, household, livelihoods, off-farm, small scale, sustainable.

#### 1.0 Introduction

The capacity of the agriculture sector alone to continue to sustain the livelihoods of farm households in some parts of rural Northern Ghana is very much in doubt. In the Upper East Region for instance food deficits of 14,000 and 21,000 metric tonnes were reported in 1997 and 1999 respectively (Ghana 1998, 2000). The concomitant effects of environmental degradation, rapid population growth, slow spread of technology and low public investment in agriculture, all account for the increasing inability of the farm sector to sustain rural livelihoods (Ghana 1997). The Upper East Region of Ghana, where severe environmental degradation and rapid population increases have combined to reduce farm holdings beyond economic production, presents a classical example. In this predicament, farm households have evolved coping strategies to sustain themselves. Among these are: the short term seasonal circular migration between the cropping and off-cropping seasons and the development of small scale off-farm economic activities (OFEA) as an integral part of their livelihood systems. These small scale off-farm economic activities are believed to be a potential frontier for generating additional income to sustain the farm household. Despite the general belief in the potential role of these off farm activities in supporting rural livelihoods in Ghana, especially in the severe food deficit regions, very little has been done to provide adequate information that might be utilized by policy makers and practitioners for possible intervention.

A review of existing literature shows that the focus of researchers of peasant households is skewed towards crops and livestock, rather than small scale off-farm economic activities. This narrow focus of researchers stems from the fact that peasant economies are often, erroneously, viewed essentially as agriculture based, where farm households cultivate crops and tend their livestock (Nowak 1989; IFAD 2001). Where there is a conscious study of off-farm eco-

nomic activities, the focus is unfortunately tilted to small scale industries producing to meet market demands, ignoring those traditional activities operated by owners with the help of household members aimed primarily at sustaining the household. As Boapeah and Poppe (1992: 5) argued most rural non farm employment is to be found in rural small scale and highly dispersed enterprises which are often missed in statistics due to their unregistered status. The conventional rural household economic surveys conducted so far in the Upper East Region of Ghana show that small scale off-farm economic activities are usually viewed as minor supplementary household economic activities. Farmers are perceived by researchers as merely choosing to spend their otherwise idle time during the off-season by engaging in one economic activity or the other. These perceptions are coloured by the lingering traditional strict divisions between the primary, secondary and tertiary sectors of an economy. Usually this evolutionary approach to the analysis of these segregated sectors further compounds the problem of the neglect of small scale off-farm economic activities, regarded as primitive and will disappear as the economy advances.

Due to the problem of inadequate analysis and comprehension of their nature and operations, there is a lack of appreciation of the contributions and potential of small scale off-farm economic activities in household livelihood sustainability and in national development. This paper, therefore: examined the types, characteristics, levels of production and problems of off-farm economic activities. The paper also analysed the gender differentials in the production, employment and income levels of off-farm economic activities and their potentials in sustaining the household.

### 2.0 Overview of concepts

The key concepts of this research do not lend themselves to easy definitions. An attempt is, however, made here to first of all present what pertains in the existing body of literature, and then to clarify the meanings given to each concept in this study.

#### 2.1. Small scale off-farm economic activities

Small scale off-farm economic activities are perceived and defined differently, depending usually on the criteria one is using. They are sometimes referred to as traditional industries, due to the reliance on indigenous technologies often regarded as "rustic ... and outmoded methods of manufacturing and organization" (Boeh-Ocansey, 1996: 4). Generally, these off-farm economic activities are not registered. Their organizations and operations are informal and, therefore, regarded as non formal activities. When the size is considered, especially size of equipment, labour, capital and output levels, they are often referred to as small scale enterprises (Boapeah and Poppe, 1992). Discussions of small scale industries, both urban and rural tend to centre on issues of ease of entry, reliance on indigenous resources, family ownership of enterprises, small scale of operations, labour intensive, adapted technology, and skills acquired outside the formal school system, and unregulated and competitive markets (Boapeah and Poppe, 1992).

In rural economies of sub-Saharan Africa, households have incorporated age-old non-farm economic activities into their livelihood systems. These off-farm economic activities depend on technologies that have been handed down from one generation to the other and are often owned and managed at the family level. They rely on resources that are usually procured within the immediate environment. The household is both the production and consumption unit with an occasional surplus disposed of in the routine daily or periodic markets to earn a pittance to supplement family income. Unfortunately, interests in small scale off-farm economic activities tend to focus more on those producing to meet market demands. This interest stems from a number of reasons. One reason is the woeful failure of the experimental state led industrialization programmes leading to the belief that small scale industries may well offer a more appropriate approach to industrialization in Africa. Secondly, governments, development banks and donor agencies are more enthusiastic about the financing of market oriented small scale entreprises as a way of increasing their output and supply potential

(Nowak /989: 121). Besides, in the existing body of literature, it is generally accepted that market oriented small scale entreprises in developing economies constitute an important way of enhancing employment creation and income growth (Nowak 1989; Sowa et al., 1992; Boapeah and Poppe 1992; IFAD 2001). It has been argued that "rural non-farm activities provide 25-40 percent of household income and incomes from these sources are even growing more than farm income" (IFAD 2001: 6).

Their importance beyond the household level has also been sufficiently acknowledged. For instance, Boapeah and Poppe (1992) argued their potential for regional development. They argue that the myriad of small scale non farm entreprises in rural areas provide opportunities for strengthening the regional and local economic circuits and if consciously promoted will lead to the eventual development of the region in question. The employment opportunities created tend to retain labour which would otherwise migrate outside the region. External linkages are also developed with both internal and external markets thereby leading to the development of both intra- and inter-regional exchanges. The views presented above confirm the argument in this paper that the focus has, unfortunately, been more on urban oriented small scale industries producing to meet market demands, ignoring traditional off-farm economic activities in rural communities.

### 2.2. Household and household livelihoods sustainability

One of the most difficult concepts to define in social science is the concept of a household. As a collection of people engaged in the quest for survival on a day-to-day basis in varied socio-cultural settings, it becomes difficult to find a uniform definition for such a collectivity. Common parameters that have been used over and over are: co-residence, joint production and consumption. Based on these three common parameters, Webb (1989) defined a household as a unit of joint production, consumption and residence where "these individuals normally share various rights, duties and material possessions, recognizes the overall authority of a single head ....". This

definition poses a lot of problems, especially in northern Ghana, where most households experience seasonal circular migration to expand the household resource base through income remittance. Another dimension of the co-residence question is the fact that in some ethnic groups, members of the same household may actually reside in separate residential units. It is also common knowledge in northern Ghana that children reside with relations of their parents, while still having a lot to do with the household of their parents through intricate resource flows. In the latter case, the consumption and co-residence arguments do not apply. Similarly, the joint production argument does not apply in all cases. In some societies, there are certain productive activities that are jointly undertaken by the household. Activities such as building of additional residential units, renovation work, working on the household farm are usually jointly undertaken. On the other hand, individuals may undertake productive activities such as supplementary off-season income generating activities, cash crops farming, and benefits of such individual endeavours accrue directly to the individuals and not to the household.

Another common parameter is the issue of the welfare function of a household. The issue of communal welfare, however, presents another interesting perspective in the discussion of the concept of household. The question often is, should households be regarded as having a unitary welfare function whereby all members of the household jointly pursue a common welfare or should the household be viewed as having divergent welfare functions or interest. Dreze and Sen (1989), argued that in households where there tends to be a great deal of congruence or non conflict of interests the cooperative model prevails. Households viewed from the welfare perspective, have a great deal of repercussions for the sustainability of the livelihood system. In the context of this study a congruence of interests in a household can then be useful in optimising the risks aversion capacity of the household under stressful conditions. On the contrary, conflicts of interests can also jeopardise the already precarious situation of the household livelihood system and render

the weaker members of the household more vulnerable.

The above arguments presuppose that there cannot be a single definition of the concept of household to cover all socio-cultural groups. For this study then, a household will be viewed as a socio-political and economic unit having consanguineous and conjugal links that lays claims to common pool resource bundles. This definition presupposes that members of the given household in one way or the other contribute to the common pool of resources and, therefore, have communal property rights, and are bounded by common obligations. It also means that members of the household as a collective unit have the obligation at all times to ensure the welfare of its members.

Households, both as production and consumption units, naturally identify viable means of ensuring their existence on a continuous basis. The term livelihood entails "a portfolio of activities, with different members of the family seeking and finding different sources of food, fuel, animal fodder, cash and support in different ways in different places at different times of the year" (Chambers 1995). All these contribute to the sustainability of the household livelihood system, where sustainability implies longer-term and livelihood the many activities (Chambers, 1995) that enable the household to cope with and recover from stress and shocks.

### 3.0 Methodology

The data for this study is derived from a larger survey conducted in November 2001 in the eastern portion of Bongo District – Bongo—Soe, Adaboya and Apatanga, in the Upper East Region of Ghana. The information collected covers a wide range of issues, including small scale off-farm economic activities. This section discusses the selection and demarcation of the zones for the survey, the sampling of households, data collection methods and presentation. Based on information gathered from a preliminary field study, existing literature, maps and discussions with key informants, three zones were identified: Bongo-Soe (including Adabe), Adaboya and Apatanga.

The Bongo-Soe zone is semi-urban and linked to the district capital and neighbouring Burkina Faso. Soe, which is the major settlement, has both a daily and periodic market. Adaboya zone is also linked to the district capital and other settlements within and outside the district by a poorly surfaced third class road. It has no market of any significance. The third zone, Apatanga, traditionally was reputed for iron ore extraction and manufacturing of implements in ancient times. However, due to the menace of onchocerciasis (oncho) it became depopulated, but with the eradication of oncho, the zone is experiencing rapid in-migration. These marked characteristic differences between the three zones provided the basis for the division of the study area into the three zones - Bongo-Soe, Adaboya, and Apatanga. In the eastern fringe of the three zones is a forest reserve, which is as a result of the oncho invasion. Currently, due to the eradication of oncho, there is encroachment of the forest reserve, especially for the exploitation of forest based resources and farming.

The main unit of analysis was the household, with other embedded units, such as different entreprises and gender segregated groupings. A total of 130 households, made up of 79 male headed households and 51 female headed households responded to the portion of the questionnaire on small scale off-farm economic activities.

A mix of data collection and analysis techniques were employed. Quantitative data was collected using formal structured household interview questionnaire. The survey questionnaire was, therefore, designed to capture information/data on: the types, characteristics and levels of production and problems of small scale off farm economic activities; gender roles in the production and ownership of off farm economic activities and the potentials of off farm economic activities in sustaining the farm household.

Apart from the survey questionnaire, interactive techniques were also used to collect qualitative information to beef-up the quantitative data and to facilitate meaningful interpretations and conclusions. Information was gathered on gender roles, perceived economic benefits, perceptions of likely negative consequences, especially concerning the environmental aspects.

In the analysis and presentation of the results some terminologies are used which need to be explained. The terms respondent and responses are frequently used throughout the presentation. The term respondent refers specifically to a person identified in each household to answer the questionnaire, while responses refer to the answers provided by the respondents. The reason for this differentiation is that in most cases one respondent can give multiple responses. The implication is that the total responses will exceed the number of respondents and this can be confusing. So in a table, the term "total responses" will refer to the total number of answers, and "total respondents" to the number of people who have answered the question.

In carrying out the survey one major problem was encountered. Being a mostly non-literate society, records keeping and measurements of economic activities posed a serious challenge. This problem was partially addressed by recruiting experienced interviewers who assisted respondents to make meaningful estimates.

### 4. 0 Results and Discussion

Apart from farming activities, both men and women are involved in a wide range of small scale off-farm economic activities both during the farming and off-seasons. However, some of these economic activities are mostly undertaken during the off-season as will be seen in the subsequent sections. The number of people engaged in off-arm economic activities by gender and zone is as indicated in Table 1. From Table 1, it would seem that more men are engaged in small-scale industries than women, but this is merely a reflection of the proportional distribution of the questionnaire. Women and men are equally active in small scale off farm economic activities.

Table 1: Distribution of small scale off farm economic activities by gender and zone

	_	M	Men		men
S/No	Zone	No.	%	No.	%
01	Apatanga	21	26.6	22	43.1
02	Adaboya	17	21.5	11	21.6
03	Bongo-Soe	41	51.9	18	35.3
	Total respondents	79	100.0	51	100.00

### 4.1. Types and Levels of Production

In this section, a more detailed analysis is done on each category of the small scale off farm economic activities, focusing on levels of production, sources of raw materials, and marketing.

#### 4.1.1. Catering services

Wide varieties of different cooked foods are sold in the three zones, as can be seen in Table 2. Table 2 also shows that the sale of food is either a major or minor activity undertaken in combination with other activities.

Table 2: Distribution of women involved in catering services as a major or minor activity

Type of food	Apatanga		Ada	Adaboya Bongo-Soe		go-Soe	Total	
	Major	Minor	Major	Minor	Major	Minor	Major	Minor
Pito brewing	4	5	7	1	1	1	12	7
Cooked rice	2	4	1	3	2	8	6	15
Waakye	1	0	1	0	1	0	2	1
Ken key	0	1	0	1	1	0	i	2
Tuo Zaafi	1	0	0	3	0	0	1	3
Tobaani	0	0	0	0	0	1	0	1
Porridge	0	1		0	0	0	0	i
Kulikuli	0	0	0	3	0	2	0	5
Bread	0	0	0	1	0	0	0	1
Maasa	0	0	1	0	0	0	1	0
Total Responses	8	11	10	12	5	12	23	36

Source: Small scale off farm economic activities survey questionnaire, November 2001.

It is also worth noting that in each zone, a few people are engaged in the sale of a particular type of food, thus reflecting some rudimentary specialisation. The limited number of people in each specialised catering service category can be explained in terms of the narrow market, which places a serious constraint on competition. This detailed break down brings to light the limited nature of this sector as a contributor to employment in the district and to household income. This pattern is not surprising because in a subsistent rural economy where every household produces nearly the same types of food crops, catering services on a daily basis will not be an important activity.

The majority of food sellers (48.5 percent) operate on the periodic market days, which come on every three (3) days. Apart from the daily sales and sales on periodic market days, food is cooked and sold occasionally, especially during funerals and on festive occasions.

Table 3:	Frequency of	f cooking	and selling	of food
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S/No	Frequency of cooking and selling of food	Percentage			
01	Daily	12.3			
02	Market days (every tree days)	48.5			
03	Weekly	24.4			
04	Funeral/Festive occasions	14.8			
Total percentage	100.00				
Total responses	59				

Source: Small scale off farm economic activities survey questionnaire, November 2001.

The low frequency of catering activities is reflected in the low levels of incomes earned from these activities as shown in Table 4.

Table.4: Average annual earnings from the sale of cooked food

S/NO	Type of cooked food sold	Average annual earnings in cedis (in cedis)
01	Pito	57, 375.00
02	Rice	43, 947.00
03	Kulikuli	43, 676.00
04	Tuo zaafi	29, 333.00
05	Maansa	28, 250.00
06	Bread	27, 460.00
07	Ken key	26, 500.00
08	Porridge	26, 350.00
09	Waakye	25, 152.00
10	Tobaani	15, 860.00

Source: Small scale non farm entreprise survey questionnaire, November 2001.

The relatively high income earning areas are pito, rice and kulikuli. These three different types of foods are cooked and sold in nearly every settlement. The raw materials, sorghum, rice and groundnuts, from which these foods are cooked are also major staples cultivated in the district. The low average income earnings also explain why small scale off-farm economic activities are not undertaken solely as major occupations. The reasons for the low levels of production stem from the problems confronting the cooking and sale of food.

Women who engage in the selling of food encounter a number of problems. The most common problems mentioned are: lack of appropriate cooking utensils; no funds to purchase equipment; inability to construct the necessary infrastructure like chop bars and the accompanying furniture. In terms of percentage distribution, 34.7 percent of the women respondents indicated lack of capital, 29.2 percent said marketing was a problem, while 18.1 and 18.0 percent indicated high cost of inputs/raw materials and labour respectively. The marketing problem stems from: the narrow nature of the market, competition, exorbitant market levies, and the habitual pur-

chases on credit by customers, especially family members. Women also complain that the cooking and sale of food is labour intensive and in the rural areas access to skilled and reliable cooks or kitchen helps are hard to come by. The generally low incomes in the study area imply that purchasing power is low. These problems account for the low participation rate in the catering services.

#### 4.1.2. Charcoal production

Currently, both men and women in all the three zones undertake charcoal production on a limited scale, although Bongo-Soe appears to lead, as can be seen in Table 5.

Table 1.5: Number of people engaged in charcoal production by gender and zones

	<u> </u>		Zone		
Gender	Apatanga	Adaboya	Bongo-Soe	Total	
Men	0	3	14	17	
Women	1	0	3	4	
Total	1	3	17	21	

Source: Small scale off farm economic activities survey questionnaire, November 2001.

A total of twenty one (21) people reported their involvement in charcoal burning as an off-season activity. More men than women are involved in charcoal production. Twelve charcoal producers operate in the oncho free zone. The other nine (9) charcoal producers get their wood from their bush farms or some occasional fallen trees. The production levels are also relatively low. On the average, the male charcoal producers produce 6,690-kilogram weight (66.9 maxi bags) in a year, while their female counterparts produce 4,403-kilogram weight (40.3 maxi bags) in a year. Average income earnings from charcoal also vary between the men and the women. The women transport their charcoal mostly on their heads and sell in nearby markets at relatively lower prices. The men transport their charcoal either by bicycles, donkey carts or lorries to distant markets like Bolgatanga, Beo, Bongo, Akayongo, Yelwongo and Agamolga and, therefore, sell at relatively higher prices. The

<sup>&</sup>lt;sup>4</sup>A maxi bag weighs about 100 kilograms

average annual earnings of men and women are \$\psi 421,000.00\$ and \$\psi 300,500.00\$ respectively.

Charcoal production in this environmentally degraded district is faced with numerous challenges. The common problems charcoal producers encounter include: difficulty in accessing wood in the oncho free zone, marketing, (especially the female producers), seasonality of the activity, and labour shortage.

The analyses show that the contribution of charcoal burning is a peripheral off-season activity undertaken by a small number of people in the study area. The level of production is low and consequently low annual average incomes are earned through this economic activity. Their potential for district wide employment generation is very much in doubt, although the paltry incomes earned from charcoal are crucial for the sustainability of these poor households.

#### 4.1.3. Galamsey

Galamsey or unorganized small-scale mining, using crude methods, is becoming an important economic activity in the Upper East Region. In the Bongo District, this activity is, however, limited to the Adaboya zone, where both men and women painstakingly wash the alluvial mud and sieve the sand from the bed of Adeweku stream, a tributary of the Red Volta River, which yields traces of gold. Information from the survey shows that only three men and seven women reported engaging in galamsey as a minor activity during the dry season when the stream dries up. Production levels are also low, about 20.3 carats on average. An average income from galamsey is estimated at \$292,166.00 per annum. Despite the small quantities produced, the market range for the gold dust is wide. Customers come from Bolgatanga, Bawku, Akayongo, Kumasi and parts of Burkina Faso to purchase the gold dust.

<sup>&</sup>lt;sup>5</sup> A carat is the equivalents of 200 milligrams weight of gold dust/grains i.e. the equivalent of the weight of a blade.

Galamsey is rather fraught with a lot of problems such as: price fluctuations, seasonal flooding, and lack of appropriate equipment to expand extraction in a more efficient way, intensive labour requirement, limited skills, and weak bargaining power. Despite these problems, the high value of gold is a tempting incentive for the painstaking search for it. Its contribution to employment and household income is, at the moment, limited as only an insignificant number of people are engaged in it. It, however, has a great potential as a source of employment and household if properly organized and supported.

### 4.1.4. Crafts

It is generally believed that crafts form an important component of the livelihood system of households in the Upper East Region, although the economics of it has not been sufficiently analysed. This section looks at: the types, levels of production, incomes derived from such activities, marketing outlets and the problems encountered.

able 6: Number of people engaged in crafts by gender and zone

Catchment	Men	Women	Total	
Apatanga	2	1	3	
Adaboya	10	3	13	
Bongo Soe	15	5	20	
Total responses	27	9	36	,

Source: Small scale off farm economic activities survey questionnaire, November 2001

As can be seen from Table 6, the main types of crafts produced include: the weaving of mats, hats, ropes, baskets, and zanamats. The main raw materials are straw and grass. The straw is either bought from markets such as Bolgatanga, Soe, Akayongo and Burkina Faso or obtained from the Adeweku River in the forest reserve. Crafts are an off-season minor activity undertaken to supplement household income. The evels of outputs are, therefore, low as indicted in Table 7. Overall, rope making and the weaving of hats are popular with both sexes. However, more women are

involved in the weaving of hats than men. Another important feature is that, those who weave hats also weave baskets.

Although the production levels are low, the market range for these products is far. These products are sold in domestic markets like Bongo, Akayongo, Beo, Kongo and Soe and also in markets outside the district such as Bolgatanga, Yelwongo, Kumasi, Accra and others. Crafts dealers also buy and export them to foreign markets in Europe. Although the market for crafts is wide, the low average quantities produced by households results in low earnings. From the survey, it was found that the average income from crafts is \$57,956.00 per season.

Table 7: Average output per season by gender

NO	Type of Crafts	Average output (Number of pie		
		Women	Men	
01	Hats	95	71	
02	Baskets	50	36	
03	Ropes	105	152	
04	Mats	0	76	

Source: Small scale off farm economic activities survey questionnaire, November 2001

The problems of the sector explain these low production levels. This sector is confronted with a lot of problems (see Table 8). The common problem of "lack of capital" runs through all the categories of small scale off farm economic activities surveyed and crafts are, therefore, not an exception.

Table 8: Types of problems facing crafts production

S/NO	Type of problem	Percentage of responses
01	Lack of capital	27.3
02	Fatigue due to the labour intensive nature of the production process	27.3
03	Losses through faults/accidents	18.3

Total	responses	100.00 22			
06	Transportation problems	4.5			
05	Difficulty in obtaining raw materials	9.0			
04	High cost of marketing	13.6			
Ghana Journal of Development Studies Vol. 1 No. 2. December 2004					

Source: Small scale non farm entreprises! survey questionnaire, November 2001.

Due to the slow production process, crafts producers complain of fatigue. The tedious process of obtaining raw materials is also a critical factor. Those who rely on natural sources along the riverbanks in the forest reserve face the problems of distance and how to cross the river. Those who purchase the raw materials from the market also complain of the high cost and transportation difficulties. These problems not withstanding, crafts producers have a high degree of resilience and interest in continuing to produce under such difficulties.

# 4.2 Gender differentiation in off-farm economic activities

Differences exist in the types of off-farm economic activities that men and women are engaged in. Women under take mostly the following activities: processing of food and brewing of pito (local beer), sheabutter, dawadawa and groundnut oil extraction, sale of fuel wood, weaving, pottery and charcoal burning. Men on the other hand, are involved more in crafts like carving, weaving of hats and rope making. They are also engaged in home based manufacturing such as blacksmithing, carpentry; block moulding, distillery of local gin and construction work. These differences are depicted in Tables 9 and 10. The processing and sale of food and brewing of pito constitute the two most important small scale off-farm economic activities of women in all the three zones. In the context of this study, food processing involves also the extraction of sheabutter and dawadawa.

Table 9: Percentage distribution of types of SSI undertaken by women

NO	SSI	Apatanga	Adaboya	Bongo-Soe	Total
01	Food processing	53.2	68.4	53.5	57.8
02	Pito brewing	36.2	15.8	18.6	24.2
03	Crafts	2.1	7.9	11.6	7.0
04	Sale of fuel wood	6.4	0.0	9.3	5.5
05	Charcoal burning	2.1	0.0	7.0	3.2
06	Galamsey	0.0	7.9	0.0	2.3
		100.00	100.00	100.00	100.00
	Total responses	47	38	43	125

These two major activities are undertaken all year round, although the peak period is in the dry season.

On the contrary, the minor small scale off-farm economic activities such as charcoal burning, sale of fuel wood, galamsey and crafts are undertaken in the dry season when raw materials are available and also the environmental conditions are favourable for such activities. Compared to the women, few men are involved in small scale off-farm economic activities. Besides, the bulk of men are engaged in crafts and charcoal burning.

Table 10: Distribution of men engaged in off farm economic activities by zones

S/No	Type of SSI	Zone			
		Apatanga	Adaboya	Bongo-Soe	Total
01	Crafts	2	10	15	27
02	Charcoal burning	0	3	14	17
03	Galamsey	1	6	0	7
04	Food selling	0	0	4	4
05	Black smithing	0	3	1	. 4
06	Distilling of Gin	0	1	0 .	. 1
07	Carpentry	0	1	0 ,	1 1

Ghana Journal of Development Studies Vol. 1 No. 2. December 2004

08	Block moulding	0	0	1	1
Total responses		3	24	35	62

### 4.3 Off-farm economic activities and household livelihoods

This section examines the contribution of off-farm economic activities to household livelihood sustainability. If one were to consider only the contribution of off-farm economic activities to household income, the obvious conclusion will be that their contribution is negligible as indicated in Table 11. Their contributions to household incomes range between 3.2 to 14.6 percent. Ironically, charcoal and fuelwood contributes more to household but on the long run can have devastating effect on the livelihood sustainability of farming households if strong environmental protection measures are not put in place.

Table 12: Contribution of off farm economic activities to household livelihood sustainability

Type of off farm economic activity	Average income of households in particular activity	Average income from activity	Percentage contribution of activity to household income
Catering services	780,205.00	32,390.00	4.15
Charcoal/fuelwood	1,387,032.00	360,750.00	14.6
Galamsey	2,465,835.00	292,166.00	11.8
Craft	1,786,302.00	57,956.00	3.2

Source: Small scale off farm economic activities survey questionnaire, November 2001.

The real value of these seemingly paltry incomes derived from off-farm economic activities can be seen in Table 12. One chronic debilitating problem in the study area in particular and the Upper East Region as a whole is the seasonal food shortage which usually begins around the month of February and can stretch as far as July in years of poor rainfall. During the lean season households dispose of their livestock at give away prices or borrow at high interest rates from others who are much better off. In both cases, households perpetuate their livelihood instability.

Table 12: Contribution of off-farm economic activities to household livelihood sustainability

S/NO	Uses	Percentage of responses
01	Supplement family feeding	22.1
02	Personal needs such as clothes	19.2
03	Investment in livestock, especially cattle, sheep and goats	12.2
03	Fulfill social obligations especially funerals	17.2
04	Health of family members	10.5
05	Education of children	11.2
06	Saves one from always borrowing from other people	4.3
07	Raise capital for farming	3.1
Total responses		100.00 29

Incomes earned from such off-farm activities are invested in human and social capital formation i.e. education, health and the building of social networks which eventually act as a strong prop to the household livelihood system. Besides, the investment of incomes from off farm-economic activities in livestock, especially cattle serve as a source of savings, security and also as collateral for borrowing in times of acute need. The size of the real income is, therefore, not what is important but their contribution to the fulfilment of household needs and maintenance and the critical issue of livelihood sustainability

### 5.0 Concluding remarks

This exploratory study revealed that:

Except for galamsey, off-farm economic activities form an integral part of the traditional livelihood system of the farm households in the study area.

Off-farm economic activities are undertaken as minor supplementary activities during the dry season when virtually all farming activities, except livestock rearing have stopped.

The scale of operation is low in all cases, due to a number of factors, including the following: the low level of technology, inadequate capital, and narrow markets, among others.

In terms of income, off farm economic activities contribute from 3.2 percent to 14.6 percent. However, the incomes earned serve strategic livelihood purposes, especially in sustaining the family during the excruciating lean season when households habitually run out of all food stock. The income earned also serves other useful social functions, such as the payment of bride price, funeral performance, the purchase of agricultural inputs and investment in livestock and human capital.

On the whole, despite their small scale of operations and low incomes generated, off- farm economic activities are a crucial part of the livelihood system of rural farming households. The development and expansion of these activities will enhance the livelihood chances of poor households in a derelict environment like the Bongo District, and for that matter Northern Ghana. It is, therefore, recommended that:

Development agencies like the Non Governmental Organisations, the District Assemblies and financial institutions consider supporting households to improve their skills, expand operations, and enhance the product quality in order to increase the demand for their products.

There is a large potential market for off-farm products both internal and external. This potential is, however, hampered by poor surface road conditions and other transport infrastructure. The District Assemblies should consider opening up the area to link up with these market centres.

Off farm economic activities like crafts and Galamsey have a long market range and, therefore, a potential income earner to both the household and the District Assembly. A conscious effort should be made by the District Assembly with the support of NGOs like World Vision, which is active on the ground to promote these vital activities by providing financial support, skills training and promoting the market of the product. These promotional activities should, however, be done alongside intensive environmental education to avert future adverse consequences.

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