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EXAMINING CONSTRAINTS TO POVERTY REDUCTION AMONG SMALLHOLDER FARMERS IN SELECTED DISTRITCS IN NORTHERN REGION, GHANA

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IN NORTHERN REGION, GHANA

BY

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DECLARATION

I hereby declare that this thesis is the result of my own original work and that no part of it has been presented for another degree in this University or elsewhere.

…………………………………   Date; …………………………

ABDUL-MUMIN ABDULAI

(STUDENT)

I hereby declare that the preparation and presentation of the thesis was supervised in accordance with the guidelines on supervision of thesis laid down by the University for Development Studies.

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ABSTRACT

The study examined constraints to poverty reduction among smallholder farmers in five selected districts of the Northern Region of Ghana. In spite of several intervention programmes to alleviate poverty in the study area, the poverty menace in the region continues to deteriorate. A mixed method approach was employed alongside cross-sectional design and exploratory procedure to gain a wider view of poverty in the study area. Probability methods were used to select 420 smallholder farmers from 30 farming communities in 5 districts of the Region. Fifteen (15) district agricultural officers, ten (10) opinion leaders and local experts, and four (4) poverty reduction civil society organisations were purposively selected and interviewed. The study found that the most influential factors affecting poverty in the study area were; number of household labour, years of farm experience of heads of household, availability of assistance to farmers, accessibility to farm lands, gender of heads of household and number of dependants. The study also established that the factors militating against poverty reduction in the Region were; unfavourable colonial administrative legacy, inadequate financial capital, rural-urban drift of the youth, violent conflicts, unfavourable climate, poor fertility, and price volatility of agricultural output. The study recommends public sector investment in rural infrastructure, effective collaboration between government, CSOs and local people through the bottom-up approach to rural development and deliberate policy interventions to bridge the development gap between the north and south of the country.

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DEDICATION

To my parents, the late Abdulai Chanzeni Bomahinaa and Asana Alhassan and to
my entire family. May Almighty God bless all of them.

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CHAPTER ONE

INTRODUCTION

1.1   Background of the Study

According to the United Nation (2006), poverty manifests itself in so many forms, including; hunger, malnutrition, ill health, limited access to health, education and other basic services, homelessness and inadequate housing, unsafe environments, social discrimination and exclusion. Poverty is also characterized by limited participation in decision-making. As a result of the adverse consequences of poverty on human race, its reduction has become so important not only at the local level but at the global level as well. Reduction of poverty is now considered a critical requirement for improved conditions of life across the world.

According to United Nation (2010), eradication of poverty is a moral and ethical requirement, rooted in the principles governing the United Nations. Living a life devoid of poverty and hunger is an essential fundamental human right of everyone as enshrined in the Universal Declaration of Human Rights. Article 25 (1) of the Declaration states that everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services. This right is further reaffirmed in the International Covenant on Economic, Social and Cultural Rights and the International Covenant on Civil and Political Rights (World Bank, 2001). This implied that Government and individual have obligations in poverty alleviation (Davy, 2010).

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Poverty reduction refers to the set of actions, strategies, interventions or measures taken to address the menace of poverty. The interventions could take the form of a public policy, project or programme targeted at addressing the menace of poverty. In view of the multi-dimensionality of poverty, different societies employ different strategies to deal with the age-old problem of poverty and economic deprivation. According to Townsend (1979), as countries get positioned to fight poverty in order to improve economic conditions of the poor people, different alternative possibilities are explored to address the problem.

The philosophical underpinning of this study derives its root from the principle of universality of human rights. The principle requires that no group, such as geographically remote communities, be left out of the reach of development assistance and public policies. Every woman, man or child is entitled to enjoy her or his human rights simply by virtue of being human. It is this universality of human rights that distinguishes them from other types of rights – such as citizenship rights or contractual rights. According to the UNDP Human Development Report (2000), poverty is an infringement on freedom, and that the elimination of poverty should be addressed as a basic entitlement and a human right- not merely as an act of charity. It calls for a framework for development, trade and investment that respects, protects and promotes human rights especially of the poor and vulnerable in society, encouraging greater commitment by donor governments to provide adequate funding of human rights priorities. Furthermore, it suggests that debt, economic policies and structural adjustment programmes should be assessed in terms of their impact on human rights. UNDP's Poverty Report (2000) highlights transparent and inclusive governance as an important link between the formulation

of national anti-poverty policies and actual poverty reduction. Transparency and accountability are deemed essential by poor people to bring about institutional change to reduce poverty, including the way the poor are treated by service providers. A human rights-based approach to poverty reduction provides a deeper and broader understanding of the root causes and consequences of poverty. One reason why the human rights framework is compelling in the context of poverty reduction is that it has the potential to empower the poor. As is now widely recognized, effective poverty reduction is not possible without the empowerment of the poor.   Thus, poor people become the principal actors and are engaged as subjects of development, rather than its passive recipients. They are considered central partners, rather than 'target groups', in pursuit of human rights entitlements. This distinguishes the human rights-based approach to development from a welfare or basic needs approach in terms of the relationship between the state, on the one hand, and individuals and local communities, on the other.

Sustained poverty reduction requires equitable growth, but it also requires that poor people have political power, and the best way to achieve that in a manner consistent with human development objectives is by building strong and deep forms of democratic governance at all levels of society. This means ensuring that institutions and power are structured and distributed in a way that gives real voice and space to poor people and creates mechanisms through which the powerful – whether political leaders, corporations or other influential actors – can be held accountable for their actions (Human Development Report, 2000).

In terms of theory, attributional studies on constraints to poverty reduction distinguish between theories that root the causes of poverty in individual deficiencies (conservative) and theories that lay the causes on the failure of the socio-economic and political systems (liberal/progressive). On one breadth, several theorists have traced the menace of poverty to the deficiencies inherent in the poor individuals (Muray, 1984; Maynard, 1997; Karoly, 2001, Rankin and Quane, 2000; Coleman, 1998). Such individualist theories remain the earliest standpoints to support the attribution of poverty to the deficiencies of the individual poor. These deficiencies of the poor relate to the inadequacies in their livelihood assets such as financial, physical, natural, human and social capital (Rankin and Quane, 2000). The proponents of the individualist theories argue that the poor are blameable for their plight and that with hard work and better economic choices they could have avoided their problems (Schiler, 1989). The poor are accused of deviant behaviours, lower worker ethic, lack of self-motivation, addiction to larger family sizes, among others (Maynard, 1997; Haris and Duncan, 1989). In the opinion of these individualist theorists, poverty reduction is conditioned on the ability of the poor to address their deficiencies (Schiller, 1989).

In contrast to the individualist deficiency theory of poverty, the structuralist theory blames the inadequacies of the socio-economic and political system for aggravating the financial predicaments of the poor in society (Rank et al. 2003; Feagin, 2000; Bracking, 2003; Gore, 2003). They argue that the socio-economic and political systems in most countries are structured in such a fashion that the poor people fall behind regardless of how competent and hardworking they may be. Therefore, addressing the imperfections characterising the socio-economic and political

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systems is a necessary requirement to reduce poverty. The structuralist theory of poverty recommends that appropriates strategies and measures are necessary to redeem the poor people from their predicaments (Rank et al. 2003). Other theories connected to poverty reduction include the modernisation theory, cultural theory, geographical disparity theory, cumulative causation theory, African renaissance theory, portfolio theory, capability and social justice theory.

In the light of the various causal views on poverty as explained in the individual deficiency theory and the structuralists theory of poverty, this study employs the capability and social justice theory to investigate the constraints to poverty reduction in the selected districts of the northern region of Ghana. The capability and social justice theory envisage that if policy makers and duty bearers give equal attention and opportunities to both rural and urban areas, rural population is capable of bridging the historic socio-economic gap between the rural and urban areas. The basic tenets of these theory are; fair and equitable distribution of opportunities and resources to eliminate or reduce undesirable socio-economic disparity in society. Of great significance are the freedoms for people to be able to make decisions they value and work to remove obstacles to those freedoms, that is, expand people's capabilities.

Since different constraints to poverty reduction require different interventions, the capability theory provides broader set of interventions to achieving poverty reduction. The capability theory offers a broad-based analysis of individual well-being and social arrangements in various context and settings. It delves into the balance between freedoms and equality that have characterised work on social

justice since eighteenth century. Thus, the expansion of human capability involves 'the freedoms people actually enjoy choosing the lives that they have reason to value' (Sen 2007). According to Clark (2006), the major strength of Sen's capability theory lies in its approach to dealing with the multi-dimensional nature of poverty such as vulnerability, voicelessness, powerlessness, social and political exclusion.

Poverty reduction has become a necessary requirement to improved socio-economic conditions of the poor people. There are several approaches to poverty reduction in different parts of the world depending on the various causal views of the menace. The most common approaches to poverty reduction are; the neo-liberal approach, the sustainable livelihood approach, the basic needs approach, the capability approach and the community-driven approach. According to Satterthwaite & Miltin, (2014), these approaches to poverty reduction are either state-directed, market-based or social movement-based. This study adopts the sustainable rural livelihood approach which is perhaps the most recent approach to rural development. These approaches to poverty reduction are discussed in greater details in chapter two.

Poverty reduction at the global level dates back to the twentieth century. For instance, in September 1999, the International Monetary Fund (IMF), at its annual meeting, issued a clear mandate for the fund to integrate the objectives of poverty reduction and economic growth more fully into its operations in the poorest member countries. Consequently, a new facility, the Poverty Reduction and Growth Facility (PRGF) was established to replace the Enhanced Structural Adjustment Facility (ESAF). In September 2000, 189 nations at the United Nations Millennium

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Summit in the UN headquarters in New York made a promise to free people from extreme poverty and multiple deprivations. This pledge became the eight Millennium Development Goals (MDGs) to be achieved by 2015. In response to a resolve to the eradication of poverty and hunger, as well as combating inequality at all levels, it became so essential to create a more prosperous and sustainable future for all (UN, 2010).

In September 2010, Heads of State and Governments again gathered at the United Nations headquarters in New York to re-commit themselves to accelerate progress towards these millennium goals. At its sixty-fifth (65th) session in September 2010, the United Nations General Assembly reaffirmed that the number of people living in extreme poverty and hunger surpasses one billion and that inequalities between and within countries remain a significant challenge. The Millennium Development Goals (MDGs), which are part of the millennium declaration, signed by the member States of the United Nations at the Millennium Summit in 2000, regard the elimination of extreme poverty as a pressing task. Empowering women, combating HIV/AIDS and other diseases and ensuring sustainable development are among the goals and are all seen as necessary conditions for extreme poverty alleviation. The MDGs were the most broadly supported comprehensive and specific development goals the world has ever agreed upon. These eight time-bound goals provide concrete numerical bench-marks for tackling extreme poverty in its many dimensions. They include goals and targets on income, poverty, hunger, maternal and child mortality, diseases, inadequate shelter, gender inequality, environmental degradation and the global partnership for development. The MDGs are both globally and locally tailored to suit specific development needs. It was expected that

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if the MDGs were fully achieved, World poverty would be cut by half, tens of millions of lives would have been saved and billions more people would have gained access to safe drinking water and other essentials of life by 2015.

The 2010 United Nations Summit on Millennium Development Goals (MDGs) concluded with the adoption of a global action plan to achieve the eight anti-poverty goals by their 2015 target date and the announcement of major new commitments for women's and children's health and other initiatives against poverty, hunger and disease (UN,2010). To eradicate extreme poverty and hunger in an accelerated style, the United Nations General Assembly outlined twenty-three (23) different strategies. All 23 strategies were geared towards eradicating extreme poverty either directly or indirectly.

The success of the MDGs by the close of 2015 had been tremendous. According to reports of the UNDP (2015), the 15-year effort of the MDGs has produced the most successful anti-poverty movement in history. Among other achievements of the MDGs, the report highlights the following achievements, each of which either affect poverty reduction directly or indirectly:

- Since 1990, the number of people living in extreme poverty declined by more than half

- The proportion of undernourished people in the developing regions has fallen by almost half.

- The primary school enrolment rate in the developing regions has reached 91 per cent, and many more girls are now in school compared to 15 years ago.

- Remarkable gains have also been made in the fight against HIV/AIDS, malaria and tuberculosis.

- The under-five mortality rate has declined by more than half, and maternal mortality is down 45 per cent worldwide.

- The target of halving the proportion of people who lack access to improved sources of water was also met.

Building on the many successes of the MDGs, a new set of goals, the Sustainable Development Goals (SDGs) have been initiated. The SDGs aim to end poverty and hunger by 2030. An end to poverty, hunger, and inequality worldwide and more is the ambitious agenda of the Sustainable Development Goals (SDGs) agreed upon by 193 countries in September, 2015 at the United Nations. The concept of the SDGs was born at the United Nations Conference on Sustainable Development, Rio+20, in 2012. The objective of the SDGs was to produce a set of universally applicable goals that balance the four dimensions of sustainable development; environment, social, and economic and cultural diversity. The Sustainable Development Goals aim at finishing the job that the Millennium Development Goals (MDGs) started, and leave no one behind.

The successes of the aforementioned poverty reduction interventions at the global level were expected to positively impact on the smallholder farmers who form the majority of the working class in the selected study districts and the country at large. According the World Bank (1999), poverty reduction has been largely as a result of macroeconomic growth and that the industrial revolution led to high economic growth and eliminated mass poverty, specifically in the developed world.

Expectations are that the macroeconomic gains from the global interventions should trickle down to the masses including the rural smallholder farmer who is the focus of this study.

According to Bird (2019), reducing regional inequality and eradicating spatial poverty traps requires a multi-pronged approach that incorporates investment in soft and hard infrastructure (including roads, information and communication technologies, power supply, water and sanitation, schools and clinics), human capital formation (health, education), pro-poorest growth (social protection, agricultural and rural development policy, market information, fiscal policy and the enabling environment – including financial services, regulation, governance and anti-corruption, property law and justice sector reform) and the eradication of chronic, severe and intersectional poverty.

At the local front, the government of Ghana, non-governmental organisations and other stakeholders have made several attempts at reducing poverty and enhancing socio-economic wellbeing of the masses. In line with the neo-liberal theory of economic growth and poverty reduction, it is becoming increasingly acceptable to most governments and donors that at the economic level, growth provides the panacea for poverty reduction. The theory behind neoliberalism is that micro economic stability and greater efficiency in resource allocation will favour economic growth, which should reduce poverty and inequality (Portes, 1997). Neoliberalism advocates for exclusive focus on the role that market forces can play in poverty reduction, while the government is assumed to be more effective at reducing poverty by stressing investment in human capital and infrastructure,

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(Hulme and Shephered, 2003). Typical examples of such policies include the structural adjustment program (SAP) and the poverty reduction strategy papers (GPRS). In Ghana, economic growth and poverty reduction policies and programmes of government range from the Economic Recovery Program (ERP), Structural Adjustment Program (SAP), Programme of Actions to Mitigate the Social Costs of Adjustments (PAMSCAD), Sector-Wide Approaches (SWAPs), to poverty reduction Strategy Papers (PRSPs). Other equally important policies and programmes introduced by the Ghanaian government towards greater economic and poverty reduction at the national level include: Making People Matter: A Human Development Strategy for Ghana (1991), followed by the National Development Policy Framework (1995*), a five-year policy statement which was later developed into the First Medium Term Development Plan (MTDP) *1996-2000*. In 1996, the government of Ghana launched a 25-year development framework called Ghana-Vision 2020*, a long-term programme aimed at accelerated growth and sustained development to achieve middle income status. In 2000, an Interim Poverty Reduction Strategy Paper was produced. In March, 2008 the Livelihood Empowerment Against Poverty (LEAP*) programme was also launched.

With a poverty incidence of 50.4 percent, the Northern Region accounts for more than one-fifth (20.8%) of the poor people in Ghana (GSS, 2013). Due to the severity of poverty in the northern sector of the country, specific growth oriented and poverty reducing policies were rolled out. As a first step in reducing poverty in the Region, successive governments supported the improvement of infrastructural facilities to boast economic activities. In response to the deplorable nature of the road network in certain parts of the region, road infrastructure has been improved to

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open up production centres to marketing centres. Electricity has been extended to most parts of the Region to support productive ventures. Educational infrastructure has been built to reduce high levels of illiteracy and vulnerability (building the human capital). In the area of credit for business operations, non-governmental organisations (local and international) have stepped in to provide microfinance to the economically poor to engage in one form of economic activity or the other (enhancing financial capital). Smallholder farmers receive credit either in financial form or farm inputs/implements. Special programmes to eliminate guinea-worm infestation in the Region have also been rolled out. Non-formal education in the areas of health, book-keeping and women empowerment has been introduced. Free education at the pre-tertiary level has been introduced to the Region. In recent times, the school feeding programme and free uniforms and books have been introduced to the Region to increase enrolments at the basic level. The Savannah Accelerated Development Authority (SADA) or the Northern Development Authority initiative is yet another measure aimed at bridging the income inequality gap between the north and the south of the country.

To reduce the incidence of poverty in the study area, each districts of the Northern Region benefitted from various forms of policies and programmes. Common among the intervention programmes aimed at poverty reduction in the study districts include, capacity building for enhance productivity, microfinance for business support, infrastructural development for the creation of enabling environment, agricultural support for enhanced food security.

Through simple random sampling technique, this study sampled five districts in the northern region of Ghana, namely; Nanumba North, East Gonja, Savelugu, Bunkuru/Yunyoo and West Manprusi Districts. All five selected districts of the study are located within the rural savannah enclave which constitute the hardest hit in terms of extreme poverty incidence and poverty gap (see Table 1.2). Evidence from the Ghana Living Standard Survey (GLSS 5 and 6) suggest that poverty is mainly rural in character. Thus, over 80 percent of the total population living below the poverty threshold in Ghana between 1998 and 2006 were residing in rural areas (GSS, 2012). Though inadequate, all the five selected districts in this study have received their share of development and poverty reduction programmes.

1.2   Problem Statement

Statistics of the poverty situation in the twenty-first century (C21[st]) is alarming. More than 1.5 billion people still live in poverty worldwide and the per capita income in the world's least developed countries average $450 (UNDP, 2010). While poverty exists everywhere, it is severe in the developing countries (particularly Africa and most particularly Sub-Saharan Africa). In 2011, over 1 billion people lived in extreme poverty and nearly half the World's population (2.8 billion people) lived on less than $2 a day (World Bank, 2012).

In 2013, 42.3 percent of the population of sub-Saharan Africa lived on less than the internationally recognised poverty threshold of US$1.90 per day (UNDP, 2015). According to the Ghana Poverty and Inequality Report, although the proportion of people living in poverty has declined by about 25 percent since 2006, the number of people living in poverty has only declined marginally by 10%, indicating a lack of

correlation between poverty reduction and population growth. Additionally, the inequality gap between the rich and the poor continue to get worse (Cooke, et al., 2016,). The incidence of poverty is much higher in the northern regions of Ghana, compared to the southern regions (Ghana Statistical Service, 2015).

According to the Ghana Statistical Services (2012) both the incidence and depth of poverty are found to be greater in rural savannah than any other area in the country. Welfare indicators such as school enrolments or availability of clean water supply are worse for the non-poor in rural savannah than they are for the poor in Accra. The extreme poverty in the northern part of the country threatens household food and nutrition security. While Ghana's overall poverty rate had declined, the three regions in the north saw only a marginal decrease indeed, with certain areas experiencing worsening trends. Poverty rates in the Region tend to be two to three times the national average and chronic food insecurity remains a critical challenge (IFAD, 2009). For instance, while poverty declined significantly in the southern forest belt of cocoa and other cash crops production, it actually increased in predominantly food crop producing areas and fishing communities of Ghana (GoG/NDPC, 2010). The level of poverty at the national level which stands at 43% (GSS, 2008) is lower compared to the three northern regions but it is quite high as compared to other developing and developed countries around the world.

Like the previous surveys, the results from the GLSS 5 and GLSS 6 surveys indicate that the contribution to poverty incidence varied across various demographic groupings. In 2014 the rural population comprised 50 percent of the population of Ghana, yet it accounted for 78 percent of those in poverty. This is

similar to previous poverty profile reports (GSS 1998/99 and 2005/06) where over 80 percent of the total population living below the poverty line in Ghana were living in rural areas. According to the population and housing census (2010), extreme poverty is a rural phenomenon with over 1.8 million people living in extreme poverty in rural areas.

Among rural localities where poverty is prominent, the poverty incidence is much higher among those living in rural savannah. In 2014, the contribution to poverty incidence in rural savannah was found to be higher than in rural coastal and forest combined. Notably, rural savannah contributes more than 40 percent to the overall poverty in Ghana (GSS, 2014). Poverty incidence is highest among households where heads are self-employed in agricultural sector (GSS, 2013). Due to the severity of poverty among the farm households in rural areas productivity levels are negatively affected and threatens food security (IFAD 2011).

The poverty statistics in Table 1.1 shows that extreme poverty in rural savannah was highest, accounting for 27.3 percent in 2012, which was greater than the cumulative effect of rural coastal and rural forest. Also, the contribution of urban localities to the incidence of poverty in 2012 was 11.2 percent, compared with 88.8 percent contribution of rural areas. Poverty in Ghana, before the economic reforms (particularly ERP/SAP), was predominantly a rural phenomenon and has continued to be so even after the reforms (Sowa, 2002). The poverty distribution in table 1.1 shows clearly that the rural savannah continues to be the poorest in the country with more than half of its population classified as poor and more than a third being very poor (GSS, 2012, Government of Ghana, 2005a, 2005b).

Table 1.1: Extreme Poverty Incidence and Poverty Gap by locality (%)

Locality	Poverty incidence	Contribution to total poverty	Poverty gap	Contribution to poverty gap	Poverty incidence	Contribution to total poverty	Poverty gap	Contribution to poverty gap
	2012/13				2005/06			
Accra (GAMA)	0.5	0.9	0.1	0.5	4.5	3.2	1.1	2.5
Urban Coastal	2.0	1.2	0.4	0.9	1.1	0.4	0.1	0.1
Urban Forest	1.8	4.8	0.2	2.1	2.8	2.5	0.8	2.3
Urban Savannah	4.6	4.4	1.0	3.3	16.9	5.5	5.1	5.5
Rural Coastal	9.4	6.2	1.8	4.5	9.6	6.4	1.6	3.4
Rural Forest	7.8	24.2	1.8	20.1	12.6	21.4	2.1	11.9
Rural Savannah	**27.3**	**58.3**	**8.7**	**68.5**	**42.9**	**60.6**	**16.0**	**74.3**
Urban	1.9	11.2	0.3	6.9	5.1	11.6	1.4	10.4
Rural	15.0	88.8	4.3	93.1	23.4	88.4	7.2	89.6
All Ghana	8.4	100.0	2.3	100	16.5	100	5.0	100

2005/06-2012/13 (Poverty line=GH¢792.05)

Source: Ghana Statistical Service 2014, GLSS6

The incidence of poverty and poverty gap are not evenly distributed among the ten administrative regions of Ghana. Thus, the three northern regions which comprise mainly the savannah areas are the hardest hit. According to GSS (2013) more than four in every ten persons are poor in the Upper East Region (44.4%), more than five in every ten persons in the Upper West Region (50.4%) and more than seven in every ten persons in the Northern Region (70.7%). The three Northern Regions combined account for more than half of those living in extreme poverty (52.7%). In terms of extreme poverty, the Northern Region of Ghana accounts for slightly over a fifth of the extreme poverty cases in Ghana, far more than any other region in the country. With a poverty incidence of 50.4 percent, the Northern Region accounts for more than one-fifth (20.8%) of the poor people in Ghana, making it the highest contributor to the level of poverty in Ghana (GSS, 2013). Since the 1990s overall, the Northern Region has seen the smallest progress in poverty reduction. This is a major issue for the country given that the Northern Region now makes up the largest number of poor people (1.3 million) than of the other nine regions (Cooke et al., 2016).

Table 1.2 shows that the northern region has poverty prevalence rate of 50.4 percent and accounts for 20.8 percent of all poor people in the country, making it the hardest hit. The contribution of the region to total poverty exceeds the cumulative contribution of Western, Central and Greater Accra regions. It is also greater than the cumulative contributions of Upper West and East regions to total poverty. From the data presented in Table 1.2, it is clear that poverty remains pervasive, particularly in the northern part of the country**.**

Table 1.2: Poverty incidence and poverty gap by region (%), 2012/13

Region	Poverty incidence (Po)	Contribution to total poverty (Co)	Poverty gap (P1)	Contribution to total poverty gap (C1)
Western	20.9	7.9	5.7	6.8
Central	18.8	6.9	5.6	6.4
Greater Accra	5.6	3.8	1.6	3.5
Volta	33.8	12.1	9.8	11.0
Eastern	21.7	9.3	5.8	7.8
Ashanti	14.8	12.0	3.5	9.0
Brong Ahafo	27.9	11.4	7.4	9.4
Northern	**50.4**	**20.8**	**19.3**	**24.9**
Upper East	44.4	7.4	17.2	9.0
Upper West	70.7	8.4	33.2	12.3
All Ghana	24.2	100.0	7.8	100.0

Source: Ghana Statistical Service (2014), Ghana Living Standard Survey 6.

Poverty in the country remains largely rural. In the light of the above statistics, the argument for developing and implementing strategies to reduce rural poverty becomes compelling. Approximately 75 percent of the world's poor reside in rural areas, and at current trends the global percentage of poor in rural areas will not fall below 50 percent before 2035 (Ravallion, 2000, Alderman, 2000). Moreover, in most developing countries the likelihood of being poor and the severity of poverty are greater in rural than in urban areas. For example, the incidence of rural poverty

reported in many of the first Poverty Reduction Strategy Papers (PRSPs) was between 10 and 40 percentage points greater than in urban areas (Cord et al., 2002).

In response to the high rate of poverty prevalence in the region, a number of growth-oriented policies and programmes were rolled out. The programmes covered; capacity building for improved productivity, microfinance for business support, infrastructural development for the creation of enabling environment, agricultural support for enhanced food security and elimination of extreme hunger. In spite of the large number of state and privately initiated poverty alleviation programmes, the levels of poverty remain significantly high in the study districts (GSS, 2014). According to Ghana statistical service (2014), the impact of such intervention programmes towards poverty reduction in the region is modest. The extent to which the efforts at reducing poverty in the study area have really contributed to improving the socio-economic conditions of the poor is brought to question. Perhaps the existence of certain constraints in the study area might be responsible for the non-achievement of a meaningful poverty reduction. The persistence of poverty in the study area in spite of the intervention programmes could be attributable to deficiencies of the poor people (poor economic choices, poor work ethics, deviant behaviours, lack of self-motivation, poor access to capital, and addiction to more children) (Schiler, 1989; Maynard, 1997; Haris and Duncan, 1998). Alternatively, poverty could persist in the study area due largely to unequal distribution of opportunities and resources as a result of the imperfections of the socio-economic and political system (Sen 2007). Wood (2013) posits that the causes of poverty and hunger in the northern part of Ghana are numerous and complex. In the north of Ghana, socioeconomic issues, such as inadequate

education and health care, fewer economic opportunities, poor infrastructure and government corruption impede agricultural development. Wood (2013) maintains that environmental issues, such as soil infertility and degradation, harsh and erratic climatic conditions and pest pressures create additional challenges to increasing agricultural production.

1.3   Research Questions

The following research questions serve as guide to achieving the research objectives:

The main research question is; what are the possible constraints to poverty reduction among smallholder farmers in the study area?

The specific research questions are:

1.   What are the socio-economic causes of poverty among smallholder farmers in the study area?

2.   What are the various strategies used by government and Civil Society Organisations (CSOs) to alleviate poverty among smallholder farmers in the study area?

3.   What measures are smallholder farmers themselves using to alleviate poverty and improve their livelihood?

4.   What are the challenges of poverty reduction among smallholder farmers in the study area?

1.4   Hypotheses

Stated in the null form, the following hypotheses were tested through empirical data;

H01: Socio-economic factors do not significantly influence poverty among smallholder farmers.

HO2: Constraints do not significantly influence the levels of poverty among smallholder farmers.

1.5   Research Objectives

The broad research objective is to examine the possible constraints to poverty reduction among smallholder farmers in the study area.

The specific objectives of the study are as follows:

1.   To examine the socio-economic causes of poverty among smallholder farmers in the study area.

2.   To assess the various strategies used by Government and Civil Society Organisations (CSOs) towards poverty alleviation among smallholder farmers in the study area.

3.   To assess the measures used by smallholder farmers themselves towards improved livelihood and poverty alleviation.

4.   To examine the challenges of poverty reduction among smallholder farmers in the study area.

1.6   Organisation of the Study

This thesis is organised into eight chapters. Chapter one is the introduction, comprising the background of the poverty situation in northern Ghana and Ghana in general and the problem statement which underpins the specific objectives of the study. The chapter further outlines the research questions and research objectives flowing from the problem statement.

Chapter two was basically dedicated to the review of relevant literature on theories of poverty, concepts, empirical evidence and lessons learnt therein. Extensive use was made of published theses, journals, books and internet materials. Special attention was paid to socio-economic factors affecting poverty and the constraints militating against poverty alleviation in the Northern Region. This chapter also examined the concept of poverty, measurement and multidimensionality of poverty as well as the sustainable rural livelihood. The theoretical and conceptual frameworks which underpin this study were also examined.

Chapter three examined the methodology of the study including the research design into which the study fits. Sampling design and sample size determination were also explored. Equally important in this chapter were the sources of data collection, specification of the regression model establishing the relationship between the dependent variable (poverty status) and the explanatory variables of poverty. The model developed in this chapter explains the variables that were used in the regression in chapter four. Data processing, and brief profile of selected CSOs for the study were also examined in this chapter.

Chapter four focused on the socio-economic factors affecting poverty in the Region. This chapter examined the influence of demographic and socio-economic characteristics of sampled households on poverty. Demographic variables considered prominent in this study included: age of head of household, gender of household head, marital status of head of household, religious affiliation of household head and dependency ratio. Socio-economic variables examined in the study in line with the sustainable livelihood framework included: household labour

force, number of dependents, educational status of the head of household, type of farming practice, availability of farm lands, years of farm experience, and access to assistance. The regression outputs of the major determinants of poverty in the study area were also explored.

Chapter five assessed the various poverty alleviation strategies used by the government and civil society orgainsations (CSOs) in the study area and discussions thereof. The various strategies adopted by the aforementioned stakeholders in the study area included: capacity building of poor households (education and training), primary healthcare delivery, agricultural support services and food security, microfinance services, community self-help projects, humanitarian and relief services, and portfolio diversification into non-farm enterprises.

Chapter six examined the various strategies used by the farmers themselves to ameliorate their poverty levels and improve their livelihood. In broader terms, the various livelihood strategies of the farmers were; agricultural intensification, portfolio diversification and migration.

Chapter seven examined the major challenges militating against poverty reduction in the study area. The major obstacles to poverty alleviation in the study area were classified into: political, economic, climatic and socio-cultural factors. Specifically, the bottlenecks to poverty alleviation in the study area included: unfavourable colonial political legacy, bureaucracy and corruption, market volatility of agricultural output, inadequate financial capital, rural-urban drift, unfavourable climatic conditions, and violent conflicts.

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Chapter eight provided a summary of the major findings. The chapter further drew conclusions on the findings and prescribed policy recommendations arising from the findings.

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CHAPTER TWO

LITERATURE REVIEW

2.1   Introduction

This section presents a review of relevant literature on the subject. Exploring various sources of existing knowledge is critical in identifying gaps and the problem of the study. According to Cottrell and McKenzie (2011), literature review helps to improve the research design and instrumentation and also contribute to the avoidance of mistakes already committed by earlier researchers. Houser (2007) posits that literature review discloses appropriate theoretical structure of the study and verifies that the ongoing study has not been done already, therefore establishing the importance of the study. Creswell (2009) maintains that literature review affords researchers the opportunity to discover existing findings of works related to the one being executed.

The review of literature covers theoretical and empirical reviews. It presents definitions and explanations of relevant concepts, discussions of theories of poverty, empirical evidence of socio-economic factors affecting poverty and constraint to poverty reduction. Multidimensional nature of poverty, measurement of poverty, strategies to escape poverty and the challenges to poverty reduction are also considered. This chapter further presents lessons learnt from the empirical review in respect of the application of theories, research design, sampling procedures and analytical techniques. A review of the livelihood diversification as a survival strategy of the rural households was explored alongside a review of the theoretical framework.

2.2   Definition of Concepts

2.2.1   Concept of poverty

''Don't ask me what poverty is because you have met it outside my house. Look at the house and count the number of holes. Look at the utensils and clothes I am wearing. Look at everything and write what you see. What you see is poverty '', poor Kenyan, (Narayan, Chambers, Shah & Petesch 2000, cited in Blackmon, 2008).

Historically, poverty has been related to income, which remains at the core of the concept today. People are said to be in poverty when they are deprived of income and other resources needed to meet the conditions of life such as diets, material goods, amenities, standards and services that enable them to play the roles, meet the obligations and participate in the relationships and customs of their society (UNDP, 2006).

The World Bank (2000) defines poverty as a deprivation in wellbeing and that poverty encompasses not only the inability to meet the food, clothing and shelter requirements, but access to education, health services, clean water etc. According to the United Nations (1998), poverty is the denial of choices and opportunities leading to a violation of human dignity.

Ogwumike (2001) defined poverty as a situation where a household or an individual is unable to meet the basic requirements of life, which include consumption and non-consumption items, regarded as minimum requirement to sustain livelihood. Oguwumike (2001) and Odusola (2001) referred to poverty as a condition of

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deprivation which takes the form of social inferiority, isolation, physical weakness, vulnerability, powerlessness and humiliation.

According to Johnson et al. (1997), sources of poverty are lack of income, vulnerability to income fluctuation and powerlessness (few choices and little control). In social terms, the poor are those who live below what most people in a particular time and place regard as the minimum acceptable standard.

According to Chambers (2002), poverty has at least four clusters of meanings. The first is income-poverty or its common proxy consumption-poverty. It refers to poverty arising from low income to meet the needs of the poor people.

The second cluster of meaning of poverty is material lack or want. Besides income, this includes lack or little wealth and lack or low quality of other assets such as shelter, clothing, furniture, personal means of transport, radios or television, and so on. It also includes poor access to services.

The third cluster of meaning is derived from Sen's (1999) capability deprivation. It refers to what people can or cannot do, can or cannot be. This includes material lack or lack of human capabilities such as skills, physical abilities and self-respect in society.

The fourth cluster of meaning takes a more broadly multi-dimensional view of deprivation, with material lack or want as only one of several mutually reinforcing dimensions. According to UNDP (2006), the multi dimensions of poverty includes

not only income-poverty and material lack, but many others as; poverty of time, living and working in bad places, bad social network, especially gender relations. Others are the body as the main asset of many poor people, indivisible, uninsured, and vulnerable to flipping from asset to liability, many aspects of insecurity, worry and anxiety, and pervasive powerlessness.

Some of the dimensions of poverty as presented in figure 2.1 shows the cyclical nature of poverty on its victims. Thus, powerlessness of the poor people translates to socioeconomic insecurity which in turns gives rise to physical weaknesses and ill health, material lack and bad social relations, thereby exacerbating the levels of poverty and deprivation UNDP, 2006).

Some of the dimensions of poverty are represented in the web of poverty disadvantages in figure 2.1:
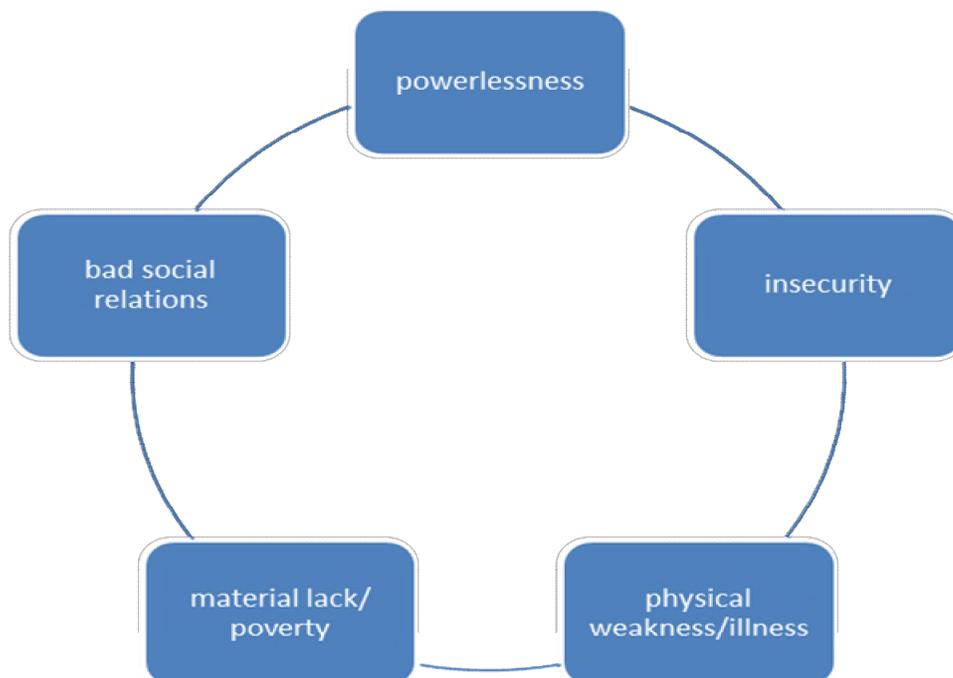
Figure 2. 1: Poverty Web

Source: UNDP, 2006

2.2.2   Concept of Rural Poverty

Poverty rates in rural areas still stand well above those in urban areas. These trends reflect the continuing challenges facing rural areas linked to the social, economic and political marginalization of rural people. Small family dominate rural landscapes across the developing world, accounting for up to 80 per cent of food produced in Asia and sub-Saharan Africa, while supporting livelihoods of up to 2.5 billion people (IFAD 2015).

Rural development is one of the most reliable and potent forces for poverty reduction and broad-based social and economic development. The evidence is strong and clear that sustained investment to enhance productivity in agriculture and the broader rural economy has a large impact on both growth and poverty reduction (Fan 2008; Fan et al. 1999, 2002).

Geographic location is one major important determinant of the levels of economic prosperity of people within such locations. The endowments of an area significantly explain the degree of poverty of people living in that geographic area subject to individual and household characteristics, such as age, household composition or ethno-linguistic group (Jalan and Ravallion, 1997 and 2002; Ravallion and Wodon, 1999).   Severe levels of poverty exist in detached, remote rural areas and in the burgeoning slums of cities (Pender and Hazell, 2000, in CPRC, 2004; World Bank, 2008).

According to Bird and Shepherd (2003), there exist a strong positive linkage between levels of remoteness and chronic poverty, and a negative linkage between

levels of public and private investment and incidence of chronic poverty in their empirical study of semi-arid zones in Zimbabwe. In a similar study in Peru, Escobal and Torero (2005) found a negative correlation between rural poverty and levels of private and public investments. Minot et al. (2003) argue that agro-climatic and market access variables account for three-quarters of poverty in rural Vietnam.

2.3   Multi-Dimensional Nature of Poverty

Proponents of multifaceted dimensions of poverty argue that poverty is neither an individual issue nor a structural one but a combination of numerous factors (Jebtoft & Midre, 2011; Alkire and Foster, 2008; Bene, 2003). The multi-dimensional nature of poverty as discussed by Alkire (2008), and Alkire & Foster (2008) show that the problems of poverty are caused by several variables at the household level such as education, health, and living standards. Its measure is based on individuals who are seen to suffer from multiple deprivations. Broadly speaking, multi-dimensional poverty identifies the poor through their physical safety and security, employment and quality of work, empowerment and agency, ability to go without shame (dignity) and meaning and psychological and subjective well-being (Alkire, 2008).

According to Onyango (2011), the multi-faceted approach of poverty has a two-face explanation:

Firstly, it is explained by multiple variables such as capability, well-being, and freedom, cultural and political exclusion, among others. Thus, for someone to be regarded as non-poor, his/her well-being, employment and quality of work,

empowerment and ability not to feel shame and meaning and psychological and subjective well-being have to be enhanced (Alkire & Foster, 2008, Sen 1999, 1981).

Secondly, the multiple variables of poverty are related to each other, making poverty a complex phenomenon. The relationship between and among the multiple variables indicate that there is a dynamic process which explains the complexity of poverty (Onyango, 2011, Alkire & Foster, 2008).

The multi-dimensional nature of poverty is demonstrated in figure 2.2
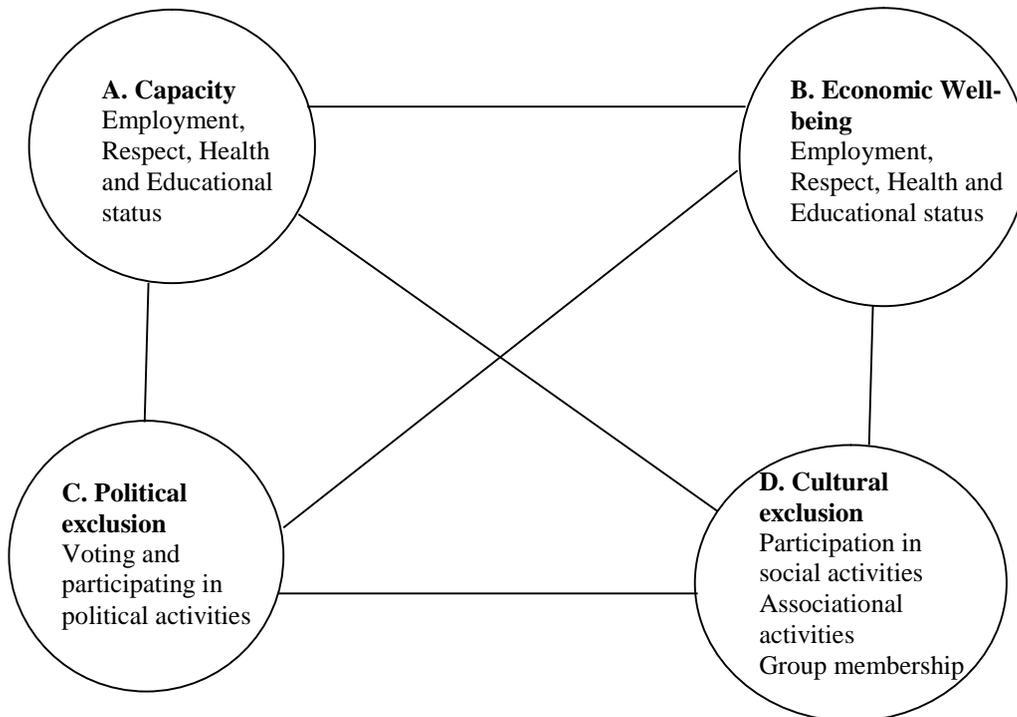
Figure 2.2: Relationships of the multidimensional poverty variables

Source: Adopted from Alkire and Foster (2008)

Figure 2.2 indicates that the multifaceted poverty involves multiple indicators comprising capability, economic well-being, political exclusion and cultural exclusion. Each indicator is related to the other. For instance, a person's capability,

which is determined by his health, education status and respect, is a pre-requisite for economic well-being, identified by income and financial status. Similarly, a person's capability serves as a catalyst to enable him/her to participate in political process (voting and other political activities) and cultural activities within the community. Participating in political and cultural processes is also a way to build capability and economic well-being as it builds social capital.

Onyango (2011) emphasizes that interaction within the community would depend on a number of factors including the value system of a community or group where an individual belongs. He further argues that an interaction mechanism where actors do not have any influence on decision or activities geared towards poverty alleviation then it is likely to inhibit the overall capacity to alleviate poverty.

The complex interaction of numerous variables relating to poverty indicates that poverty reduction strategies should depend not only on the understanding of the various aspects of poverty as indicated in Figure 2.2 but also how its understanding is shared between *governing actors* and *poverty alleviation beneficiaries.* Examining the crucial roles played by values, norms and principles of *governing actors* and *poverty alleviation beneficiaries* is paramount in addressing the poverty menace in any community. Thus, *values* are what the governing actors and poverty alleviation beneficiaries consider very important, *norms* are what they believe to be morally mandatory to do and *principles* are what should direct their behavior and/or actions.

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2.4   Measurement of Poverty

The determination of poverty line cannot be based on an arbitrary selection of a low level of income. Only scientific criteria can justify where the poverty line should be drawn. The multiplicity and severity of different types of deprivation can constitute those criteria. The complexity of measurement mirrors the complexity of the definition, and the complexity increases where participatory methods are used and people define their own indicators of poverty. The key is therefore to define a threshold of income below which people are found to be deprived.

To avoid arbitrary use of poverty measuring rod, a robust and credible framework for identifying and measuring poverty is needed to provide the basis on which anti-poverty strategies, policies and programs can be developed, implemented, monitored and evaluated (Saunders, 2004). The two key features that underpin the credibility of the poverty line are: firstly, that the methods on which it is based reflect 'best practice' scientific research methodology and data; and second, that the judgments on which it is based are broadly in line with community opinion on the meaning and measurement of poverty (ibid). The classification between poor people and those who are not poor depends on the method of measurement. Amid several approaches to measurement of poverty in different context and conditions there is no universal consensus on what constitutes poverty and how it should be measured.

2.4.1 Monetary Measure of Poverty

Historically, monetary poverty has been related to either income or consumption. The conventional approach to the development of a poverty line is to define it in terms of consumption expenditure or income level sufficient to meet primary

human needs. It conceptualises poverty as those living in households in which the household income falls below the minimum subsistence level. The approach relies on the assumption of a strong link between household income/consumption and the well-being of members of the household and their opportunities for development, Noble et al. (2006).

According to Cooke et al. (2016), monetary poverty analysis is based on consumption per adult equivalent using Foster, Greer and Thorbecke (FGT) (2002) poverty indices. Statistically, the poverty line is estimated using the following equation:

$$P\alpha = 1/n \sum \left[1 - x_i/z \right]^{\alpha} I(x_i < z) \qquad (2.1)$$

Where $P\alpha$ is the measure of poverty, n is the number of households, poverty line is z. I is the indicator function, which is equal to 1 if the statement in parenthesis is true; otherwise it is equal to 0. The coefficient α is a measure of poverty aversion. Larger values of α give greater emphasis to the poorest poor. P0, the headcount index measure, sets $\alpha = 0$ and shows the headcount poverty rate; the proportion of the population below the poverty line.

When estimating poverty using monetary measures, Coudouel et al. *(2002)* argue that, provided the information on consumption obtained from a household survey is detailed enough, consumption will be a better indicator of poverty measurement than income for the following reasons: consumption is a better outcome indicator than income, consumption may be better measured than income, consumption may better reflect a household's actual standard of living and ability to meet basic needs. Similar views are held by Travers and Richardson (1993) when they argue that:

'when measuring the resources available to an individual it is preferable to quantify expenditure rather than income. Expenditure generates the flow of services from which material well-being is derived. Income, in contrast, provides the *capacity* to purchase things ... generally income is valued not for its own sake but for the ability it provides to buy goods and services. It is thus more satisfactory to measure directly the level of goods and services bought.' (Travers and Richardson, 1993: 24).

In spite of the strong practical arguments in favour of consumption as the unit of measure, however, income, properly computed, is satisfactory for poverty estimation. Coudouel et al (2002) maintain that measuring poverty by income allows for a distinction to be made between sources of income, and when such distinctions can be made, income may be more easily compared with data from other sources, such as wages, thereby providing a check on the quality of data in the household survey.

For practical purposes, when both income and consumption data are available, then poverty can be measured with both indicators to allow results to be compared. Since income and consumption capture different aspects of poverty, a blend of the two approaches can provide information on other aspects of well-being, such as the ability of households to smooth consumption (Hentschel and Lanjouw 1996).

2.4.2 Non-Monetary Measure of Poverty

Besides the use of monetary measure to estimate the amount of income or expenditure necessary to meet the basic requirements of life there are other known

indicators of well-being such as the basic needs approach, the capability approach and the human development index.

2.4.3 The Basic Needs Approach

The Basic Needs Approach (BNA) an advancement form of the income and consumption approaches in presenting poverty in the context of material deprivation in respect of basic human needs for individual survival. Such needs include basic needs of food, clothing and shelter, essential services including education and health, safe water and sanitation facilities, and employment opportunities (Lok-Dessallein, 2000; Townsend, 2006: 6). The concept of Basic Needs measures goods and services directly in terms of human welfare, accounting for price effects (Lok-Dessallein, 2000). For example, a rise in the cost of basic needs without a corresponding rise in income is considered as a decline in welfare – using an income approach, however, this would have been considered as a real increase in per capita gross national product. Nevertheless, the major challenge associated with Basic Needs is aggregating meaningful indicators for the purpose of in-country analysis and the difficulty in interpreting such indicators in relation to the income approach (Lok-Dessallein, 2000). Thus, as Fukuda-Parr (2006) argues, a comprehensive measure of poverty requires a more composite indicator that can aggregate the different characteristics of human deprivation. Two of such measures are the UNDP's Human Poverty Index and Sen's Capability Approach.

2.4.4 The Human Poverty Index

The HPI is a more efficient means of measuring deprivation in peoples' lives compared to income /consumption poverty measures, similar to the basic needs

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approach it lacks perfect aggregates (Lok-Dessallein, 1999; Fukuda-Parr, 2006, cited in Joseph, 2016). In spite of its usefulness over the income and consumption poverty measures, it is also limited as it does not include all dimensions of human life and the required social environment (Fukuda-Parr 2006). In recent times the human development index (HDI) has been outpaced by the Multidimensional Poverty Index, which measures multiple deprivations.

2.4.5 The Capability Approach

The capability approach is defined by the capacity to achieve functionings, a concept largely developed in Amartya Sen's influential work. According to Sen (1992) the capability to function represents the various combinations of functionings (beings and doings) that the person can achieve. Capability is, thus, a set of vectors of functionings, reflecting the person's freedom to lead one type of life or another. The Capability approach encourages not the welfare policies but empowerment, insisting that people are responsible for their own lives and should have freedom (Rosette, 2015).

The capability approach, systematically critiques the income and utility focus of neoclassical economics and proposes that well-being be understood as multidimensional and considered in the space of capabilities (Wasswa, 2015). According to Rosette (2015), the central idea of the capability approach is empowerment. Empowerment refers to the expansion of freedom of choice and opportunity to shape one's life.

In spite of the potential of the capability approach to heavily contribute to poverty reduction, Ruggeri (2003) argues that the approach fails to capture the fundamental causes or dynamics of poverty and presents a set of possible effects that are difficult to see empirically. The failure of Sen to provide a specific list of minimally essential needs resulted in attempts by several people (Alkire 2002; Desai 1995; Qizilbash 1998) to produce such a list, but each has arrived at the same list. This confirms Ruggeri's arguments that the lists are the same as the list identified in the basic needs approach.

From the review of literature, three main measurements of poverty were identified, namely, objective poverty, subjective poverty and multi-dimensional poverty.

2.5   Objective versus Subjective Measure of Poverty

2.5.1   Objectivity Poverty Measure

The objective measure looks at poverty from two perspectives, namely, from the absolute and relative perspectives.

Absolute poverty is defined as a situation in which the individual's basic needs are not covered, in other words, there is a lack of basic goods and services, normally related to food, housing and clothes (UNDP, 2006). Absolute poverty lines are normally expressed using indicator values, usually monetary in nature. These lines reflect the value of resources needed to maintain a minimum level of welfare. The aim is to measure the cost involved in purchasing a basket of essential goods and services, which allows a person to reach minimum levels of satisfaction in terms of basic needs. One of these absolute lines that is widely used fixes a dollar per capita

a day as the value of minimum resources needed for a person not to be considered poor. This line can be used in a world context with the implication therefore that any person who lives on less than a dollar a day is poor. This way of measuring poverty includes the consideration that expenditure on food in households is a constant proportion of total expenditure.

The poverty line is fixed by multiplying the value of the basic food products by the reverse of the proportion that food expenditure signifies for total expenditure. For example, in the United States of America in the 1960s, this proportion was a third and the poverty threshold was therefore equal to the value of the basic food baskets multiplied by three. In the twentieth century, Rowntree (1901) developed a poverty line using a basket of products made up of all those essential goods and services needed to meet the minimum sustenance requirements in household. The poverty threshold is set using the monetary value of this basket plus a fixed amount of money aimed at covering other types of expenditures, such as fuel, rent, etc. Every household whose income is less than this figure is regarded as poor. However, Rowntree's (1901) poverty line was criticized on the grounds that the type of products in the basket tends to depend on the lifestyle of a particular society and therefore brings certain relativity to the supposed absolute poverty measure.

In contrast, relative poverty is a measure that compares the average income of the poorer segment of a population with better off segments, using 'current data to generate current poverty thresholds' (Foster, 1998). It is about an individual's well-being in relation to others in the same society (Foster, 1998; Lok-Dessallein, 1999; Mowafi, 2004). Relative poverty is more of a distributional measure, using

statistical measures such as 'mean, median, or some other quantile' (Foster, 1998). Lok-Dessallein (1999) notes that poverty trends in terms of absolute and relative measures may move in opposite directions; thus, relative poverty may fall while absolute poverty rises. This may occur when 'the gap between upper and lower strata of the population' becomes smaller as a result of a 'decline in the well-being of the [upper strata] at the time that additional households fall beneath the absolute poverty line' (Lok-Dessallein, 1999). This, therefore, suggests that, even though both absolute and relative poverty are income based measurements, one cannot act as a substitute for the other. Moreover, absolute poverty is normally identified as the line which contrasts the poor with the non-poor based on their income position, suggesting that income remains the focal point for understanding and measuring poverty (Mowafi, 2004).

In spite of the popularity of the absolute poverty measure, there are some serious limitations to its use for determining who is poor and who is not. First, the poverty line is determined by prevailing market prices and, thus, monetary value is critical, thereby ignoring subsistence production. Other relevant social services that are not easily valued at market prices remain unaccounted (Summer, 2003; Francis; 2006, World Bank, 2001a; 2001b).

Second, poverty lines are applied to households without taking into account the nutritional and other needs of individuals within the household (Laderchi et al., 2006). For instance, pegging the poverty line at $1.25 per day per person may not interpret in specific terms the amount of resources needed by the 'poor to meet basic needs such as nutrition or shelter' (Mowafi, 2004). Moreover, establishing

such nutritional requirements may be difficult given differences in terms of metabolic rates, the activities people engage in, their age and gender, and so on. In other words, in practical terms a distinction exists between the concept and reality; - poverty line measure may be of little relevance to the real-life situation of the poor. Indeed, empirical studies have failed to establish 'systematic breaks in living standards that correspond to poverty lines' and, hence, a poverty line is useful for descriptive purposes but may be of limited practical value (Morduch, 2005).

2.5.2   Subjective Poverty Measure

Information on the opinion of the individuals or households and their situation is used to measure poverty. The subjective measure of poverty influences the subjective view that household individuals have of their financial situation as opposed to the objective focus that uses observable and measurable variables. Subjective poverty lines are based on the opinion held by individuals about themselves in relation to society as a whole. Thus, dividing the population into poor and non-poor is based on the perception households and individuals themselves have in relation to what it is to be poor. When using this focus for measuring poverty, it is assumed that "each individual is the best judge of their own situation" (Van Praag et al., 1980). Therefore, to a certain extent, the opinions of value implicit in the relative poverty measures, choice of threshold, use of equivalence scales.

2.5.3   Multi-dimensional Poverty Measure

The multi-dimensional poverty measure is closely linked to social exclusion and is related to deprivation or the lack of access to certain goods and services considered

necessary for society, whether a basic need or not. By this approach, poverty is measured with non-monetary variables and deprivation indicators, using breakdowns of these indicators to construct poverty measures.

The need to provide other poverty measures that are not only based on monetary indicators, but on variables that directly reflect the deprivation suffered by household, is the necessity for this multi-dimensional approach. The growing need to provide non-monetary deprivation measures has many reasons. On one hand, monetary poverty only shows a part of the phenomenon and assumes that households with the same income have similar standards of living. In addition, although income is a good indicator of standard of living, it does not reflect all possible situations and sometimes, its measurement is complicated and difficult to adjust, for example, in the case of freelance workers.

On the other hand, individuals have other kinds of resources that are not reflected in monetary poverty measures and which could be used to avoid poverty and to achieve an acceptable standard of living. This would be the case of people who have savings, equity. There is also another group of resources that can influence a household's situation and which is not directly and uniquely linked to current material wealth, for example, education, the support of family or friends, access to credit (Kośny and Piotrowska, 2019).

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2.6   Theories of Poverty

Scholarly works on poverty seek to distinguish between theories that root the causes of poverty in individual deficiencies (conservative) and theories that lay the causes on broader social phenomena (liberal or progressive).

According to Brady (2018), explanations with respect to the causes of poverty can be classified into three broad families of theories, namely, behavioral, structural and political theories. Brady (2018), posits that the behavioral theories of poverty concentrate on individual behaviors as driven by incentives and culture. Structural theories emphasize the demographic and labor market context, which causes behavior and poverty. Political theories contend that power and institutions cause policy, which causes poverty and moderates the relationship between behavior and poverty.

2.6.1   Individual Deficiencies Theory

This is one of the earliest theories of poverty propounded to support the attribution of poverty to the deficiencies of the individual poor. This first theory of poverty is a large and multifaceted set of explanations that focus on the individual as responsible for their poverty situation. The "individualistic" theory of poverty is advocated by the conservative thinkers (Rainwater, 1970; Weber 2001; Blank, 2003). The proponents argue that individuals in poverty are blamable for creating their own financial predicaments and that with harder work and better choices the poor could have avoided their problems (Ryan, 1976; Schiller,

1989).

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The underlying premise of this theory is that, although other options are available, the poor people still make choices that limit their access to economic resources, thereby raising their risk of ending up in poverty (Blank, 2010). In this theory, the behavioral set of individuals is the key mechanism directly causing poverty (AEI-Brookings 2015; Sawhill 2003). In this regard the poor are poor because they engage in counter-productive, poverty- increasing behavior or "risks (Bertrand et al. 2004; Durlauf, 2011; Brady, 2018). Neo- classical economists reinforce individualistic sources of poverty with the assumption that individuals are responsible for their choices in maximizing their wellbeing through wise investment (Ryan, 1976). The theory cast the poor as a moral hazard with claims that poverty persist because the poor are not doing enough or are engaged in activities which are counterproductive (Gwartney & McCaleb,1985).

Poverty is high in a context because there is a high prevalence of those with demographic characteristics indicating such behaviors (Brady, 2018; Cruz & Ahmed 2018; Kaida 2015; Ku et al. 2018; Milazzo & van de Walle 2017). When some people choose short term and low-pay off returns, economic theory holds the individual largely responsible for their choices. For example, some people will forgo high education or other forms of training that will lead to better paying jobs in future. Poverty reduction is achievable through skills acquisition, hard work, motivation and resilience (Voelwoen, 2018).

According to Brady (2018), poverty reciprocally feeds back into behavior to reproduce poverty intra- and intergenerationally. Poverty imposes a cognitive burden, present bias, and stress, which then encourages poverty-perpetuating

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behavior, such as lower educational attainment (Gennetian & Shafir 2015; Hannum & Xie 2016; McEwen & McEwen 2017; McLoyd et al. 2016; Mullainathan & Shafir, 2013). Poverty induced by individual deficiencies can be alleviated if all stakeholders including government and policy makers provide the needed support; opportunities and incentives that help people make right choices to evade poverty (Voelwoen, 2017).

In spite of the useful contributions of the individualist theory of poverty, it suffers from the following limitations:

Firstly, Streib et al. (2016) posit that in spite of the causal claims regarding the deficiencies of the individual poor people, there remains tremendous uncertainty about the real causality. It is argued that scholars routinely fallaciously imply that describing "who is poor" provides an explanation of the causes of poverty (Gans 1995; Katz 2013; Rank 2005; Ryan 1976; Schwartz & Carpenter 1999. If behaviour and poverty are reciprocally related, this leads to a rather obvious endogeneity problem that fails to explain what causes poverty in the first place (Gans 1995; Katz 2013; Ryan 1976). The relationship between behaviors and poverty is quite unreliable (Andreß et al.2006; Rothwell & McEwen 2017).

Secondly, behavioralists have been unable to explain macro-level variation in poverty (Brady, 2018 Heuveline & Weinshenker 2008; Rainwater & Smeeding 2004). The cross-national prevalence of risks cannot explain cross-national variation in poverty (Brady et al. 2017).

2.6.2 Modernisation Theory

The proponents of the modernization theory outline the transition and drastic transformation that a traditional society has to undergo in order to become modern and thereby overcome key developmental challenges (Hussain and Tribe, 1981; Lenin, 1964, cited in Elis and Biggs, 2001). It is about Africa following the development footsteps of Europe (largely the former colonizer of Africa). According to modernity, policies intended to raise the standard of living of the poor often consist of disseminating knowledge and information about more efficient techniques of production. For instance, the agriculture modernization process involves encouraging farmers to try new crops, new production methods and new marketing skills, (Elis and Biggs 2001). In general, modernization led to the introduction of hybrids, the green house technology, genetically modified (GM) food, use of artificial fertilizers, insecticides, tractors and the application of other scientific knowledge to replace and/or complement traditional agricultural practices (Matunhu, 2011).

The key elements of the theory are as follows:

i. Western world countries are the most developed and, and the rest of the world comprising former colonies are on the earlier stages of development, and will eventually reach the same level as the Western world.

ii. Development stages go from the traditional societies to the developed ones.

iii. Third world countries have fallen behind with their social progress and need to be directed on their way to becoming more advanced (Rostow, 1960, cited in).

The major assumptions of the theory according to Giovanni (2001) are as follows:

i) Modernization is a systematic process. The attribute of modernity forms a consistent whole, thus appearing in a cluster rather than in isolation

ii) Modernization is a transformative process, in order for a society to move into modernity its traditional structures and values must be totally replaced by a set of modern values, and

iii) Modernization is an imminent process due to its systematic and transformative nature, which builds change into the social system (Giovanni, 2001).

The theory stresses the modernization factor that many societies are simply trying to emulate the most successful societies and cultures. It also states that it is possible to do so, thus supporting the concepts of social engineering and that the developed countries can and should help those less developed, directly or indirectly (Omideyi, 2013). The modernization theorists claimed that Africa's development had to pass through distinct stages from primitive society through 'take off' to periods of mass production as described by the Rostowian theory (Rostow, 1953). Similar argument was made in a study conducted by Coetzee et al. (2007) that, agricultural societies can be regarded as modern only when they display characteristics as detailed below:

i. Readiness to accommodate the process of transformation resulting from chances.

ii. Continuous planning, calculability and readiness towards new experiences.

iii. Continuous broadening of life experiences and receptiveness to new knowledge

iv. High premium on technical skills and understanding of principles of production.

v. Changing attitudes to kinship, family roles, family size and the role of religion.

vi. Changing consumer behavior and the acceptance of social stratification.

Coetzee et al. (2007) observed what they viewed as the failure of modernization and asserted that arrested development was due to structural causes, in particular the centre-periphery relations, established during the colonial period and maintained through unbalanced trade relations. They argued further that protection, allied with import substitution, represented the best response to this situation. According to them, direct action is required to safeguard the rights of the poor, redistribute wealth where necessary and develop the capacity of poor people to engage fully in the development process.

It is further argued that modernization of economies is required for wealth creation and poverty will then reduce as benefits "trickle down" through society. Later developments of the modernization theory gave greater recognition to the political context and suggested the need for improvement in governance (DFID, 2001). Cleary (1989) refers to the improved breed of modernization theory as integration theory and suggests that integrationists ensure that economic theory was inextricably woven into the domestic political process. Cleary (1989) further emphasized that integration theory focused on the domestic political economy.

In spite of the strengths of the modernization theory, it suffers from the following limitations:

Firstly, the theory is criticized for failing to consider the poor as the centerpiece in poverty reduction initiatives. By ignoring the involvement and participation of the target community, modernity achieves the marginalization of their commitment, creativity and support of the intervention strategies. According to Mantunhu (2011), the intervention initiatives become imposed on the people and therefore fail to construct adequate notions of both the causal powers of social structures and the role of human agency in shaping social relations in general. The top-down approach of the foreign powers does not fit well into the African problem.

The second limitation of the modernization theory is that it is based on deterministic reason which states that within the linear model of socio-economic development, changes are initiated externally. This notion leaves little or no room for the reciprocal relationship between causation from within the developing region and from outside the developing region. The premise of the theory encourages the foreign powers to prescribe the route to Africa's development. For instance, the failure of IMF-imposed economic structural adjustment programmes (ESAPs) in Africa in the 1980s was largely attributable to the Fund's disregard of the cultural, social, political and traditional values of the recipient countries. Thus, the 'Eurocentric' experiment failed to pull the African continent out of poverty.

The third shortcoming of the modernization theory is the widespread view that modernization impoverished Africa through colonialism and imperialism by the West. The modernization theory failed to recognize the creativity and initiatives of

the Africans. Instead it places value on externally sourced aid without attending to the inhibiting conditionality attached to such aid. The theory emphasizes the supremacy of the Metropolis (Colonial Masters).

The fourth limitation of the modernization theory is the failure of economic growth to 'trickle down' to the masses of the poor people. Even with economic growth and development in most African countries, hundreds of millions of people have been condemned to starvation and despair.

2.6.3   Cultural Theory

The cultural belief theory is a culturally liberal approach. This concept was developed and popularized by Oscar Lewis, an American anthropologist as a result of his studies of the urban poor in Mexico and Puerto Rico in 1961 and 1966 (Mandell & Schram, 2003). Culture explains the counterproductive behavior that causes poverty (Dahl et al. 2014). The theory of culture of poverty is built on the assumption that both the poor and the rich have different pattern of values, beliefs, and behavioral norms. The culture of poverty holds that the poor could fight and break away from poverty (McIntyre, 2002).

The theory argues that poverty is caused by the transmission over generations of a set of beliefs, values, and skills that are socially generated but individually held (Blank, 2010, Lewis, 1965, quoted in Townsend, 1979). This theory does not blame the individuals because they are regarded as victims of their dysfunctional subculture or belief systems. Technically, the culture of poverty is a sub-culture of

poor people who develop a shared set of beliefs, values and norms that are embedded in the culture of the main society, Bradshaw (2006).

According to Voelwoen (2017), the culture of poverty is prevalent in developing countries and societies in the early stages of industrialization as well as among the lower class in advanced capitalist societies. Voelwoen (2017) argues that it is a reaction to low income and lack of opportunities such that people live for the present and believe in luck rather than effort to achieve success.

Oscar Lewis as reported in Ryan (1976:120) writes "once the culture of poverty has come into existence it tends to perpetuate itself. By the time slum children are six or seven they have usually ascribed the basic attitudes and values of their subculture. Thereafter they are psychologically unready to take full advantage of changing conditions or improving opportunities that may develop in their lifetime". Murray (1984) argues that government welfare programmes perpetuate poverty by encouraging a cycle of "welfare dependency" where poor families develop and pass on to others the skills needed to work the system rather than to gain paying employment. It is argued that the welfare programmes for the poor have introduced a perverse incentive structure, one that penalizes self-improvement and protects individuals against the consequences of their own bad choices (Gwartney, 1985). The net result of this theory of poverty is summed up by Asen's (2002: 48) perceptive phrase, "From the war on poverty to the war on welfare."

From a community development perspective, if the theoretical reason for poverty lies in values and beliefs, transmitted and reinforced in subcultures of disadvantaged persons, then local anti-poverty efforts need to intervene to help

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change the culture. According to Valentine (1968), problems of cultural poverty can be addressed in one of three ways:

Firstly, if one considers the culture of the poor as a dysfunctional system of belief and knowledge then the remedy will be to replace that particular culture with a more viable and functional one that obviously supports rather than undermines productive work, investment, and social responsibility.

Secondly, if one thinks of the culture of poverty as an opportunistic and nonproductive subculture that is perpetuated over generations, then the focus will shift to youth to stop the recreation of the detrimental culture. Head start and many coherent and quality educational programmes, according to Zigler and Stysco (1996), are successful at providing an alternative socialization for the next generation to reduce poverty. Similarly, community developers are often involved to help establish after school programmes for teens where their peer culture is monitored and positive social values are established, while keeping youth away from gangs and detrimental behaviour. According to Levitan et al. (2003), these programmes are policy favorite because they are believed to change the culture of youth while their values and norms are still malleable.

Thirdly, the approach to the culture of poverty is to try to work within the culture to redefine culturally appropriate strategies to improve the group's wellbeing. For instance, policy makers and community developers can enhance and build upon cultural values with the subcultures of the poor which can become assets for economic development. Formation of local crafts cooperatives can tap the useful traditions of small business and entrepreneurship found in different subcultures.

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Institutions by which ethnic groups or clans assist each other in creating and financing businesses are useful lessons (Bradshaw, 2006). While programs promising micro-enterprise as a path from poverty are often oversold (Goldstein, 2001), the mystique of the Gramin Bank type of programmes as a road out of poverty offer culturally compatible strategies that build on a group strength as catalyst for deliverance from the economic woes of poverty, diseases, among others. The cultural theory of poverty suffers a number of challenges:

The opportunity theory of poverty argues that people are poor because they have limited human capital, as well as limited access to opportunities compared to the wealthy. According to opportunity theory of poverty, the social system is structured such that it favors some group to succeed.

Sameti, Dallali & Karnameh (2012), Gans (1971), Rank (2004), Mandell and Schram (2003) also argued against the cultural theory of poverty. They criticized the culture of poverty for holding the poor responsible for their predicaments rather than social forces associated with poverty. According to Gans (1971) and Rank (2004), the blaming-the-victim ideology used by politicians often focuses on character defects of the poor rather than the primary cause of poverty. People use judgmental and behavioral labels to justify their accusation of the poor.

Darling (2002) and Rank (2004) noted that human capital can have major effects on an individual's risk of poverty or success. The literature indicates that human capital significantly affects people's earning, and consequently lack of human capital can place an individual at risk for poverty (Sameti, Dallali & Karnameh,

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2012). According to Rank (2004) and Darling (2002), individuals with greater human capital are more likely to be competitive in the labor market than those who lack human capital.

According the Davis and Sanchez (2015), the main criticisms of the cultural beliefs' theory are:

Bias in interpretation of observed common attitudes and patterns among groups of poor individuals**.** This is arguably the principal objection made against this view and rests in the argument that many of the normally used to distinguish the culture of poverty are formulated in terms of western, middle-class values (i.e. against middle-class background/prejudices).

That the concept of a subculture of poverty cannot be applied when the values and attitudes that are supposed to be inherently possessed by people experiencing poverty are not accepted by those in the same situation as themselves. By counterargument, the observed attitudes and conditions may well be the result of external causes rather than internal values.

2.6.4 Progressive Social Theory

Theorists in this tradition look not to the individual as a source of poverty, but to the economic, political, and social system which causes people to have limited opportunities to resources with which to achieve income and wellbeing. Rather than blaming the poor individuals, this theory blames the failure of the socio-economic and political system in working to perfection (Quigley, 2003).

The theory ascribes poverty to economic, social and political structures that make the poor fall behind regardless of how committed they may be. Another category of system flaw associated with poverty relates to groups of people being discriminated against based on personal attributes such as race, gender, disability and religion, which limit their opportunities in spite of their personal capabilities (Voelwoen, 2017).

The nineteenth (19th) century social intellectuals launched a full-scale attack on the individual theory of poverty by exposing how the socio-economic and political system facilitated and fuelled the economic predicaments of the poor in society. They argued that the economic systems in most economies are structured in such a manner that the poor people fall behind regardless of how competent and hardworking they may be. For instance, Marx (1967) as cited in Goldstein (2001) demonstrated how the economic system of capitalism created the "reserve army of unemployed" as a conscientious strategy to keep wages low. The root of this imperfection is the fact that minimum wages do not allow most employees and their families to enjoy economic self-sufficiency (Jencks, 1996). According to Jencks (1996), minimum wage legislations do not permit single mothers or their families to be economically self-sufficient.

The problem of the working poor is increasingly seen as a wage problem linked to structural barriers preventing poor families from getting well-paid jobs. This problem is complicated by limited availability of jobs coupled with lack of growth in sectors supporting lower skilled jobs (Tobin, 1994) A parallel barrier exists with the political system in which the interest and participation of the poor is either

impossible or is deceptive. There is a positive correlation between political power and economic might. Coupled with gender, disability, ethnic, religious and racial discrimination, poor people lack influence in the political system that they might use to mobilise economic benefits and justice. Since the poor and vulnerable people are either less involved or completely excluded from the political process their interests are often sacrificed. These and many other related economic changes documented by Blank (1997) and Quigley (2003) show the way the system has created increasingly difficult problems for those who want to work. In the words of Rank, Yoon and Hirschl (2003), "Poverty researchers have in effect focused on who loses out at the economic game, rather than addressing the fact that the game produces losers in the first place".

If the problem of poverty is inherent in the socio-economic and political system rather than in the poor people themselves, then a community development response must be to change the system and changing the system can take place at three levels (Page & Simmons, 2000; Rank 2004; and Bradshaw, 2006).

First, from grassroots level, social movements can exert pressures on policy makers to effect desired changes in the system (in support of the poor and vulnerable groups in society). Rank (2004) argues that change could be mobilized to support better jobs for the poor and a more effective system since poverty affects everyone either directly or indirectly. In his view, public pressure including unionization can increase wages and gainful-employment for persons systematically excluded. Rank (2004) argues further that, civil rights movements have had a strong impact on breaking down formal barriers, as has the women's movement.

Secondly, the strategy within community development for changing the system involves creating and developing alternative institutions which have access, openness, innovation, and a willingness to help the poor gain wellbeing. This strategy is at the cornerstone of most development corporations which aim to provide alternative businesses, housing, education and healthcare programmes for the poor (Bradshaw, 2006). Networks among minority and women groups are encouraged as well as community ownership of businesses and institutions such as community banks, markets etc. In order to protect poverty alleviation programmes, it is important that the poor and their advocates are politically mobilized.

Finally change can occur through the policy process (Page & Simmons, 2000). The range of federal and social policies that can be adjusted to accomplish poverty reduction include provision of jobs, raising wages to meet economic conditions, expanding the safety net, assuring effective access to medical care, and coordinating social insurance programmes. Legal changes to enforce civil rights of the poor and to protect minority groups are needed. One of the boldest policy moves is suggested by Quigley et al. (2003) who advocate a constitutional amendment to guarantee jobs to anyone who is capable and wants to work. In his view, such jobs ought to be full time and be able to generate living wages. Quigley et al. (2003) also lauded the American Disability Act which has established many gains for otherwise able-bodied who unfortunately are either blind, deaf or with limited mobility.

2.6.5 Geographical Disparities Theory

This theory of poverty is geographically based. It demonstrates the fact that people and institutions in certain areas lack the resources needed to generate wellbeing and

income, and that they lack the power to claim redistribution. Shaw (1996) points out that, "Space is not a backdrop for capitalism, but rather is restructured by it and contributes to the system's survival. The geography of poverty is a spatial expression of the capitalist system." Poverty is most intense in certain areas due mainly to the lack of economic resources. Weber and Jensen (2004) note that most literature finds a "rural differential" in poverty. Voelwoen (2017) argues that this theory is closely linked to the economic agglomeration theory which shows how the concentration of similar firms attract supportive services and markets which further attracts more firms while impoverished communities generate more poverty, low housing prices in such areas attract more people. According to Bradshaw, King and Wahlstrom (1999), agglomeration shows how close similar firms attract supportive services and markets, which further attract more firms. In reverse, the closeness of poverty and the conditions leading to poverty or the consequences of poverty (crime and inadequate social services) generate more poverty, while competitive areas attract business clusters, drawing away from impoverished communities. Bird, 2019, Bradshaw et al. (1999) argued further that, in a world in which the criteria for investment is "location" then it is not unreasonable to track investment going to neighborhoods, communities and regions in which there is already substantial investment, while leaving less attractive areas.

Voelwoen (2017) argues that the gross neglect of rural areas in the provision of social amenities and empowerment opportunities by successive governments have led to an imbalance and a wide divide between rural and urban dwellers resulting in challenges of rural –urban drift. Poverty is high because governments and communities have not tapped the resources and opportunities in the disadvantages

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areas to improve the wellbeing of the populations. And so, food shortages, housing crisis, low electricity (power) generation, fuel crisis and other deprivations persist in a country well-endowed with vast and arable land, rivers, waterfalls, mineral deposits and other resources that could yield immense benefits if properly utilized (ibid).

Regional inequality is a significant driver of inequality in Ghana. Poverty is much lower in Accra and around the Rural Forest area than in the northern regions (Northern, Upper East and Upper West) (Bird, 2019, Coulombe & Wodon, 2007), with Northern Ghana lagging behind the rest of the country (Jebuni, McKay and Shepherd, 2007). Addressing inequality within and between regions has been identified as central to improving Ghana's economic performance and human development indicators (International Development Association and International Monetary Fund, 2006; World Bank, 2007).

From the human ecology perspective, the Rural Sociological Society (1990) presents a theoretical insight on the flow of knowledge and capital. It points out that, rural areas are often the last stop of technologies, and low wages and competitive pricing dominate production. Efficient utilization of resources depends on the level of infrastructural development; therefore, poorly developed areas limit economic activity that might use these resources. An increasing body of literature holds that advantaged areas stand to grow more than disadvantaged areas even in periods of general economic growth and that there will be some "trickle-down" but not an equalizing as classical economists would have us believe (Rural Sociological Society, 1990).

Another theoretical perspective on spatial concentrations of poverty stems from selective out-migration. According to Wilson (1987), people from ghetto areas (poverty endemic areas) with the highest levels of education, greatest skills, widest world view, and most extensive opportunities were the ones who migrated to places with greater opportunities, thereby worsening the poverty situation of the ghetto areas. Wilson (1987) argued further that these departing people also were the community's best role models and were often civic leaders.

From an anti-poverty programme perspective, instead of focusing on individuals, businesses, cultural processes, the geographical theory directs community developers to look at places and processes by which they can become self-sustaining. Approaches adopted to build stronger geographical areas include the following:

- Improve local industry competitiveness through cluster development (Blakely and Bradshaw, 2001)

- Building creative communities (Florida, 2002)

- Enterprise zones, redevelopment and other tax-based incentive programmes for economic development and channeling private investments.

- Affordable housing and similar programmes that place conditions on development.

- Downtown revitalization and civic improvements that increase amenities and make areas more attractive, hoping to stimulate employment and tax revenues.

- Infrastructure investment, including inter-state highways, parks, water, waste disposal, schools and other public facilities.

- Community organization.

- National and regional reinvestment that shifts funds from areas of abundance to deprived communities.

2.7   Empirical Literature

According to   Singh, Singh, Meena, Kumar, Jha and Kumar (2013), socio-economic indicators provide a background to understanding the poverty scenario in a country. These indicators for a country will help in identifying the linkages between socio-economic indicators and achievement of health goals. Understanding the socio-economic factors influencing global poverty is a crucial requirement for the drawing and implementation of policy decisions aimed at reducing the poverty menace. Understanding poverty characteristic is a main point for designing an effective poverty reduction strategy (Sugiharti & Ranggi, 2017).

A satisfactory explanation of why some people are poor is necessary if measures have to effectively address the root causes of poverty. In the light of the aforementioned, this section reviews empirical literature on the socio-economic factors affecting poverty among different societies.

2.7.1   Socio-Economic Factors Affecting Poverty

At cross country setting, a number of studies have delved into the socio-economic factors that contribute to poverty (see, Mduduzi and Talent, 2017; Raul, 2015; Mood and Johnson 2015; Xhafaj and Nurja 2014; Spaho, 2014; Achia et al. 2010; Camila et al. 2010; Mwabu, 2000; Oyugi, 2000;). Such studies have varying empirical findings thereby igniting controversies among scholars. Due to the

complex nature of poverty, different studies employ different measurement approaches. While some scholars employ the monetary measure of poverty, others embrace the non-monetary approach. Notwithstanding the efforts at the cross-country level, there is limited empirical study on the socio-economic factors affecting poverty in Ghana, which creates a gap in the literature and has serious policy implications.

Mduduzi and Talent (2017) conducted a study on the analysis of determinants of poverty and household welfare in South Africa. Using mixed method approach and cross sectional design a representative sample of over 28,000 individuals in 7,300 households were randomly selected. The study used household per capita income (incidence of poverty) as dependent variable. The independent variables were; level of education of household head, province dummies, race of the household head, dependency ratio, indicator variables for location of the household -rural or urban, gender of the household head, employment status of the household head, marital status of the household head, asset ownership and household size and age of the household head. With the exception of dependency ratio, age of head of household, asset ownership and household size which were continuous variables, the rest were dummy variables. Applying the probit estimation model, the study revealed that the most of the explanatory variables are statistically significant at 1%, with expected signs. More specifically, the results indicate that unmarried (divorced, never married or widowed and living with a partner) head of households, were significantly more likely to be poor than their counterpart (married head of households). As expected, female-headed households were more likely to be poor than male-headed households. The probability of being poor for a household

member whose head was employed was lower. Likewise, an increase in the number of household members significantly increased the probability of being poor

Xhafaj and Nurja (2014), conducted a study to establish the most influential factors affecting poverty in Albania. The survey obtained data from the Living Standards Measurement Study (LSMS) for 2008 that included a random sample of 3600 households representing four (4) zones, Center, Coast, Mountain and Tirania. Questionnaires were used to solicit primary data from the sampled population. In terms of poverty measurement, the study applied the standard decomposable indicators in the Foster- Greer-Thorbecke (FGT). The indicators were; the incidence of poverty, the depth of poverty and the poverty gap. The incidence of poverty sought to reveal the percentage of the population whose per capita consumption was below the poverty threshold. Similarly, the depth of poverty and the poverty gap sought to respectively measure the average income shortfall of the poor in relation to the poverty line and the severity of poverty. The study used the linear log regression model and the logistic regression model. The linear log regression model used consumption expenditure per capita of the household as the dependent variable and demographic, educational and geographical factors as independent variables. The logistic regression model on the other hand had a dependent variable being the economic status (poor and non-poor) and same independent variables as in the linear regression model. The results of both econometric models confirm that the variables that are strongly connected with the expenditure of consumption per capita and with the economic status were; household size, educational level and gender of the head of household and geographic zone. The study recommended a careful review of the educational reforms in Albania.

Mood and Johnson (2015), conducted a study on the consequences of poverty in Sweden. At the core of the study was the multidimensional nature of poverty. To study how falling into poverty, or rising from it, is associated with outcomes in terms of primary and secondary social relations, including participation in civil society, the survey applied panel data methods on longitudinal data from the Swedish Level-of-Living Survey for 2000 and 2010. These panel data made it possible to generalize the results to the Swedish adult population in 2000 and in 2010 to address the issue of causality, and to estimate how strong the relation between poverty and social outcomes is. The study expanded the absolute poverty measure to include those who received social assistance. Using logistic regression, the study showed the correlation between poverty and outcome variables. With the dependent variable being the economic status (poor of non-poor), the study employed independent variables including; level of education, health status, gender, marital status, employment status, social relations and age. The study concludes that there is a strong correlation between poverty and all the explanatory variables. All the explanatory variables were critical factors in determining how people either fall into poverty or rise out of it over time.

In a study conducted in Paraguay, Raul (2015) sought to explore the determinants of poverty in Paraguay and to establish which household characteristics were related to poverty status. To analyze the determinants of poverty, Raul (2015) used both an ordinary least squares regression and logistic models with data from Paraguay's 2013 survey of households. Raul (2015), employed different regression techniques to explore poverty in Paraguay. The regression types used were: i) a standard linear regression on household income per capita, ii) a binomial logit

model and iii) an ordered logit model. The latter two have a categorical dependent variable that denotes different poverty statuses. The independent variables for both regressions were key household characteristics and assets of the household head. The study focused on the following explanatory variables; education (by category: primary, secondary, tertiary), gender, dummy (1 if male and 0 if female), language, land owned, health insurance ownership (dummy variable), healthiness (dummy variable), access to services such as water, electricity and sewers (dummy variable), informal employment proxies (not having a work contract, being a domestic worker, being a family worker, or being self-employed), and an agricultural employment dummy (1 if employed in the agriculture sector, 0 if otherwise). The regressions used data from the 2013 Permanent Survey of Households. The study used a sample size of 5,424 households obtained randomly. The regressions had the following as primary factors significantly related to poverty or lower incomes: being a female household head, being only Guarani-speaking, a lack of education, lacking health insurance, lacking access to sewers, lacking a work contract, being self-employed, and working in agriculture (for the general and urban data). The primary household characteristics that were linked to higher incomes and not being in poverty were being male (for household heads), having secondary and tertiary education, spousal tertiary education, health insurance ownership, being healthy in the last six months, access to sewers, and owning more than 15 hectares of land. The study used Z-test p-values to test whether there is a statistical difference between poor and non-poor households and between urban and rural households with regards to the variables under investigation. The study shows that the logistic regressions show results similar to the linear regression. In addition, the two logistic regressions share the same coefficient signs for every variable. Both regressions

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also coincide on when a variable is statistically significant, except with Male that has a p-value of outside the significance level though very close to significant. Thus, given that the regressions mainly only differ in the magnitude of their coefficients, both of their results can be mentioned together (Raul, 2015).

Singh et al. (2013), conducted a study aimed at analysing the nature, extent and severity of rural poverty across different household classes at selected villages in the state of Jharkhand, India. In order to track changes in rural poverty in household and village economies in Eastern India, the study focused on the following villages; Dubaliya, Hesapiri, Dumariya and Durgapur. The study was based on micro-panel data being collected from the sample households through panel interview method. The data pertains to these two representative districts, one representing the socioeconomically developed district (Ranchi) and the other representing the socioeconomically backward district (Dumka). Dubaliya and Hesapiri villages in Ranchi district represent relatively better socioeconomic conditions whereas villages Dumariya and Durgapur in Dumka district represent less developed economy. While Ranchi district has edge over other districts of Jharkhand with respect to education level, per capita income, health and hygiene, and infrastructure facilities, Dumka district has been inferior to majority of districts of Jharkhand with respect to education level, per capita income, health and hygiene, and infrastructure facilities (Singh et al 2013). Forty (40) households were selected randomly in each of four villages, making a sample size of 160 households. In order to ensure equal representation of different groups of households, the study randomly selected representative samples from different categories of people, namely; landless, small, medium and large-scale business categories. The study considered a household poor

if its daily per capita income was less than USD 1.25in terms of the Indian currency (Ruppe) at the prevailing exchange rate of 1USD=Rs 14.67. Using the income conceptualization of poverty, the study used the FGT index to measure the incidence of poverty (headcount ratio), intensity of poverty (poverty gap ratio) and severity of poverty (squared poverty gap ratio). To find out the determinants of poverty, affecting the probability of an individual being poor, Singh et al (2013) estimated a Probit model using poverty as a dependent factor-a binary (poor-1 and non-poor-0) and a set of agricultural and socio-economic variables as explanatory variables. The study focused on the following independent variables; average age of household, average education level of household, land tenure status, household asset ownership, place of residence, access to utilities, occupation (share of agriculture income), migration and financial inclusion. The study concludes that the factors that pull-out poverty were the level of education and the number of income-earning members of a household. The study shows the coefficient for education was significant at 1% which clearly indicates that education has a significant antagonistic (negative) effect on poverty likewise the number of family members working and earning income (Singh, 2013). Also, the study suggests that the factors which push in poverty were; the size of the non-earning members of the household the share of agricultural income in total household income. Larger non-earning members of household and concentration on agriculture clearly indicates that a reduction in non-earning household membership as well as the creation of more non-farm employment opportunities were essential to reduce the poverty as agriculture would no more be able to combat poverty (Singh et al. 2013).

In Indonesia, Sugiharti and Ranggi (2017) conducted a study to establish the determinants of poverty. They study used a consumption-based measurement on the basis that consumption measures welfare achievement rather than measuring an opportunity for welfare as in income approach and also that the consumption approach is less fluctuative than the income approach. To identify the level of poverty the measures adopted by the study were the head count index (Po), the poverty gap index (P1) and the poverty severity index (P2). In line with the Statistics Bureau of Indonesia, the study used the level of daily consumption which is equivalent to 2100 kilocalories per capita/day as the poverty line. Data for the study was obtained from The Indonesian National Socioeconomic Survey (SUSENAS) 2012 which is a series of large scale multipurpose socioeconomic surveys carried out by the Statistics Bureau of Indonesia. In choosing the samples the study used stratified multi-stage design constituting 278,836 households scattered in 33 provinces made up of urban and rural households. The study used a binomial logistic regression model to determine the factors affecting poverty. There was a dichotomy to refer to dependent variable, 1 if a household per capita expenditure was below the poverty line, and 0, if a household per capita expenditure was above the poverty line. The explanatory variables were categorized into three; household characteristics (gender, age, size of household), factors of production (employment, education levels, access to credit, and access to technology), and geographic characteristics (rural and urban households). The explanatory variables included both dichotomous or binary and continuous variables used in the model. The study assumed a Bernoulli probability distribution. The results of the determinants of poverty in Indonesia show that poor households are those with large number of dependents and with limited access to education with majority of

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these households living in rural areas. Accessibility to production technology and credit, size of household, and quality of human capital through educational attainment were the important variables of poverty. The study concludes that increasing accessibility of households to technology and credit, reducing the size of households, and increasing educational attainment especially in rural areas are important interventions to ameliorate poverty.

Spaho (2014), conducted a study to identify the influential factors of household poverty in Albania. The study applied the consumption-based measure to estimate poverty due to the largely rural nature of the Albania economy. The study population consists of families living in Tirana, Durres and Korca. Using a simple random sampling, 215 families living in urban and rural areas were sampled for the study. The data for the study was collected through direct interviews with the use of questionnaires. Using the data collected, the study used two econometric models; a log-linear regression model and a logistic regression model on the potential determinants of poverty in terms of household characteristics. The dependent variable of log-linear regression model was the logarithm of per capita monthly consumption expenditures and the logistic model used the poverty status of the households (poor or non-poor) as the dependent variable. The results of two econometric models indicated that household size and residence were the factors that influenced the welfare of the households in the sample studied. From the results of log-linear regression model it was concluded that sampled families with higher number of members had lower consumption per capita, and urban households had higher consumption expenditures per capita. From the results of logistic regression model, it was concluded that larger families were more likely to be poor, urban

households were less likely to be poor, and surprisingly, households with employed heads were more likely to be poor. Education, age and gender of household head showed no significant relationships with poverty status.

To analyse the influential determinants of household poverty, Sekhampu (2013) conducted a study in a black and coloured dominated town of Bophelong in South Africa. The study was based on a household survey using questionnaires. A random sample of households was interviewed. A questionnaire was used to obtain the desired information. A total of 300 households were interviewed. Using the consumption expenditure approach, the study used a poverty line comprising food and non-food estimates per capita per month. The South Africa Statistics Bureau estimated that when consuming the kinds of foodstuff commonly available to low-income South Africans, it costs R 211($26.37) per person every month to satisfy a daily energy requirement of 2261 kilocalories. For non-food comprising; accommodation, electricity, clothing, and schooling for children, transport and medical services, amongst other things, the cost of such essential non-food items were estimated at R111 ($13.88) per capita per month. Therefore, the study used the sum of food and non-food expenditures as the poverty threshold. Thus, a poverty line of R322 was used, representing food and non-food expenditures of R211 and R111 respectively, per capita per month in 2000 prices (Statistics South Africa 2007). The study used a logistic regression with two different dependent variables of dichotomous nature. The households were classified as either poor or non-poor based on their per capita expenditure. The predictor variables were made up of a set of demographic and socioeconomic variables (age, education attainment, employment status, gender, marital status of household head, and the number of

people in a household). The results show that household size, age of the household head and the employment status of the household head significantly explain the variations in the likelihood of being poor. The age and employment status of the household head reduces the probability of being poor, whereas household size is associated with an increased probability of being poor. The strongest predictor of poverty status was the employment status of the household head. The gender of household head and marital status were less significant in determining poverty.

Ennin, Nyarko, Agyeman, Mettle and Nortey (2011), conducted a study on the trend analysis of the determinants of poverty in Ghana. The study used secondary data obtained from the office of Ghana Statistical Service, GSS (1995, 2000, 2008) for the 3rd, 4th and 5th rounds, respectively of the three consecutive rounds. The Ghana Living Standards Survey focuses on the households as a key socio-economic unit and provides valuable insights into living conditions in Ghana hence the need for the study. In all, a sample of 4552, 5998 and 8687 households were selected nationwide in each of the rounds respectively, with approximately 200, 300 and 580 enumeration areas respectively, stratified by urban/rural and ecological zones. The study categorized all the households into two groups (poor and non-poor) based on their total consumption expenditure. Ennin et al. (2011) estimated the probability of being poor conditional on the logistic distribution function. Binomial logistic regression model was used to find which of the nine explanatory variables sampled from the survey, significantly influence poverty. The study used the following explanatory variables; age of head of household, sex of head of household, education status of head of household, size of household, location of head of household, occupation of head of household, ecological zone, and access to health.

The dependent variable was the poverty status of the head of household (poor or non-poor). In terms of measurement of the variables, sex, education, location, occupation, access to health, and locality were considered binary variables while age and size of household were considered continuous variables. The study revealed that household size, ecological zone, locality and age of household head were significant determinants of poverty for all the years under consideration. However, access to health, occupation of head of household not engaged in agriculture and educational status were significant determinants of poverty for the 4th and 5th rounds. In terms of the trend analysis of poverty, the results also show that households in the savannah zone were becoming poorer and poorer every year. The study further revealed that rural households still remain the poorest relative to the urban population.

Konwar and Mazumder (2015), examined the economic, social and demographic determinants of rural poverty among the Mishing tribe in Dhemaji and Sivasagar districts of Assam in North East India. The study made use of primary data collected through household level questionnaire. The study randomly selected households from purposively sampled villages in each of the two districts. A total of 373 households were selected. The study used two econometric methods, namely, the OLS regression method and the binary Logit regression method on the potential determinants of rural poverty in terms of economic, social and demographic characteristics of the households. The dependent variable in the OLS regression method was the log of per capita consumption expenditure and the binary Logit regression method used the poverty status of the households, that is, whether a household was poor or non-poor. In terms of measurement, the study

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used 1 if Poor and 0 if non-Poor. The study estimated a log linear multivariate model to verify the effects of socio-economic and demographic variables on rural poverty of the Mishing tribe. The explanatory variables were; type of family, size of household, dependency ratio, sex ratio, age of head of household (years), number of income earners, mean years of schooling, health index, value of physical assets, landholding, place of residence and state of flood. For Dhemaji district, the results confirm that per-capita consumption expenditure was negatively and significantly correlated with dependency ratio and distance from nearest urban, but positively and significantly correlated with number of income earners, mean years of schooling, physical assets per household landholding per household, and livestock per household. In Sivasagar district, the results were similar to those in Dhemaji,

The estimates show that per-capita consumption expenditure was positively and significantly correlated with number of income earners, mean years of schooling, physical assets per household and landholding per household. The correlation coefficients of dependency ratio and distance from nearest urban area were significant with negative signs. Using the alternative logistic regression technique, the study reveals that in Dhemaji the signs of the coefficients of size of household, dependency ratio, occupation as agriculture and allied, distance from town, and flood were positive significant, signifying that these variables positively affected the probability of being poor. Also, the dependency ratio and size of household were positively significant showing that probability of being poor was high in case of the large families with high dependents. On the other hand, the signs of the coefficients of health of the households were negative and significant implying that sound health can reduce the poverty. In the case of Sivasagar district, it was evident that the probability of being poverty is high in case of high size of household, high

dependency ratio, high female-male ratio, occupation as agriculture and allied, remoteness or long distance from town to the village, and if the household was affected by flood.

In Thailand, Sakondhavat (2013) conducted a study to determine the underlying factors and processes that contribute to poverty dynamics, both in terms of the movement into and out of poverty, and the poverty persistence of rural households. The study was based on a survey of a two-wave panel data of 240 households that were originally interviewed in 1988, and a followed-up interview in 2009 for the purpose of longitudinal study. The key factors specifically explored in the study include households' characteristics and asset holdings. The study explored the dynamics of poverty by utilising the benefits of multidisciplinary approach in which quantitative analyses were integrated with qualitative research methods. The study argues that mixed method approach provides a richer insight of how rural households' economic, social and demographic characteristics have been associated with poverty dynamics.

A number of similar factors that influence households' poverty dynamics were identified in both quantitative and qualitative approaches. These include asset factors, demographic factors and employment factors. In terms of econometric analysis, the study adopted a multinomial logit and probit regression model. The results of the model suggest that the most significant determinants of poverty dynamics include demographics, education, land and employment. In terms of demographic factors, household size was more likely to be positively associated with chronic poverty. In addition to size, household composition was another

important attribute to poverty dynamics. If an increase in household size accompanies an increase in the number of working-age members, (for example, when children have grown up and started to work), households are less likely to remain in chronic poverty. The results from the model show that the number of working-age members in households is negatively associated with chronic poverty. Households with female heads were more likely to move into poverty. This suggests that changing the household head from male to female can lead to households becoming vulnerable to poverty. The study reveals that majority of female heads of rural households were widows, who normally become household heads at a very old age; therefore, there are fewer opportunities for them to participate in the labour market, which makes them particularly vulnerable to moving into poverty.

In Kenya, Otieno (2015) undertook a study to establish the key determinants of poverty. The survey was conducted in 1339 randomly collected clusters across all districts in Kenya. A total of about 13390 households were sampled. The unit of analysis was the household. The study used the 2005/6 Kenya Integrated Household Budget Survey data to undertake the task. Otieno (2015) used the consumption approach to the measurement of poverty on the basis that the consumption approach is more reliable and smoother across the rich and the poor (Republic of Kenya, 2007). The study considered the food consumption component and the non-food consumption component in deriving the overall poverty line. The study adapted both the food and overall poverty lines as reported in the Kenyan Welfare report of 2007 for the purposes of deriving the determinants of poverty. Otieno (2015) used consumption per capita as a measure of welfare instead of consumption per adult

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equivalent. The study used Logit models to derive the determinants of poverty. The total household consumption expenditure was divided by the size of the household. This gave the expenditure per capita. The expenditure per capita was then compared with the poverty line. Those households whose consumption per capita was less than the poverty line were considered poor and therefore represented a value of 1. On the other hand, households whose consumption per capita was more than the poverty line were considered non poor and therefore took a value of 0. Since poverty status was the dependent variable, it was therefore a binary dependent variable, taking a value of 1 for households that were poor and 0 for the non-poor households. The explanatory variables included; household size, marital status of the household head, gender, employment status, age, level of education, sector of the economy one is engaged in, area of residence (rural or urban), land size (acreage of land owned by a household for both livestock and crop farming), sanitary conditions, roads (time taken to travel to work as a proxy of road network), and water (time taken to reach the nearest water source as a proxy of accessibility to water). The study shows that poverty was determined by the household size, occupation, gender, marital status and level of education of household members. The study also shows that poverty was determined by the area of residence of a household (rural or urban) and the time taken to collect water as well as to travel to the place of work.

2.7.2   Constraints to Poverty Reduction

According to Jega (2010), Poverty reduction has been a major development challenge facing many developing countries. Jega (2010) posits that the global financial and economic crisis that originated from the United States of America in

the second half of 2007 and deepened in 2008 and 2009 contributed significantly in exacerbating the challenge of poverty reduction in Sub-Saharan Africa. It is emphasized that the poverty implication of such crisis arises mainly from the economic growth slowdown effect and its spillover to poverty-related variables such as employment and remittances. In terms of the growth-poverty nexus, economic growth has been hailed as the key condition for sustainable poverty reduction, Dollar and Kraay (2002). In spite of the close linkage between economic growth and poverty reduction, consensus seems to be emerging that economic policies that target growth alone are necessary but not sufficient to alleviate poverty for certain countries or regions in the developing world, Besley and Cord (2007). Fosu (2015), identifies the uneven distribution of the benefit of growth in many countries of Sub-Saharan Africa region as well as other developing regions, as a major cause of the persistence in poverty despite the high annual average GDP growth rates which even surpasses the population growth rates.

In Philippines, the Asian Development Bank (2009) undertook a study of poverty in relation to the causes, constraints and opportunities. The study examines the key areas that are relevant to poverty reduction, namely, increasing incomes, human capital, capacity, risk protection, and voice and empowerment in governance and institutions. It used the mixed method approach. Quantitatively, the study examined trends in poverty and regression analysis for poverty correlates. Qualitatively, the study used key informant interviews to assess the poverty situation as it relates to the overall development of the country. Additionally, the study organized a workshop to discuss the findings of the study, to get feedback from key stakeholders, and to identify concrete and actionable recommendations.

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The study used data compiled by the National Statistics Office (NSO) and the National Statistical Coordination Board (NSCB). The data was randomly collected from a sample of more than 40,000 households nationwide. The study reveals that the major constraints to both economic growth and poverty reduction were; limited access to economic opportunities such as education, health, infrastructure, finance, land, among others. The study also recognizes high levels of vulnerability to disasters for which relief and social programmes are woefully inadequate to benefit victims.

In South Africa, the World Bank (2018) carried out an assessment of the possible drivers and constraints to the eradication of poverty and income inequality. The study used consumption data from the Income and Expenditure Survey (IES) 2010/11 and the geographical coverage of the 2011 Population Census. Poverty estimates were calculated for all 234 municipalities in the country (World Bank, 2018). The study concludes that the critical constraints to poverty reduction were; high level of inequality of opportunity, (with the poor facing limited access to education, health, assets and essential infrastructure). Other constraints to poverty reduction revealed by the study included; high levels of unemployment and underemployment.

In Ghana, the World Bank (2015) conducted a study on the progress and challenges of poverty reduction. The analysis in the study was based on data of the Ghana Living Standards Survey (GLSS) produced by the Ghana Statistical Service (GSS). The GLSS is a multipurpose survey that collects detailed information on individual and household characteristics and on basic indicators of living standards. The GLSS

is based on a two-stage (non-stratified) sample design. The study used the 1999 poverty line. In spite of Ghana's success stories in reducing poverty and promoting shared prosperity, the study reveals the existence of major constraints to poverty reduction in the country. The three major constraints to poverty reduction in the country were; the growing inequality and polarization in household consumption, the large spatial disparities, and deteriorating macroeconomic environment. The study suggests that inequality in household consumption has widened considerably between 1998 and 2005. The consumption-share of the poorest quintile of the population also declined steadily between 1991 and 2005 from 6.8 percent to 5.7 percent, while the share of the top 20 increased slightly from 44.8 percent to 46.6 percent. Also, the study reveals two spatial trends; poverty is mainly a rural phenomenon and increasing concentration of poor people in the north of the country. The study further suggests that the country has suffered a number of serious external and internal macroeconomic shocks since 2012. Depreciation of the local currency (Ghana Cedi) relative to foreign ones, falling prices of cocoa, rapid increase in inflation, among other critical macroeconomic variables were considered as threats to economic prosperity.

Osakwe (2015), undertook a study on trade and challenges of poverty reduction in Africa. Using data from the UNCTAD database, the study concludes that the key constraints to poverty reduction in Africa were; lack of diversification, limited role of manufacturing in total output, weak infrastructure, poor access to finance. The study also suggests that the poor share of intra-regional exports and imports in Africa's total trade constitute a major challenge to poverty reduction in the bloc. Regarding exports, the share of intra-regional exports in Africa's total exports fell

marginally from 12.2 percent in the period 1995-1999 to 11.4 percent in the period 2008-2012. These numbers are quite low compared to what was observed in other regions of the world. In Europe, Asia and Latin America for example the average share of intra-regional exports in total exports was 68.9, 51.3 and 20.5 percent respectively in the period 2008-2012. Tariff and non-tariff barriers are some of the factors that have contributed to the weak intra-regional trade performance of Africa (Osakwe, 2015).

In a study undertaken on agricultural development in the northern savannah of Ghana, Wood (2013) found that the major challenges to poverty reduction in the northern sector of Ghana are; socioeconomic issues, such as inadequate education and health care, fewer economic opportunities, poor infrastructure and government corruption. The study further reveals that environmental issues, such as soil infertility and degradation, harsh and erratic climatic conditions and pest pressures create additional challenges to increasing agricultural production and poverty reduction.

2.8   Lessons Learnt from the Review of Literature

From the review of empirical studies, it is evident that an appreciable level of understanding of the socio-economic factors influencing poverty and the constraints to poverty reduction are crucial requirements for the drawing and implementation of policy decisions aimed at reducing the poverty menace. Understanding poverty characteristic is a main point for designing an effective poverty reduction strategy (Sugiharti and Ranggi, 2017). The review shows that several factors influence poverty under varying socio-economic and political conditions. Studies conducted

by Ennin et al. (2011), Sakondhavat (2013), Seckhampu (2013), Otieno (2015), Konwar & Mozumder (2015), Raul (2015), Mood & Johnson (2015), Sugiharti & Ranggi (2017) and Mduduzi & Talent (2017) have identified several factors influencing poverty. The determinants of poverty revealed by the studies include; gender of head of household, size of household, dependency ratio, geographic zone (rural or urban), occupation (agric or non-agric), education level of household, marital status of head of household, age of head of household, health status of household members, and asset ownership. Regarding constraints to poverty reduction, a number of studies have revealed that the major challenges to poverty reduction are; poor economic growth/ deteriorating macroeconomic environment, uneven distribution of gains of economic growth, high levels of unemployment, spatial disparities, limited access of poor people to economic opportunities and internal and external shocks; Dollar & Kraay (2002), Besley & Cord (2007), Asian Development Bank (2009), Fosu (2015), World Bank (2015), Osakwe (2015) and World Bank (2018).

The studies reviewed have used several models in modeling the determinants of poverty and measuring poverty in various ways. For example, Mduduzi and Talent (2017) applied the probit estimation model, Singh et al (2013) estimated a Probit model, Xhafaj and Nurja (2014) used the linear log regression model and the logistic regression model, Spaho (2014) used a log-linear regression model and a logistic regression model. Mood and Johnson (2015) and Seckampu (2013) used logistic regression model, Raul (2015) employed different regression techniques to explore poverty in Paraguay. The regression types used were: i) a standard linear regression on household income per capita, ii) a binomial logit model and iii) an

ordered logit model. Sugiharti & Ranggi (2017) used a binomial logistic regression model.

In terms of research design, all the empirical studies reviewed used mixed method design.

The Lessons learned from combining the quantitative and qualitative approaches in the empirical studies will guide this study to enlighten the understanding of poverty dynamics. The implications of combining these two approaches in this study will improve the level of understanding and contribute to the advancement of applying multidisciplinary approaches to the study of poverty dynamics.

Data for most of the empirical studies reviewed were obtained from survey of households. Representative samples of individuals and households were randomly selected (Mduduzi and Talent, 2017; Xhafaj and Nurja, 2014; Raul, 2015).

2.9   Conceptual Framework of Poverty Reduction

The concept of 'sustainable rural livelihoods' is increasingly central to the debate about poverty reduction, rural development and environmental management. The sustainable livelihood framework shows how, in different contexts, poverty reduction, rural development and sustainable livelihoods are achieved through access to a range of livelihood resources (natural, economic, human, and social capitals) which are combined in the pursuit of different livelihood strategies (agricultural intensification or extensification livelihood diversification and migration). Central to the framework is the analysis of the range of formal and

informal organizational and institutional factors that influence sustainable livelihood and poverty reduction outcomes (Scoones, 1998).

According to Chambers and Conway (1992), livelihood comprises the capabilities, assets (including both material and social resources) and activities required for a means of living. A livelihood is sustainable when it can cope with and recover from stress and shocks, maintain or enhance its capabilities and assets, while not undermining the natural resource base. Five key elements can be recognized from the definition. The first three elements focus on livelihoods, linking concerns over work and employment with poverty reduction and broader issues of adequacy, security, well-being and capability. The last two elements add sustainability dimension, looking in turn, at the resilience of livelihoods and the natural resource base on which, in part, they depend.

Three broad clusters of livelihood strategies are identified from the sustainable livelihood framework, namely, agricultural intensification/extensification, livelihood diversification and migration. Thus, rural people either gain more of their livelihood from agriculture (including crop cultivation, livestock rearing, aquaculture, forestry etc.) through processes of intensification (more land per unit area through capital investments or increase in labour inputs or extensification (more land under cultivation), or they diversify to a range of off-farm income earning activities or they move elsewhere to seek livelihood, either temporarily or permanently or they pursue a combination of strategies (Scoones, 1998).

Institutions refer to structures and processes which mediate the complex and highly differentiated process of achieving a sustainable livelihood. Institutions may thus be both formal and informal. Organisations are synonymous to institutions. Understanding of institutions and organisations is key to designing intervention programmes to reduce poverty and improve livelihood outcomes.

Fig 2.3: Sustainable Rural Livelihoods Framework
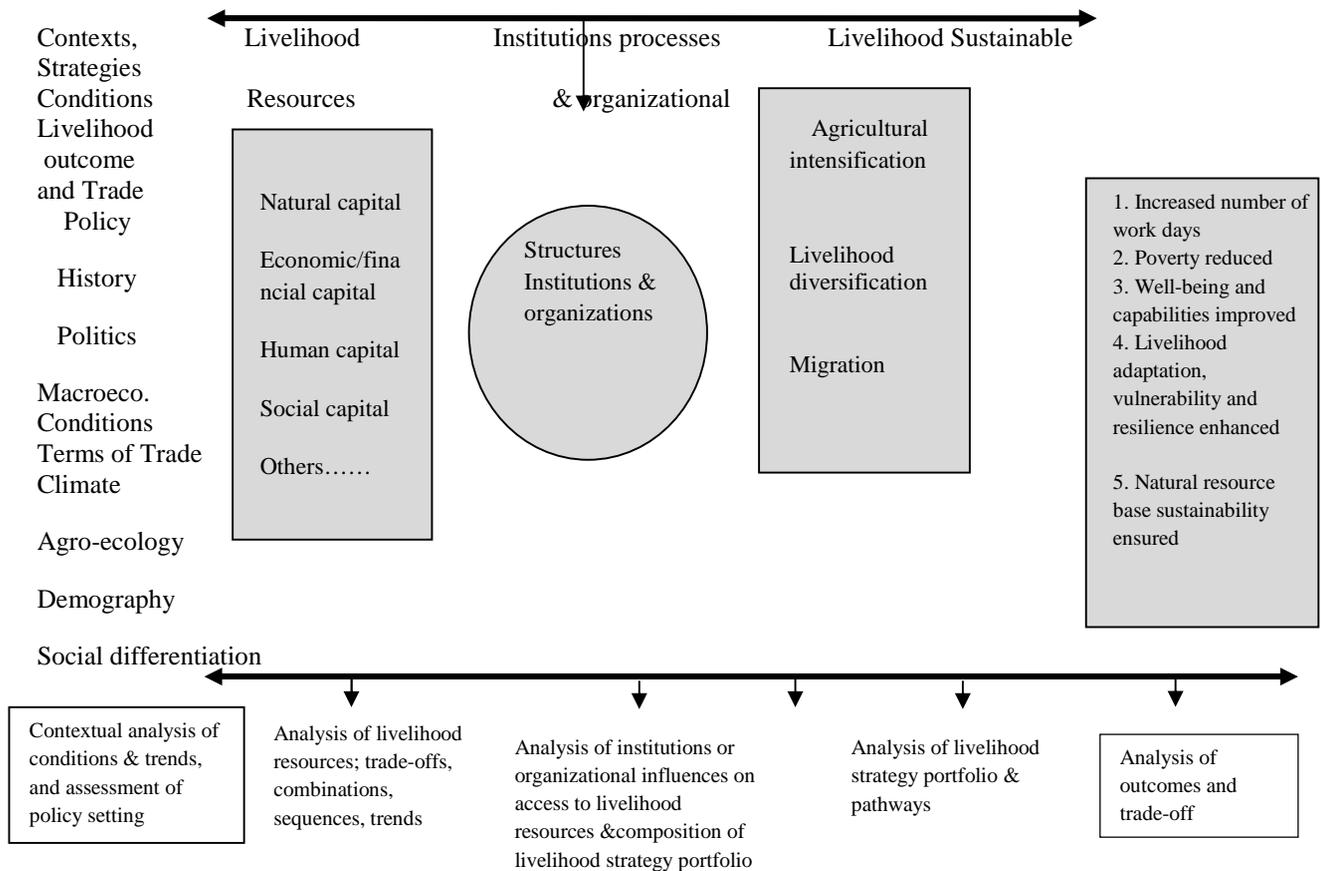
Source: Adopted from Scoones (1998)

On the basis of the linkages established in the Sustainable Livelihood Framework between the livelihood resources, the livelihood strategies (portfolio pathways) and the institutions & organizations in the fight against poverty, the following Conceptual Framework is constructed to guide the study. The conceptual framework has been developed from the literature review to serve as guide on the possible variables to select for the analyses.

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Figure 2.3: Conceptual Framework of Poverty

Socio-Economic Factors

- Characteristics: Age, gender, marital status, family size of labour force
- Level of Education
- Farm experience
- Access to assistance
- Access to farm land
- Farming system

Constraints to Poverty Reduction

- Climatic conditions
- Poor infrastructure
- Rural urban migration
- Market volatility
- Administrative Bureaucracy
- Inadequate financial capital
- Limited access to opportunities
- Deteriorating macroeconomic environment

Livelihood Portfolios

- Agricultural Intervention
- Livelihood Development
- Migration

Current levels of poverty

CSOs Policy Investment

- Capacity Building
- Microfinance
- Agricultural service of food security
- Humanitarian & Relief Services
- Health and Nutrition
- Peace Building
- Women's rights and governance

Government Policy Intervention

- Capacity Building
- Agricultural Support
- Infrastructural Development
- Primary Health Care

Reduced poverty

Source: Author's own construct (2017)

The conceptual framework shows the interactive process through which the several determining factors of poverty alongside the constraints to poverty reduction can possibly be offset by policy interventions. This study focuses more on the constraints to poverty reduction amid influence of policy interventions of government and civil society organisations as shown in the framework. Effective policy interventions are expected to translate to reduction in poverty and improved wellbeing of the poor people. The various measures employed by government and civil society organisations to reduce poverty are shown in the framework. The framework further shows the livelihood portfolios of the rural farmers with agricultural intensification as a dominant economic activity in the study area.

2.10   Chapter Summary

The review of empirical and theoretical literature in this chapter provides insight on the various socio-economic and political factors influencing poverty in different parts of the world. Poverty alleviation programmes of successive governments and non-governmental organisation in the Northern Region and the country at large were explored.

Different approaches to measurement of poverty were also considered. The sustainable livelihood framework was adopted to establish the fundamental relationships between rural resources and livelihoods. Three broad clusters of livelihood strategies were identified from the sustainable livelihood framework, namely, agricultural intensification/extensification, livelihood diversification and migration. Thus, rural people either gain more of their livelihood from agriculture (including crop cultivation, livestock rearing, aquaculture, forestry etc.) through

processes of intensification (more land per unit area through capital investments or increase in labour inputs or extensification (more land under cultivation), or they diversify to a range of off-farm income earning activities or they move elsewhere to seek livelihood, either temporarily or permanently or they pursue a combination of strategies (Scoones, 1998).

From the literature reviewed, it can be emphasized that a clear understanding of the socio-economic factors influencing poverty is quite critical for any policy formulation and implementation. The review shows that the socio-economic factors determining poverty in different parts of the world include: household size, level of education, location/residence (rural/urban), agricultural land size, gender, employment status, age, availability of assistance, rate of economic growth etc. Different variables may apply to different socio-economic conditions in the country. Though some of the variables were tested outside Ghana they may yield same or similar results in Northern Region of Ghana. The relevance of local solutions to the age-old problem of poverty and vulnerability has been adequately highlighted.

The review also sheds light on the different models used by different scholars to evaluate poverty. Mwabu et al. (2000) used discrete and continuous-choice based regressions to model poverty. They used total expenditure, total expenditure gap and the square of the gap as dependent variables. Logit and ordered logit models were also used by Mwabu et al. (2001) with several dependent variables in different categories. On the other hand, Oyugi (2000) used a probit model on discrete and continuous indicators of poverty with calorie consumption as a measure of poverty. Mwabu et al. (2000) justified the use of the discrete and continuous choice-based

regression approach as follows: that the commonly used logit/probit model involves unnecessary loss of data in converting household expenditure data into binary variables. Notwithstanding the simplicity of their model specification, it suffers an inherent weakness of the assumption that consumption expenditures are negatively related with absolute poverty at all expenditure levels. Thus, increasing levels of expenditures of households that are already above the poverty threshold might not necessarily affect levels of poverty. In spite of the weakness, nonetheless the approach is widely in use and the current study makes use of same.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1   Introduction

This chapter discusses the profile of the selected study districts and justification of the methodological processes adopted in this study in order to meet the research aims and objectives established in Chapter 1. Thematic areas considered in this chapter include; geography and climatic conditions, worldviews of the people, political administration, economy and living conditions, research design, justification for the use of mixed method, sampling procedures, sources and methods of data gathering, data processing and analysis and model specification.

3.2   An Overview of the Selected Study District

3.2.1   Savelugu-Nanton District

The Savelugu-Nanton district was carved out of the Western Dagomba District Council under the PNDC Law 207 in 1988. In March 2012, the Assembly was up-graded to a Municipal status. The district is located at the northern part of the Northern Region of Ghana. It shares boundaries with West Mamprusi to the North, Karaga to the East, Kumbungu to the West and Tamale Metropolitan Assembly to the South (GSS, 2014). The district is predominantly Dagombas (88.4%) and Frafra (nearly one percent). The other ethnic groups are Mampurises, Ewes and Gonjas. Islam is dominant religion, representing (95.4%) beside Christianity and other religions. The district has two constituencies; Savelugu and Nanton, with six Area Councils. There are 10 decentralized departments in the assembly. The district is located in the Savanna woodland which could sustain large scale livestock farming, as well as the cultivation of food crops such as rice, groundnuts, yams, cassava,

maize, cowpea and sorghum (GSS, 2014). The district is blessed with vast arable land with potential for both livestock and crop production. The district is, however, faced with unfavourable natural environmental conditions. There is little tree-cover, resulting in harsh harmattan seasons and its attendant bushfires resulting from the activities of farmers and hunters (GSS, 2014).

Majority of the people in the district are engaged in the production of food crops at subsistent level. Cash crop production is very minimal and includes shea nut, soya beans and cotton. Food crops produced include groundnuts, maize, millet, guinea corn, cassava, yam and cowpea. Agro-processing is generally carried out by traditional methods on very small-scale. There is also a large plantation of grafted mangoes at Gushie, cultivated by ITFC which provides employment for a number of people in the area. Livestock reared on a small scale in the district include animals such as cattle, sheep, goat and fowls (GSS, 2014).

3.2.2   Bunkpurugu Yunyoo District

The Bunkpurugu-Yonyoo District was established by Legislative Instrument (C.I) 1748 in August 2004 as part of the government's efforts to further decentralize governance. Bunkpurugu is the administrative capital of the District. The District is located at the north-eastern corner of the Northern Region of Ghana. It shares boundaries in the North with the Garu-Tempane, to the East with Togo, West with East Mamprusi and to the South with Gushiegu and Chereponi Districts (GSS, 2014). The District lies in the tropical continental belt western margin and experiences a single rainfall regime in April to October after which it comes under the influence of the tropical continental air masses. The mean annual rainfall is

between 100mm to 115mm with an annual range of temperature of between 300C and 400C.

The White Volta enters the District from the north-east and serves as the boundary between the District and the Garu/Tempane District. The District is a heterogeneous society with many ethnic groups and religions. The major ethnic groups in the District are Bimobas, Kokombas (Kombas) and Mamprusis who speak Moar, Komba and Mampruli respectively. The major religious groups are traditional and Christian. According to GSS (2014), the main occupation of the population in the District is agriculture, but potential also exists for agro-industries such as processing of groundnuts, pito brewing, shea butter extraction and tobacco making. Crop farming is perceived as the highest source of income for both males and females in all the communities. Trade in non-agricultural produce is the second most important income earning activity of men while women depend on livestock-rearing as the next major income-earning activity. The District produces a wide range of food crops. The food crops include cereals such as maize, rice, millet, sorghum, legumes like groundnuts, bambara beans, and soya beans (GSS, 2014). Limestone and dolomite deposits have been discovered in the District, and these are found in commercial quantities and suitable for the production of cement and quick line. Limestone deposits are estimated at 15 million metric tons while dolomite deposits are estimated at 20-30 million metric tons (GSS, 2014).

3.2.3 Nanumba North District

The Nanumba North District is one of the twenty-six districts in the Northern Region of Ghana. It was created as a separate district in 2004 under LI 1754 when

the then Nanumba District was split into two, North and South, with an area of 2260.8 sq/km. It is found in the eastern part of the Northern Region. The district shares boundaries with East Gonja to the west, Yendi Municipal to the north. To the east, it shares its boundary with Zabzugu, the south with Kpandai and to the south east the Nanumba South Districts. The administrative district capital is Bimbilla (GSS, 2014). The District lies entirely in the Tropical Continental climatic zone, characterized by high temperatures throughout the year. Temperatures range from 29º C to 41ºC. Two major rivers (the Oti and Daka) and numerous streams drain the District. The District has a heterogeneous population in terms of ethnicity but is populated by two major ethnic groups, the Konkonba (60.6%) and Nanumba (31.0%) and a few other minority tribes, including the Chokosis (1.3%). Major languages spoken in the District are Nanungli and Lekpakpan (GSS, 2014). The Economic potential of the district lies in its vast arable land with a huge agricultural investment potential. The District is predominantly agrarian with (78.6%) of the people engaged in the agriculture and forestry sector (2010 PHC). Out of the total land area of 173,459 hectares in the District, about 130,094 hectares representing 75% are agricultural lands. However, only 46,566 hectares representing 28% is under cultivation. There is currently no area under irrigation despite the fact that two major rivers; Oti and Daka run through the district. The district also has some valleys such as the Kaleogu and Sabonjida for commercial rice production, which are under-utilized. Crops grown are roots and tubers, cereals, legumes and tree crops such as teak and cashew nuts. Animal rearing including poultry keeping is an integral part of the economic activity of every household (GSS, 2014).

3.2.4   East Gonja District

The East Gonja District is located at the South-eastern section of the Northern Region of Ghana. The district shares boundaries with the Mion District and the Tamale Metropolitan Assembly to the North, Central Gonja District to the West, Nanumba-North, Nanumba-South and Kpandai Districts to the East, and the Brong-Ahafo Region to the South. The total land area of the district is 8,340.10 square kilometres, occupying about 11.95 percent of the landmass of the Northern Region making it the largest district in the country (GSS,2014). The District lies in the Tropical Continental climatic zone. Temperatures are fairly high ranging between 29oC and 40oC. Maximum temperature is usually recorded in April, towards the end of the dry season with minimum temperatures recorded from December to January, during the Harmattan period. The area experiences a single rainy season (May to October) and a long dry season (November to March/April). Average annual rainfall varies between 1,112.7 mm and 1,734.6mm (GSS, 2014). The district has a number of large water bodies that flow throughout the district. These include the Volta Lake and the Dakar River both of which run across the district. The district falls within the sub-basins of the Black and White Volta. Other rivers and seasonal tributaries form a network with some important valleys such as the, Katanga and Chambugu which are suitable for rice farming. Salaga, the district capital was the hub of the slave trade in the West African Sub-Region and had one of the biggest slave markets in Ghana and the sub-Saharan region as a whole (GSS, 2014). The district has a total population of 135,450 with the major ethnic groups being the Guans, the mole-Dagbani and the Gurma. The other minority ethnic groups are the Ewe, the Akan, and the Ga-Adangbe (2010 PHC). Agriculture is the main economy of the people. The common crops cultivated in the district include

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yam, maize, millet, rice, cassava and groundnuts. The main cash crop produced is shea nut, which is grown in the wild.

3.2.5   West Mamprusi District

The West Mamprusi District was created in 1988 under Legislative Instrument (LI) 1448 which was later in 2012 replaced with LI 2061 following the creation of the Mamprugu Moagduri District. The district has a total land size area of 2610.44 sq km and shares boundaries with East Mamprusi and Gushiegu Districts to the east; North Gonja, Savelugu and Kumbungu Districts to the south; Builsa, Kassena-Nankana East Districts and Bolgatanga municipal (Upper East Region) to the north and; to the west, Mamprusi Moagduri District (GSS, 2014).

The District is one of the 26 administrative assemblies in the Northern Region of Ghana with Walewale as its capital. Administratively, the district lies within the Northern Region, although it has strong economic and functional linkages with some major settlements in the Upper East Region like Bolgatanga and Fumbisi (GSS, 2014). The District has a population of 121,117 (GSS, 2010 PHC). About 50.8 percent of the district's population is females while 49.2 are males. There are 86 communities in the District including some fishing and farm camps. The District is predominantly rural, with a population of 76,503 living in rural settlements (GSS, 2014). Urbanization in the District is centered in Walewale, which is the dominant urban centre with many social amenities. The district is characterized by a single rainy season, which starts in late April with little rainfall, rising to its peak in July-August and declining sharply and coming to a complete halt in October-November. Annual rainfall ranges between 950mm - 1,200mm (GSS, 2014). The West

Mamprusi District is largely inhabited by the Mamprusi who constitute about 75 percent of the total population of the district. This dominant ethnic group coexists harmoniously with minor groups such as the Builsa (4.7%), Frafra (2.7%), Kasena (2.2%), the Dagomba (1.8%), and some other ethnic groups in Ghana (2010 PHC, GSS). Agriculture is the main occupation of the people of the district. Crop production in the district is on a subsistence basis where small farm holders produce for family upkeep and occasional sale. There are, however, some forms of commercial farming. The major crops grown in the district are maize, millet, rice, groundnuts, beans, sorghum, bambara beans and yam. These crops are grown during the rainy season. Dry season farming is done along the banks of the White Volta during which crops such as tomatoes, onions, soybeans, pepper and tobacco are cultivated. Animals such as cattle, goats and sheep are the most reared in the district (GSS, 2014).

3.3   Approaches to Research

According to Brannen (2005), there are three major approaches to research, namely qualitative, quantitative or mixed method. The mixed method approach is also termed as the triangulation. Both quantitative and qualitative approaches are characterised by epistemological and ontological orientations that are in consonance with the world view of their actors (See Table 3.1). One major difference between the qualitative and the quantitative approaches is their theoretical orientation in relation to research. In simplistic terms, the quantitative method is deductive; it tests theory and, hence, the research originates in theory. Conversely, qualitative methods generate theory and, thus, theory is derived from the outcome of research (Bryman and Bell, 2007). Another significant difference between quantitative and

qualitative approaches is that quantitative methods employ logical positivism and experimental approaches involving the application of quantitative measures to test hypothetical generalisations and to establish causal relationships between two or more variables (Denzin and Lincoln, 1998; Golafshani, 2003; Hoepfl, 1997). Qualitative research, however, refers to any research findings that are obtained without the use of statistical procedures or other means of quantification (Strauss and Corbin, 1990).

3.3.1 Research Paradigms and philosophies

Deshpande (1983) defines a paradigm as 'a set of linked assumptions about the world which is shared by a community of scientists investigating the world'. Research paradigms give direction and reflect the philosophical assumptions about the research processes and techniques to be used. The limit of research regarding 'what falls within and outside' the confines of the research are defined by the paradigms (Guba and Lincoln, 1994; Denzin and Lincoln, 2000). There exist four major categories; positivism, critical theory, constructivism/interpretivism and realism (Guba and Lincoln, 1994; Healy and Perry, 2000). The philosophical assumptions which support and give true meaning to research paradigms are ontology and epistemology (Guba and Lincoln 1994; Ponterotto, 2005).

Ontology deals with reality. It is concerned with 'what' knowledge is and with assumptions about the nature of 'reality and being' (Ponterotto, 2005; Pathirage et al., 2008). Ontology is concerned with what can be known about that reality and whether reality is of an 'objective' nature or a product of a mental construct and, thus, subjective (Guba and Lincoln, 1994; Ponterotto, 2005; Bryman, 2012). According to Bryman and Bell (2007), social facts can be considered as objective

entities, external to social actors or as social constructs from the perceptions and actions of social actors.

Epistemology on the other hand is concerned with the nature of the relationship between the 'knower' (the research unit of study) and the 'would-be knower' (the researcher/investigator) (Guba and Lincoln, 1994; Ponterotto, 200; Bryman, 2012). The major concern of epistemology is the nature of knowledge and how one develops knowledge. It deals with whether the social world should be investigated through the methods of the natural sciences or from the perspectives of social sciences (Bahari, 2012).

Positivism is a philosophical realism which is anchored on the natural sciences deductive method of investigation (McGrath and Johnson, 2003; Healy and Perry 2000; Cacioppo, Semin and Berntson, 2004; Ponterotto, 2005). Anchored on realist ontology, positivism holds the tenets of objectivity and being value-free. It holds that knowledge is only obtainable through the gathering of data, the testing of theories and the formulation of objective and value-free laws. Positivists believe there are 'social facts with an objective reality' external to social actors (Benton and Craib, 2001; Snape and Spencer, 2007; Bryman and Bell, 2007, 2012; Bahari, 2012). In spite of its relevance, positivism has been criticised on a number of grounds. Firstly, researchers have questioned the notion of the unbiased claim of realism and truth regarding the phenomena being investigated. There is the notion that every investigation is inherently influenced by the investigator's/researcher bias (Merriam, 2009; Tribe, 2009). Secondly, it is argued that positivism is not

appropriate in social scientific contexts that deal with human beings and their 'real-life experiences' (Healy and Perry, 2000).

Realism is associated with the objectivity of the researcher. Objectivity is a fundamental requirement in this paradigm. Critical realists believe in reality which exists outside of the researcher; hence, reality is independent of the researcher's mind (Sobh and Perry, 2006). Although the reality is discoverable through research, it may require triangulation (Guba and Lincoln, 1994; Sobh and Perry, 2006). In spite of the strong believe in reality, the critical realists appreciate the shortcomings associated with the research process and therefore admit that research findings which are socially generated through the interaction between the researcher and the research participants cannot be absolutely true. Methodologically the paradigm adopts 'critical multiplicity' (Guba and Lincoln, 1994) as the researcher is value-aware and, therefore, has to triangulate perceptions being collected from varied sources using mixed methods (Guba and Lincoln, 1994; Healy and Perry, 2000; Sobh and Perry, 2006). Realism paradigm endorses generalisation to a population as positivists strive to do (Yin 1989).

Interpretivists argue that human behaviours are complex and cannot be subjected to scientific principles (Bryman and Bell, 2012; Snape and Spencer, 2007). It is argued that researchers play the role of 'social actors'. As 'social actors' the researchers provide interpretations base on their own perspectives, therefore, research outcomes reflect the researcher's viewpoint and beliefs (Suander et al*.,* 2007; 2012; Bahari, 2012). The interpretivists apply subjectivist epistemological position since reality is constructed out of the interaction between the researcher and research participant(s).

The research paradigms and their elements are explained in Table 3.1

Table 3.1 Scientific paradigms and their elements

Table 3.1: Categories of scientific paradigms and their elements

Element	Question	Positivism	Critical theory	Constructivism	Realism
Ontology *The researcher view of the nature of reality or being*	What is the nature of reality?	Reality is real and apprehensible	'Virtual' reality shaped by social, economic, ethnic, political, cultural, and gender values, crystalised over time	Multiple local and specific 'constructed realities	Reality is 'real' but only imperfectly and probabilistically apprehensible
Epistemology Researcher view of what constitutes acceptable knowledge	What counts as knowledge? How are knowledge claim justified? What is the relationship between the researcher and that being researched?	Objectivist: findings true	Subjectivist: value mediated findings	Subjectivist: created findings	Modified objectivist: findings probably true
Common methodologies Techniques most often used	What is the process of research?	Experiments/surveys: verification of hypothesis, chiefly quantitative methods	Dialogic/dialectical: researcher is a 'transformative intellectual' who changes the social world within which participants live	Hermeneutical/dialectical: researcher is a 'passionate participant' within the world being investigated	Case studies/convergent interviewing: triangulation, interpretation of research issues by qualitative and by some quantitative methods such as structural equation modeling

Source: Adapted from Perry, Alizadeh and Riege (1997:547) based on Guba and Lincoln (1994)

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Qualitative research adopts interpretivism, an epistemology that requires that researchers should understand the differences between individuals in their role as social investigators (Saunders et al., 2007; Bahari, 2012). Bryman and Bell (2007), posit that quantitative methods have integrated the 'practices and norms of the natural sciences' and at the same time accepting the 'view of social reality as an external objective reality'. In contrast qualitative researchers view 'social reality as a constantly shifting emergent property of the individual's creation' (Bryman and Bell, 2007: 28)

According to Mugender and Mugender (2003), the qualitative research is advantageous in that it permits the researcher to go beyond the statistical results usually reported in the quantitative research. He reiterated that human behaviour is best explained using qualitative research and human behaviour which cannot be interrogated by observation such as human attitude and feeling are best investigated using quantitative approaches.

The use of qualitative analysis as opposed to quantitative approach often seeks to measure the potential impacts of intervention programs, mechanisms of such impacts and the extent of the program benefits to the targeted beneficiaries. Whereas, quantitative results can be generalized, the qualitative results may not be. Quantitative approach is vital in addressing the problems of statistical bias in terms of attribution of the impacts of intervention programs. Nevertheless, the qualitative approach is capable of generating relevant data critical for the understanding of the relevance or otherwise of any intervention program.

According to Babbie (2006), it is much better to blend qualitative and quantitative methods especially when some objectives of the study are better addressed using qualitative while others are best assessed using quantitative method. The blend of the qualitative and quantitative methods minimises possible biases associated with each method due to their complementary roles. Without doubt, a mixed-method is useful in providing a clearer picture of the impacts of any intervention program.

3.4 Justification for the Use of Mixed Method

Most existing literature on poverty dynamics has tended to largely rely on a quantitative approach, using longitudinal or panel household survey datasets in which poverty has been conceptualised based on income or expenditure (Baulch & Hoddinott, 2000; Lawson et al., 2003). Quantitative studies are informative and helpful for identifying which households move into and out of poverty. Nonetheless reliance on panel survey data generated by quantitative means alone poses limitations on what can be learned from the dynamic process, as well as the complex and multidimensional aspects of poverty (Sakondhavat, 2013).

Another limitation of using only quantitative approach relates to how panel surveys on poverty in most developing countries cover short time periods with limited scope. Such panel studies cannot provide information about the poverty status of households in the periods between the years they are observed. Although the use of quantitative technique in studies of poverty have remained dominant, there has also been an increased use of qualitative and participatory approaches to poverty research (see Shaffer, 2002, Krishna, 2007, Kristjanson et al., 2009, De Weerdt, 2010).

Due to the limitations of quantitative and qualitative approaches, earlier studies on poverty which adopted either quantitative or qualitative methods were unable to perfectly capture the complexity and multidimensionality of poverty. The quantitative approach provides standardised measures of poverty and produces an econometric analysis that further enables inferences of correlation and causality between poverty and explanatory variables. Representative sample sizes also ensure that findings are generalised among the wider population. However, some problems still persist in the quantitative approach in terms of measuring poverty or measurement errors (Sakondhavat, 2013).

Apart from the problem of mistakes in survey design and data processing errors, another two major problems are the identification of the weight to attach to aspects of household welfare that are not revealed by market behaviour (such as welfare effect of family characteristics and public goods) and the determination of the reference level of welfare above which people are considered not to be poor or on the poverty line (Ravillion, 2003). Sakondhavat (2013) stresses further that quantitative methods also tend to perform less well in explaining certain behaviourial traits, particularly when explanations involve issues that are hard to quantify, such as beliefs, attitudes and perceptions, social and political relationships, or the institutional context. The explanations about such behaviourial traits are better addressed by adopting the qualitative approach.

Combining quantitative and qualitative approaches provides a better understanding of the complexity of poverty. According to Sakondhavat (2013), the combined methods in poverty research have been increasingly promoted on the grounds that

they capture the strengths of the quantitative approach in identifying and aggregating poverty and understanding the correlation and characteristics of the poor, as well as the strengths of the qualitative approach in providing a richer definition of poverty, improving the survey design, and gaining more insights into unanticipated processes and contextual factors underlying different categories of the poor that are not easily captured by quantitative studies. A combination of quantitative and qualitative methods compensates for the weaknesses of each approach, and each method provides more value when it is used in a mixed-method design, providing more coherent, reliable, and useful information and conclusions than those derived from single-method studies (Adato, 2011). The complementary roles of quantitative and qualitative approaches are extensively reported by Barrett, 2005b, Lawson et al., 2006, Adato et al., 2007, Lawson et al., 2007, Hulme, 2007, Davis and Baulch, 2009, Addison et al., 2009, DeWeerdt, 2010). The relevance of the mixed method in poverty studies has been underscored by a number of scholars (see, Ennin et al. (2011), Sakondhavat (2013), Seckhampu (2013), Otieno (2015), Konwar & Mozumder (2015), Raul (2015), Mood & Johnson (2015), Sugiharti & Ranggi (2017) and Mduduzi & Talent (2017).

Carvalho & White (1997) outlined the strengths and weaknesses of each approach, which are summarised in Table 3.2.

Table 3.2: Strengths and Weaknesses of Quantitative and Qualitative Approaches

	Quantitative	Qualitative
Strengths	-Makes aggregate and generalisation possible -Provides results with measurable reliability -Allows simulations of several policy options - Identifies correlations and causality	- Richer definition of poverty -Elicits accurate and deeper responses to certain questions -Explains causal process and focuses on contextual factors and people's experiences
Weaknesses	- Generates sampling and non-sampling errors which means that the sampling frame may miss significant members of the population - Measures errors by identifying problems and references problems of determining welfare level - Misses what is not easily quantifiable and has a typically closed form - Fails to capture intra-household dynamics - High cost and the length of time	- Inability to generalise beyond the research area - Difficult to verify information - Insufficiently standardised to permit systematic aggregation and comparison - Lacks the quality of simple verifiability to trace back to the evidence

Source: Carvalho and White (1997), Appleton and Booth (2001)

According Carvalho and White (1997), there are three potential ways in which qualitative and quantitative methods can be combined for a poverty analysis. The three major ways to combine both methods are described below in Table 3.3.

Table 3.3: Combining Quantitative and Qualitative Approaches in Poverty Analysis

There are different forms in which the quantitative and qualitative approaches can be combined (Carvalho and White, 1997).

(i) *Methodological integration* of the two methodologies in which that the output of one approach feeds into the design of another approach. This includes, for example, using survey data to identify representative individuals/ communities to be engaged by subsequent qualitative work or using participatory research to develop survey questionnaires.

(ii) *Examining, explaining, confirming, refuting, and/ or enriching findings* from one approach with that of the other. The results of different approaches conducted separately are put together in order to crosscheck or triangulate each other.

☐ "Explaining" entails the use of participatory research to identify unanticipated results from survey findings.

☐ "Confirming or refuting" entails the use of participatory research to ascertain the validity of survey-based research (or vice-versa);

☐ "Enriching" entails the use of participatory research to obtain information about variables and processes not obtained from questionnaire surveys;

(iii) *Merging findings* from the two approaches into one set of policy recommendations. Each approach is used independently but their findings can be used to enrich each other.

Source: Carvalho and White (1997)

3.5   Study Design

To address the complex issues of poverty, cross-sectional design and exploratory procedure were employed to gain a wider view not only on the poverty situation in northern Ghana but also the effects of socio-economic factors on poverty reduction strategies in the study area. According to Fayorsey (2010), cross- sectional design entails the collection of data on more than one case at a particular time without

intervals. It is associated with the collection of quantifiable data related to variables for purposes of examining patterns of associations. The author further noted that exploratory procedure is often possible to use when the real purpose of an issue is unclear. Cross-sectional design which entails the collection of volumes of data on more than a single case at a time is often used in quantitative research but also allows for triangulation of both qualitative and quantitative methods. Babbie (2006) reiterated that a cross-sectional design is much suitable especially, when "how" and "why" questions need to be addressed. Furthermore, Babbie (2006) stressed that a cross-sectional design should be employed in instances where the researcher has little or no control of the events and when the research is focused on contemporary issues within a locality or an organisation. These and many other strengths of the cross-sectional design make its adoption necessary for this study of poverty and its associated multidimensional issues.

3.6   Study Population

The study population was made up of smallholder farmers in the five selected districts of the northern region of Ghana. The total number of farmers in the five selected districts stood at 188, 275 (MoFA, 2016). The break-down of the farmer population in the selected districts is shown in Table 3.4.

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Table 3.4: Farmer Population in the Selected Districts

District	Household Members Engaged in Agriculture (farmers)		
	Total	**Male**	**Female**
Savelugu/Nanton	**36,196**	23,934	12,262
Bunkpurugu/Yunyoo	**45,890**	23,675	22,215
East Gonja	**34,459**	21,385	13,074
Nanumba North	**37,344**	22,643	14,701
West Mamprusi	**34,386**	20,353	14,033
Total	**188,275**	111,990	76285

Source: SRID, MoFA (2016)

3.7   Sample Design

The sample refers to the study sites and participants. These were selected using multiple sampling methods (multi-stage sampling strategy). It involves selecting a sample in at least two stages. It is generally used when it is costly or impossible to form a list of all the units in the target population. When the target population is massive, the standard sampling procedure (random sampling) becomes unfeasible hence the use of other forms of sampling becomes necessary. The multi-stage sampling strategy was a preferred technique in this study because the population of the study was divisible into distinct groups. According to Damon (2011), the multi-stage sampling technique is flexible in many senses. Firstly, it allows researchers to employ random sampling or cluster sampling after the determination of the groups.

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The technique also allows the researcher to use non-probability sampling techniques like purposive. Secondly, researchers can employ multi-stage sampling indefinitely to breakdown groups and sub-groups into smaller groups until the researcher reaches the desired size. Lastly, there are no restrictions on how researchers divide the population into groups. This allows a large number of possibilities for methods of convenience, the maximisation or minimisation of variance or interpretability (Damon 2011). This study employed the simple random sampling and purposive sampling as part of the process of multi-stage sampling. The purposive sampling technique was employed to identify small scale farmers and subsequently the simple random sampling technique was then used to select the required number of farmers. Key informants were also purposively determined.

According to Saunders et al. (2009), the simple random sampling technique is simple to use and best suits situation where the population is fairly homogenous and not much information is available about the population. Simple random sampling reduces bias since all respondents have equal chance of being selected.

3.8 Sample Size Determination

Generally, the larger the sample size, the more representative it is in the target population. However, in view of limited time, logistics and financial resources, researchers often resort to work with manageable sample of the target population. The benefit of sampling lies in the more detail information that can be collected on the sample. It is also time-saving and relatively less expensive, however, smaller sample sizes do not permit generalisation from the sample to the wider population. The total farmer population of the five selected districts stands at 188,275 with

about 90 per cent of them constituting smallholder farmers (SRID, MoFA, 2016).

Through random sampling, five districts in the region were selected for the study,

namely, Nanumba North, East Gonja, Savelugu/Nantong, Bunkpurugu/Yunyoo and

West Manprusi Districts.

The target population comprises smallholder farmers, Directors and Field Officers

of District Agricultural Departments, NGOs working to reduce poverty in the

selected districts, local experts and opinion leaders.

The sample size for the smallholder farmers in the selected districts was determined

using Yamane's (1967) sample size determination approach:

That is $n=N/(1+ N(e)^2)$,   Where:

 n= Sample size

 N= total population of smallholder farmers in all five selected districts

 e= margin of error

Making provision for non-responses, the sample was increased by 5 percent

$n= \{188,275/1+188,275(0.05)^2\}$

 n=420. Thus, 400+ 0.05(400) = 420.

The determined sample size of 420 was distributed among the five districts based

on their proportions of farmer population.

Table 3.5 below presents the sample sizes of the various clusters of respondents in

the target population.

Table 3.5: Distribution of Sample Sizes

Category of Respondents	Sample Size
Smallholder farmers	420
District Agricultural Officers	15
District Assembly Administrators (Coordinating Directors or representative)	5
Civil Society Organisations (CSOs)	4
Opinion Leaders and Local experts	10
Total	**454**

Source: Author's field survey (2017)

The opinion leaders were made up of Chiefs, Unit Committee members and women organizers. The local experts on the other hand refer to experienced farmers and award winners, such as district best farmers.

In each of the five selected districts, six farming communities were randomly selected. In view of smaller farm settlements in some parts of the study area, the study applied the simple random sampling technique after eliminating such farming communities because their number of farmers fell short of the number required for responses. It was not very feasible for the selection of such communities due to difficulty of obtaining the required number of farmers to be interviewed in those communities. After the random sampling of farming communities with the good numbers of farmers, the required number of respondents (farmers) was then selected based on the lottery system (simple random sampling). The lottery system provided equal chances for all farmers to be selected. Lists of all the farmers in the

study communities were prepared before the selection of those that were interviewed. At the community level, the sampling of farmers was undertaken by both the researcher and the district agricultural officers. The district agricultural officers provided a list of farmers in the selected communities. Selected farmers were contacted and interviewed. The stratum sample size of each selected district and community was applied. A total of thirty farming communities were selected from the five study districts through random sampling. The study communities are presented in Table 3.6.

Table 3.6: Study Communities in the Various Districts

District	Community (1)	Community (2)	Community (3)	Community (4)	Community (5)	Community (6)
Nanunba N.	Bincherataga	Nakpaa	Chamber	Pusuga	Dokpam	Lepusi
East Gonja	Kayerso	Kpalbe	Janton-Daboashei	Fuu	Bunjai	Buhijar
Savelugu/Na.	Gushie	Zoggu	Kpung	Nambagla	Nyolugu	Tuunaayili
Bunkuru/Y	Najong	Jimbale	Bimbagu	Timaa	Kpemale	Tatara
W. Manprusi	Kparigu	Janga	Naabulgu	Wungu	Zagsilari	Bimbini

Source: Author's field survey (2017)

Key informants comprised officials of the District Assembly, District Agricultural Departments and NGOs as well as local experts and/or opinion leaders. In each district, the Coordinating Director or representative, the District Agricultural Director or representative and two officers of the District Agricultural Departments were contacted and interviewed. At least one CSO working to reduce poverty in each of the selected districts was also purposively selected with the exception of Bunkurugu District. The arrangement with the anti-poverty CSO in the Bunkurugu

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District did not materialise. At least one local expert in agricultural activities and/or an opinion leader was purposively selected and interviewed in each district.

Female headed household were purposively selected for purposes of establishing a link between poverty and gender. In instances where farmers selected randomly did not meet the criterion, a replacement was done. Thus, randomly selected farmers who indicated that they temporary halted farming in order to pursue other economic opportunities were replaced. It was observed that agricultural data provided by the district agricultural departments were not updated. For instance, in a community in the Savelugu/Nantong district, a randomly selected farmer indicated that he had abandoned farming in the previous year to engage in tricycle business, hence he was replaced. Apparently, the agricultural data from the district agricultural department had not been amended to reflect the change in occupation of the person. To avoid the recurrence of such instances, the researcher decided to add two or three more participants to the sample in each farming community to cater for possible replacement if the need arises. As it is the case in most African settings, it was observed that multiple households existed in a single house. In such cases, only one of the multiple household heads was interviewed. The older farmers were selected in such cases.

Four Civil Society Organisations (CSOs) purposively selected from the study districts were identified and interviewed. Table 3.7 shows the CSOs selected from four of the study districts.
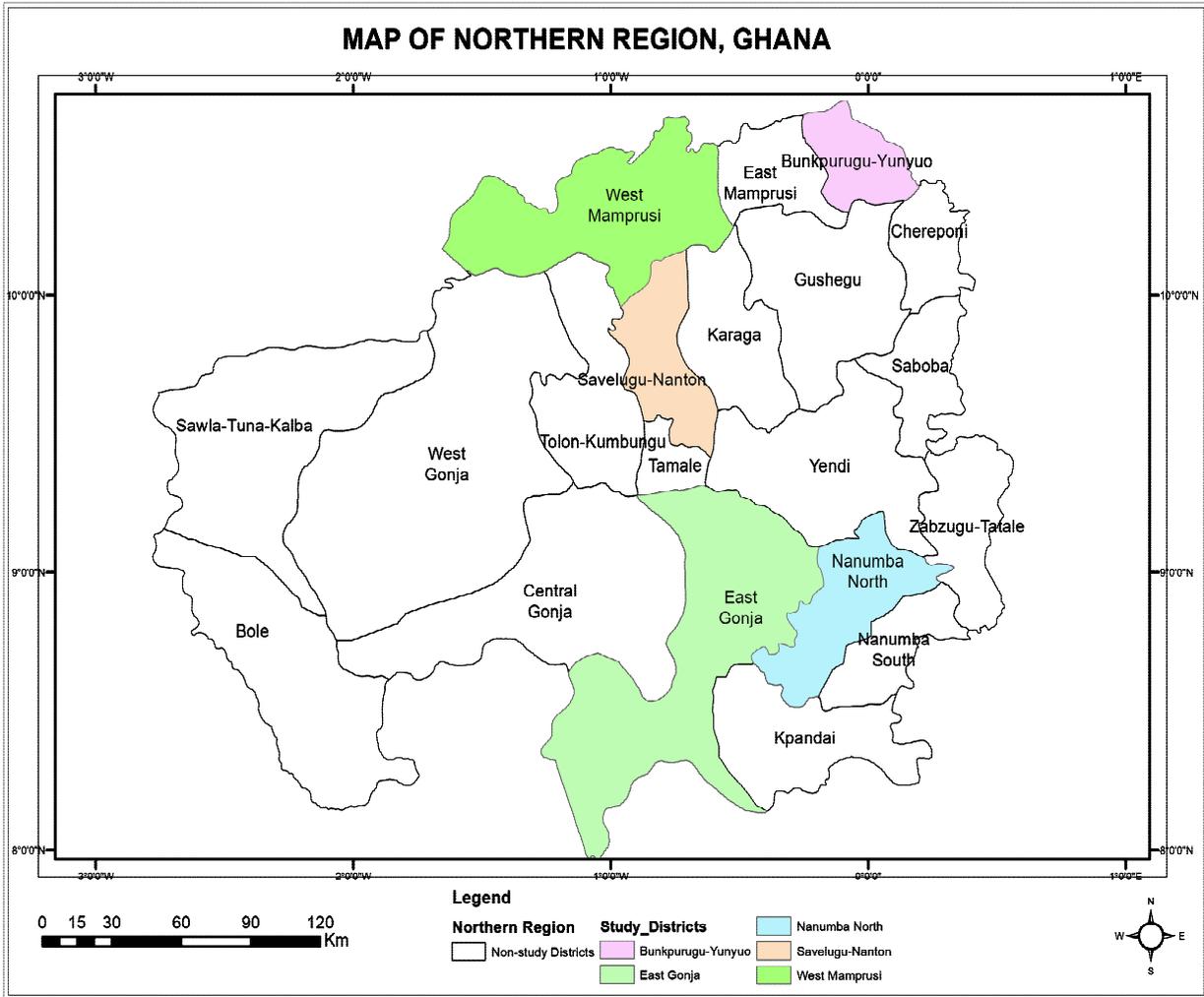
Figure 3.1: Map of Northern Region

Source: Author's own construct with the help of Mr. Abdul-Latif Sualihu of the Department of Geography& Resource Studies, University of Ghana, Legon.

Table 3.7: Selected Civil Society Organisations in the Various Districts

Name of Civil Society Organisation	District
Songtaba	Nanumba North
Presbyterian Agricultural Services (PAS) Mile7	East Gonja
UrbANet	Savelugu Nanton
Zasilari Ecological Farms Project (ZEFP)	West Mamprusi

Source: Author's field survey (2017)

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Figure 3.1 is the map of the Northern Region of Ghana indicating the various districts, roads, district capitals and the study districts.

3.9   Data Collection

The study made use of both primary and secondary data. Data was gathered from five selected districts of the Northern Region. Generally, the data for the study was centred on the demographic features and socio-economic characteristics of the smallholder farmers as well as on the constraints to poverty reduction among the smallholder farmers. Basically, the data was obtained from both primary and secondary sources. The primary data was obtained from respondents in the field of study. The respondents were made up of; farmers, district administrators, district agricultural officers, opinion leaders and local experts in the field of agriculture. Secondary data on the other hand was obtained from sources such as reports, journal articles, published theses, relevant textbooks, internet and other publications related to the study.

In terms of method of data collection, the study used key informant interviews, interviews and observation. Key informant interview guides were used to solicit relevant data from key informants such as civil society organisations, district administrators, agricultural officers, opinion leaders and local experts in the field of agriculture.   Interview guide was used to obtain information from the farmers. Observation tool was also used throughout the study. The behaviour of respondents during interviews was observed as a way of validating certain responses.

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To facilitate the data collection processes, three research assistants were employed to assist in the collection of data from the field of study. The research assistants were trained on how to solicit the required data from the field. They were university/ polytechnic graduates who understood the local dialects. Table 3.8 summarises the data collection.

Table 3.8: Summary of Data Required and Method of Data Collection

Data Type	Data Source	Method of Collection	Instrument
Primary Data	Farmers, Key informants- Agricultural Officers, CSOs, District Administrators	Key informant Interviews, personal interviews & Observation,	Interview guide, audio-visual recorders
Secondary Data	Published & unpublished sources- Reports, text books, theses,	Documentary review	Search engines

3.10 Instrument Design

This study employed key informant interviews, interviews and observation as methods of data collection. As a result, interview guides, semi-structured interview schedules and audio-visuals recorders were used.

3.10.1 Key Informant Interview Guide

The purpose of the key informant interview guide was to solicit information from key actors such as district administrators, district agricultural officers, civil society organisations, opinion leaders and local experts in the field of agriculture. The key informant interview guide contains key questions pertaining to the specific objectives of the study. It sought to unravel the different opinions on poverty, the possible causes of poverty, the policy interventions applied to ameliorate the effects

of poverty on its victims and the effectiveness of such policy interventions. The key informant interview guide contained a set of open-ended questions.

3.10.2 Semi-structured Interview Schedule

The purpose of the semi-structured interview schedule was to solicit information from the farmers on whom the study was centred. It was structured in five main sections. These sections were; Socio-demographic characteristics of the farmers, socio-economic factors affecting poverty, poverty reduction strategies of government and civil society organisations, livelihood strategies of the farmers and the challenges confronting the farmers. The items ranged from closed-ended to scoring, through open-ended questions.

3.10.3 Observation

The purpose of using the observation tool as a method of data collection was to validate certain responses. The face-to-face interview method afforded me the opportunity to establish rapport with interviewees, clear any doubts, clarifying questions and also observe nonverbal communication signs (Robson, 2011; Sekaran and Bougie, 2013).

3.10.4 Focus Group Discussion

Initially, the researcher thought of using focus group discussions to solicit relevant information from the farmers but the idea was dropped as it would have been difficult or impossible to obtain individual-specific information such as output levels, dependency ratio, etc. Besides, the focus group discussions are bedevilled with a set of challenges such as the identification and recruitment of appropriate

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participants, scheduling times for meeting, group dynamics, individual differences amongst participants, domineering roles of some participants whose action can affect other participants' inputs and the researcher's ability to make use of the often significant amount of data generated (Bryman and Bell 2002; Kruger and Casey, 2009; Bryman, 20012, Joseph, 2016).

3.10.5 Pre-Test of Instruments

In order to establish that the data collection instruments were fit for purpose, they were pre-tested. This was done purposively on selected groups identified as having similar characteristics with the population of the study. The pre-testing was done to ensure the reliability and validity of the research instruments.

The semi-structured interview schedule for soliciting data from famers was pre-tested in the Kpene community in the Sagnarigu district of the Northern Region. It was administered on five smallholder farmers. The pre-testing afforded the researcher the opportunity to fine-tune certain questions to pave way for the administration of the semi-structured interview schedule in the selected study communities.

3.11 Ethical Considerations

The data collection for this study commenced with protocol activities at District and Community levels. At the district level, district administrators were initially contacted either through telephone conversation or face-to-face meetings. The initial interactions were to afford me the opportunity to explain the rationale for the study and for which reason the data collection was necessary. After the initial

interactions a schedule of meetings was agreed upon in each of the five selected districts. The district level participants were made up of the District Directors of Agriculture, District Agricultural Extension Officers, District Coordinating Directors or District Planning Officers or their representatives in some cases.

At the community level, initial interactions commenced with Assembly members and Agricultural Extension Officers (AESs) responsible for the sampled communities. In line with traditional customs, community chiefs were appropriately briefed of the rationale for the data collection exercise in their jurisdictional areas. The AESs provided lists of farmers in their catchment areas for sampling and interview purposes.

Before the commencement of each interview, the rationale of the interview and of the entire study was made known to the interviewee. Subsequently, the consent of the participant was sought expressly. Participants were told (prior to the interview) that their participation in the interview process was highly voluntary and that they could withdraw at any point in time if they so desired and even withdraw the information they had already provided to the researcher.

In order to ensure confidentiality of the issues arising from the interviews, the participants were assured of the confidentiality of the information they provided to the researcher. Even though the information sought from the participants were not very sensitive and confidential, they were expressly informed that the information they provided was meant only for academic purpose and that whatever piece of information they provided would be treated with utmost confidentiality. In order to

enhance the level of confidentiality and anonymity, the researcher in most cases used pseudo names to represent participants' actual names.

3.12 Field Work

Following the preliminary discussions with the research participants, a time table for the entire data collection was arranged. With support of the Research Assistants, the data collection exercise commenced on Saturday, April, 8, 2017. The process started with the farmers on which the study was focused. I started with the farmers to afford me the opportunity to appreciate their views of the study before proceeding to interview the key informants, some of whom were policy makers and implementers. The interviews with the farmers started in the Savelugu/Nanton District. The schedule of interviews with the farmers in the selected Districts of the study is summarised in Table 3.9.

Table 3.9: Schedule of Interviews with Farmers

District	Duration of Interview
Savelugu/Nanton	8th April to 20th April, 2017
West Mamprusi	26th April to 7th June, 2017
Bunkpurugu/Yunyoo	13th June to 28th June, 2017
East Gonja	2nd July to 11th July, 2017
Nanumba North	15th July, to 27th July, 2017

Due to the individual nature of the interviews, the farmers were interviewed at their preferred locations and time. Most of the interviews were carried out at homes or under trees closer to homes. As a result of farm activities, a good proportion of the

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farmers were interviewed either in the morning (before they went to farm) or in the evening when they returned from the farms. Opinion leaders and the local experts in the various districts were also interviewed during our visits to interview the farmers.

Unlike the interviews with the farmers in the selected districts, the District Agricultural Officers, the District Administrators and Officials of the selected Civil Society Organisations were interviewed not on district by district basis. A good number of the key informants were working for either the District Assemblies or the selected Civil Society Organisations. Most of them had their families in Tamale who they visit during weekends. Such officers had agreed to be interviewed in Tamale, the Capital of the Northern Region, during their weekend visits to their families. The others were interviewed in their officers at their respective organisations. In all, 5 District Administrators, 15 district Agricultural Officers, 4 Administrators of Civil Society Organisations and 10 opinion leaders and local experts were interviewed.

3.13 Data Processing and Analysis

The qualitative data from interviews was processed prior to the analysis. In view of the fact that the data was collected from different districts, the cross-site approach was used to analyse the qualitative data. As a first step, the data obtained from the field of study was transcribed and organised into files. Since the study was conducted across five selected districts, the second step was to group the data according to their sources. The third step involved summarizing the ideas of the responses from the various sources (grouping similar ideas from the responses across the districts) and taking note of the differences in views across the districts.

Lastly, themes were developed to facilitate discussions. To summarise the ideas from the different sources, all responses were thoroughly examined to obtain an overall impression of the findings. Regarding voice recordings, the audio-tapes were attentively listened to in order to discover misunderstanding by respondents. Through memos, verbatim quotes were derived from the key informants. Logical analysis of claims of the participants was used to establish possible relationships between variables.

The quantitative data collected was coded, edited and then entered into the computer for processing using the Statistical Product and Service Solutions (SPSS). The qualitative data was used to support the quantitative data during the analyses. Descriptive statistics was employed to facilitate the analyses of the data. At the uni-variate level, frequency tables, percentages, among others were used frequently to present the field results. In the case of multi-variate, logit regression model was applied to establish the magnitude of the relationship between the independent variable (poor or non-poor) on one hand and the explanatory variables such a; gender of family head, occupation of family head, number of dependants, size of household labour, landholding, assistance to farmers, etc on the other hand. Table 3.10

Table 3.10: Analytical Framework

No	Objective	Analytical Method
1	Socio-economic factors of poverty	Descriptive statistics, Logit regression
2	Poverty reduction strategies of government and CSOs	Descriptive statistics, content analysis
3	Poverty reduction strategies of farmers	Descriptive statistics, content analysis
4	Challenges/constraints to poverty reduction	Descriptive statistics, content analysis

3.14   Model Specification

A number of approaches are proposed in the literature for modelling poverty dynamics in order to establish the factors that determine poverty. Apart from descriptive approach, there are other three main econometric estimation models under the multivariate (Lawson et al., 2006, Baulch, 2011). The first is the discrete dependent variable of poverty status. Second is the continuous model of changes in living standard variables such as income and expenditure and third is the regression model. Nonetheless, analysis of poverty dynamics is mainly based on multivariate regression model to establish the determinants of poverty at the household level, using reduced form models of various structural relationships that affect poverty (Baulch & Hoddinott, 2000, Addison et al., 2009).

In line with the empirical literature, this study employs Logit regression model to derive the determinants of poverty. Logit model allows for the establishment of a relationship between a binary outcome and a group of predictor variables. This model is easy to interpret and have flatter tails than probit models (Otieno, 2015). The model is based on a cumulative logistic probability function specified as $y_* = \alpha + \beta x_i + e$. Where, y^* is a latent variable that is not observable and assumed to be normally distributed. That is, for y^*, $e \sim N(0, \delta^2)$ but yi is not and x_i are the explanatory variables. The explanatory variables are; number of dependants, years of farm experience, type of farming, gender of head of household, access to assistance, availability of agricultural lands, labor force, availability of farmland, level of education, etc.

The observed variable yi is a dummy variable that takes a value of 1 or 0 and is defined by

$yi = (1$ if $y^*_i < 0$ and $yi = 0$ if $y^*_i \leq 0$

The cumulative logistic function is specified procedurally in equation 3 as follows;

$Pr(Yi = 1) = F(xi' b)$ (1)

Where, b is a parameter which needs to be estimated and F is logistic cdf.

The functional form of cumulative logit model is specified as follows:

$Prob(event) = Pi = E\ y = 1|xi = \mathbf{1}/(\mathbf{1}+e^{-\beta o + \beta ixi})$ (2)

Where, Bo and B1 are coefficients to be estimated from the data; X is the independent variable; e is the base of the natural logarithm for more than one independent variable.

The model can be written as;

$Prob(event) = Pi = E\ y = 1|xi = e^Z/\mathbf{1}+e^z$ (3)

Equation 3 above represents the cumulative logistic distribution function

Equivalently, Prob (no event) $= 1 - Pi = 1/1 + e^{zi}$ (4)

Where, z is the linear combination of independent variables written as:

$Zi = Xi\beta = B_0 + B_1X_1 + B_2X_2 + \cdots + BnXn.$

$Zi = \beta_0 + \beta_1Dep + \beta_2Lab + \beta_3Gen + \beta_4Edu + \beta_5Exp + \beta_6Ass + \beta_7Land + \beta_8FaT +$

$\beta_9NCr + \beta_{10}Age + \varepsilon$

Where

Zi= poverty status (poor or non-poor)

β_0 = Constant or intercept

Dep = Dependency ratio/No. of dependents

Lab= Labor force of households,

Gen= Gender of head of household

Edu=Educational Status of head of household

Exp= Farm experience of head of household

Ass= Assistance available to heads of household

Land= Land accessibility to farm households

FaP=Farming Type

NCr=Number of Crops

Age=Age of head of household

ε = Error Term

$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6, \beta_7, \beta_8, \beta_9$ = parameter change **in** Y value given one-unit change in any of the explanatory variables.

To determine the expenditure per capita, the total household consumption expenditure is divided by the size of the household. The expenditure per capita is then compared with the poverty line. For those households whose consumption per capita is less than the poverty line, they are considered poor and they take a value of 1. On the other hand, households with consumption per capita in excess of the poverty line are considered non poor and assigned a value of 0. Therefore, poverty status is a binary dependent variable, taking a value of 1 (poor) or 0 (non-poor). According to the World Bank (2015), the poverty threshold stands at \$1.9 per day, per person. In Ghana, two different poverty thresholds are applied, namely, the lower poverty line and the upper poverty line. The lower poverty line is GHC792.05 per adult per annum and the upper poverty line stands at GHC 1314 per adult per annum. In terms of daily measurement, the lower and upper poverty lines are GHC2.17 and GHC 3.6 respectively. Since this study was on rural communities, the lower poverty line was applied.

On the basis of empirical evidence, this study proceeded to draw hypothesis on the possible relationships between poverty and the explanatory variables impacting on poverty. Table 3.11 explains the expected signs of the explanatory variables as they relate to levels of poverty.

3.15   Hypothesis Testing

Table 3.11 shows the expected signs of the variables used in the model

Table 3.11: Postulation

Explanatory Variable	Measurement Scale	Influence on Poverty (Expected Sign)	Reason
Gender of Head of Household	Dummy Male=1 Female=0 Nominal	Negative on Males, Positive on Females	Females are culturally discriminated against in terms of asset ownership (Mwabu et al 2000)
Marital Status of Head of Household	Dummy Married=1 Unmarried=0 Nominal	Negative on Married couples and positive on unmarried (singles)	Married couples are more likely to pool resources to earn higher returns (Mwabu et al., 2000)
Age of Head of Household	Continuous (years)	Negative	More resources are accumulated with age
Farm Experience of Head of Household	Continuous (years)	Negative	Rich experience increases productivity and income
Level of Education of Head of Household	Dummy Educated=1 Illiterate=0 Nominal	Negative	Higher level of education increases productivity and income
Number of Dependents	Continuous Units	Positive	Poverty and number of dependents are directly related. Greater financial burden on breadwinners reduces investment and income (Mwabu et al., 2000).
Number of Workforce	Continuous Units	Negative	Greater working hands to generate wealth
Access to Farm Land	Dummy Have=1 Have Not=0 Nominal	Negative	Land is a means to an end through its usage for farming and an end by itself
Access to Assistance	Dummy Have=1 Have Not=0	Negative	Financial, Input and Technical assistance boast productivity and income (Mwabu et al., 2004).
Number of Crops Grown	Continuous Units	Negative	Crop diversification to contain varying natural conditions.

Source: Author's own construct (2017)

3.16   Profile of The Selected Civil Society Organisations

3.16.1 URBAN AGRICULTURAL NETWORK (UrbANet)

The Urban Agriculture Network-Northern Ghana (UrbANet) started as a loose platform known as Tamale Urban Agriculture Working Group (TUAWG) in 2000 by key stakeholders interested in promoting sound agriculture practices in the urban environment. The platform went on for three years from 2000 to 2003 which saw the mobilization of small-scale farmers into associations and groups (www.urbanet.com). The farmer groups and associations in 2003 made a decision to formalize the network with established structures to operate fully as a farmer's network. The decision gave birth to UrbANet which was duly registered with the Registrar General Department in 2005 as a network of farmer-based association/organization (www.urbanet.com).

The formation of UrbANet was in response to a growing need for the promotion of urban agriculture as a strategy for urban poverty reduction. Emphasis on rural poverty and therefore rural agriculture is resulting in the neglect of urban agriculture which has a great potential to addressing the poverty situation of the poor and vulnerable populations of urban and peri-urban dwellers. Obstacles such as limited access of the poor farmers to land and water resources, lack of extension services, lack of capital, lack of policy framework on urban agriculture, are common. Urban agriculture also poses potential health risk (e.g. inappropriate use of agrochemicals, non-treated organic waste and waste-water, lack of hygiene in food processing and marketing activities). UrbANet engages in projects that seek to promote and manage urban agriculture through policies and incentives that meet

public interest, while promoting gender equity and social integration (www.urbanet.com).

The mission of UrbANet is to create a network of small-scale farmer organizations for capacity development to promote sustainable agronomic practices and networking as a means of ensuring access to production resources for food security, sustainable livelihoods and healthy environment. The CSO focuses on food, nutrition security and livelihood development, climate change and environmental management, policy governance in agriculture, water and sanitation, microfinance and women economic empowerment (www.urbanet.com).

Specifically, UrbANet works to achieve the following objectives: improve on food and nutrition security of smallholder farm families in northern Ghana; mobilize smallholder organizations and build their capacities into effective networks for participation in agricultural policy discourse; promote climate resilience agriculture and environmental sustainability; provide agriculture extension support to smallholder farmers in the northern regions; promote safe and productive use of urban waste for food production; provide micro-credit services for women agro-processors; facilitate sustainable waste management, and safe & healthy environment through safe and productive use of waste for food production (www.urbanet.com).

Over the last two years (2016-2017), efforts have been made by the organisation to increase smallholder farmer's access to land in the wake of urbanization in the

Tamale Metropolis. About 178 hectares of agriculture land was zoned for protection to facilitate farming in 2008 (www.urbanet.com).

3.16.2 SONGTABA

Songtaba is a local Civil Society Organisation operating in the Northern, Upper East and Upper West Regions. For over 10 years, Songtaba has been empowering and supporting the women and children of the regions. In response to staggering illiteracy, poverty, and education statistics that plagued Northern Ghana, Songtaba works to bridge the gap, working to increase the status of the Region as a whole by promoting the status and rights of women in particular (www.sogtaba.com).

The CSO focuses on women's rights and empowerment, food security and livelihood, soil conservation and water management, livelihood diversification, education and capacity building, and sexual and reproductive health. Since its inception, Songtaba has provided free education to hundreds of children in the Northern Region through complementary basic education programme, as well as ensuring that girls stay in school through Girls' Clubs. The CSO also trained women in a variety of livelihood programmes. One major programme for women is the Funding Leadership and Opportunities for Women (FLOW) which helps provide food security through smallholder farmer training, and assist women accused of witchcraft in Kukuo and Gnani witches home in the Northern Region. Songtaba is working with 210 Community Child Protection Team (CCPT) and 15 key change agents as a strategy to curb violence and ensure redress for girls and young women whose rights have been violated and get cases reported through official channels. The project is working with 1800 girls and young women to build

their capacities about their bodies, to appreciate issues, conduct advocacy work and insist on their rights to get their voices and opinions heard and to make informed decisions and access decent work. The project intervention has already reached out to 130 teachers, three girl-child education officers from the implementing districts on sexual and reproductive health issues with focus on early sexual education for girls and preventive measures as well as the need to provide save spaces for girls. With support from the government, Songtaba has been working in partnership with Action-Aid Ghana in providing complimentary basic education to reach children of school age who are not currently enrolled in school. The first cycle of this project targeted 800 children in 18 communities in the Nanumba North District. The programme is able to provide 800 children with a standard nine-month functional literacy education and enrol them in the formal school system the next academic year. In the second cycle institution category, 1912 students from 41 communities had been graduated by the close of 2016 (www.sogtaba.com).

3.16.3 PRESBYTERIAN AGRICULTURAL SERVICES, MILE7

The Presbyterian Church of Ghana was established in 1828 and formalized its partnership with the then government of Gold Coast, now the Republic of Ghana in 1932 to contribute to the spiritual and socio-economic development of the citizens of Ghana. To this end, the Church established seven agricultural service stations in the late sixties in the Northern, Upper East, Eastern and Greater Accra Regions of Ghana to complement the efforts of Government at poverty eradication in rural communities of the country (www.pasmile7.com).

In 2007 the Presbyterian Agricultural Services, a Unit of the Department for Development and Social Services (DDSS), was registered under the auspices of the Civil Society Organization (CSO) "The Presbyterian Relief and Development Services (PRSSD)". Presbyterian Agricultural Services, Ghana (PASGH) is one of three units of the Department of Development and Social Services (DDSS) under the Presbyterian Church of Ghana (PCG). Its head office is currently located in Tamale, the capital of Northern Region.

PAS is engaged in the field of agricultural development, specifically in food security, nutrition and alternative livelihoods; agriculture commercialization, agribusiness and entrepreneurship; environmental management and climate change; and advocacy and gender interventions' in communities in Ghana. Through these programmes, PASGH is improving livelihoods, household food security and poverty reduction in Ghana. The mission of PASGH is to provide innovative, participatory and continuously proven agricultural development services to the meet the immediate and strategic needs of farm families in their effort to attain sustainable household food and income security in a sustainable farming environment in partnership with other development actors.

The CSO focuses on the following: commercialization and agribusiness, access to finance and markets, food security and alternative livelihoods, capacity building, gender, environment, climate change and advocacy, collaboration and partnership with government and allied institutions, establishment of new stations and expansion of programs, resource mobilization, and program coordination and monitoring &evaluation (www.*pasmile7.com.)*

3.16.4 ZASILARI ECOLOGICAL FARMS PROJECT (ZEFP)

Zasilar Ecological Farms Project (ZEFP) is a local, non-governmental organization which produces organic foodstuff, and also supports smallholder farmers to increase crop/livestock yields through sustainable land management technologies, organic inputs supply and products market security with the aim of complementing the nation's efforts in fighting rural poverty in northern Ghana. The principal objective of ZEFP is to upscale environmentally friendly innovative approach in food production to improving livelihoods of the rural poor farmers in northern Ghana. It was founded by David Agongo who was particularly concerned about poverty and its linkage to natural resources depletion in the northern Ghana. In response, he introduced ecological agricultural technology to arrest the rapidly dwindling soil fertility situation for improved crop yields. He started this in 1991 in a small but very busy farming community called Zasilari, hence the name Zasilari Ecological Farms Projects [ZEFP]. Currently ZEFP works directly in many communities across northern Ghana in the areas of ecological agriculture education with individuals and women groups as the main targets. Zasilari Ecological Farms Project works in selected district in the northern region, namely, Mamprugu, Moaduri, West Mamprusi, East Mamprusi, Bunkprugu and Yunyoo Districts (www.zefp.com).

The CSO focuses on the following: environmental resource management, good governance advocacy, peace and security, income generating activities in agro-processing, integrated farming support projects for farmers, farmer support in agro-forestry projects, youth training in sustainable agriculture/organic/climate smart agriculture (www.zefp.com).

Specifically, ZEFP works to achieve the following objectives: empower local small scale farming communities in the northern savannah to integrate biodiversity and sustainable resource use [conservation] measure into their farming activities through training and networking; develop long term cooperation and collaboration between farmers, CSOs and policy makers to enhance participatory engagement around programmes on biodiversity protection in rural communities, information sharing, technology development and transfer to address biodiversity conservation and land degradation; promote poverty reduction among poor farmers through assistance for them to develop community based off-farm biodiversity – protection related income generation activities.

3.17   Chapter Summary

This chapter explored the geographical characteristics of the study area as well as the methodology and methods of the study. Research design suitable for the study was analysed as well the determination of suitable sample size for the study. The justification for the use of mixed method (quantitative and qualitative) was provided. The profile of the sampled Civil Society Organisations (CSOs) was also presented.

CHAPTER FOUR

SOCIO-ECONOMIC FACTORS AFFECTING POVERTY IN THE SELECTED DISTRICTS OF THE NORTHERN REGION

4.1   Introduction

The question of the factors that affect poverty in northern Ghana in particular is of great interest to researchers and policy makers. This chapter presents the research findings from the survey conducted in five districts of the Northern Region of Ghana. The aim of this chapter is to discuss the major socio-economic factors affecting poverty among smallholder farmers in the selected districts of the Northern Region, Ghana.

Brady (2018), posits that behavioral theories of pover

ty concentrate on individual behaviors while the structural theories emphasize the demographic and labor market context, which causes behavior and poverty. This chapter begins with the demographic characteristics of household heads (farmers) who were surveyed and then proceeds to discuss the major socio-economic factors affecting poverty and the linkages thereon. Descriptive statistics were employed to present the demographic characteristics of the farmers. It is worth noting that the head of farm households represent the unit of analysis in this study. The sample sizes for the analysis of the socio-economic characteristics of the farmers vary from issue to issue. For instance, the number of wives per male farmers was limited to only married male farmers, hence the size of the sample was less than the determined sample size of 420 in this study.

In view of the complex and multidimensional nature of poverty, there are varying socio-economic factors influencing poverty. In line with the conceptual framework adopted for this study, the socio-economic factors influencing poverty are delineated into the following:

i.   Demographic characteristics (headship, gender, age and marital status of household head, and household composition)

ii.   Human capital: Education/skills, ability to labour (occupation), good health

iii.   Natural capital- Land (land size, cultivated, land tenure arrangements, environmental resources, wild life, biodiversity)

iv.   Physical capital: Agricultural assets (machinery/ livestock/vegetables and fruits) and non-agricultural assets (houses, motorcycles and bicycles)

v.   Social capital: Networks, membership of groups, access to wider institutions

vi.   Financial capital: Savings, availability of credit, remittances, pensions

vii.   Income source: Income from farm and non-farm sources.

4.2   Demographic Characteristics of Sampled Households

The demographic characteristics of the sampled farmers considered prominent in this study are; gender of household head, age of head of household, marital status of head of household, religious affiliation of household head and dependency ratio. According to Randela, (2005) and Makhura, (2001), these demographic characteristics are very crucial because they are most likely to influence the economic decisions of households, particularly the head of household. Therefore, it is important that this study examines these demographic characteristics visa-vis the household livelihoods.

4.2.1 Headship of Household by Gender

The gender of household head is important because of its significant influence on the capacity of the household to source income and access assets such as land and capital that have a direct bearing on agricultural productivity (World Development Report, 2008).

Most households in the study area were headed by males. Thus, 359 farm households (85.4%) were headed by males. Female heads of household were 61 (14.6%) which is indicative that headship by female is not common in the study area. Evidence from the field of study suggests that females (wives) do engage in farming by rendering support to their husbands. Most of the females who do independent farming are either widowed or separated from their husbands or their husbands had migrated in search of greener pastures elsewhere, hence compelling them to assume leadership roles in the family.

4.2.2 Age of Head of Household

Age is a very important variable which determines the choices and decisions of individuals. Maxwel et al. (2001) argues that the quality of decisions taken by most individuals is closely related to how long those individuals have lived together as couples with life experiences. All things being equal, matured and experienced people think deeper thereby taking informed decision. It is for this reason this study considers the age of the head of household an important variable in determining household activities.

Table 4.1 shows the age distribution of respondents. The dominant age of the respondents that were interviewed was between 50-59 years which constituted 40.3% of overall respondents. There was no household head below the age of 30 years. The youngest respondent household head was 35 years. The study also revealed that older people still take keen interest in farming. Farmers who were 70 years or older constituted about 12% of overall respondents. Most of such older farmers played supervisory role over their farm workforce.

Table 4.1: Age Distribution of Head of Household

	Age range (Years)	Frequency	Percent	Cumulative Percent
	30-39	58	13.8	13.8
	40-49	89	21.3	35.1
Valid	50-59	169	40.3	75.4
	60-69	53	12.6	88.1
	70 or more	51	11.9	100
	Total	**420**	**100**	

Source: Author's Field survey (2017)

4.2.3 Marital Status of Household Head

The survey shows that 96.2 percent of respondents interviewed were married. Two people (representing 20%) of the unmarried respondents were proxy heads of household. They stepped in for the heads of household who were not readily available at the time of the interview. There were clear indications that an

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overwhelming majority of the respondents were married. The institution of marriage is a revered one particularly in rural settings. According to Alhassan (2012), those who are married are so much revered and recognized in society far more than those unmarried. Invitations to social gatherings and such other important occasions are strictly based on marital status. The unmarried are less recognized. Depending on one's religious orientation, marriages are either performed customarily or in line with either Islamic or Christian beliefs.

4.2.4 Number of Wives to a Male Head of Household

Table 4.2 shows the number of wives to a male head of household in the study area. Polygyny is a popular practice among Muslims and Traditionalists. The number of wives to a male head of household is important in this study because of its implication on the number of children (dependency ratio) and the workforce which are critical determinants of poverty.

The sample size for male headed household in this study was 359. The findings show that about 47.9% of male headed household married two or more wives indicating the polygamous nature of the study area. That is, 4.1% of male respondents got married to four wives at a time, with another 13.1% and 38.1% of the male respondents marrying three wives and two wives respectively. Male respondents who married single wives constituted 42.2%. Only 1.4% of the male respondents were unmarried. The average number of wives to a male head of household in the study area was two (2).

Table 4.2: Number of Wives per Male Head of Household

	Number of Wives	Frequency	Percent	Cumulative Percent
Valid	One wife	177	49.3	50.7
	Two wives	114	31.8	82.5
	Three wives	47	13.1	81.8
	Four wives	15	4.1	95.9
	Total	**359**	**100**	

Source: Author's field survey (2017)

4.2.5 Number of Household Children

The number of children in each household influences the dependency ratio and/or the workforce (farm labour). This study considers children as those below eighteen (18) years. The 18-year threshold is in line with the national stipulation that a person should be 18 years or above before he/she is qualified to take part in national elections. Table 4.3 below shows the distribution of children in different households.

Households with children between seven and nine years, and ten years or more constituted 25.8% each, depicting a cumulative picture of 51.6% of total respondent households with 7 or more children. Households with children varying between four and six years constituted 35.3%. Households with children ranging from 1 to 3 represent 11.9% of the total respondents. Households without any child constituted 1.2% of total respondents. The average number of children per household was 7.

Table 4.3: Number of Children per Household

	Frequency	Percent
None	5	1.2
1-3	50	11.9
4-6	148	35.3
7-9	108	25.8
10 or more	108	25.8
Total	**419**	**100**

Source: Author's field survey (2017)

4.2.6 Religious Affiliation of Head of Household

There were three dominant religious affiliations in the study area, namely, Islam, African Traditional Religion and Christianity. In particular, Islam and Christianity were associated with several denominations. Religious affiliation is considered an important variable in this study because of the impact of the religious belief systems on productivity and polygamy (which influences the number of children and the dependency ratio therein).

Majority of the respondents were Muslims, constituting 76.6%. African Traditional Religion and Christianity constituted 18.4% and 5% respectively. It was observed among the traditionalist group that libation was poured in honour of the ancestors before commencing each farming season and repeated after harvest to express their gratitude. It was also observed that the Muslims came out in their numbers to offer special prayers to the almighty Allah (God) during periods of drought. It was revealed that many Muslims in the study area visited their farms after observing

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congregational prayers on Fridays, likewise the Christians on Sundays. Followers of all three dominant religious faiths took time off their schedules to observe other "big" occasions such as Eid festivals (Muslims), Christmas and Easter festivities (Christians) and Fire and Yam festivals (traditionalists).

4.3   Socio-Economic Factors Affecting Poverty

This section presents the results of a multi-variate analysis of the relationship between various social and economic aspects of living conditions and poverty as measured by household income or expenditure. In view of the complex and multidimensional nature of poverty, there are varying socio-economic factors influencing poverty. Socio-economic factors considered in this study in line with the conceptual framework include; household labour force, number of dependents, age of head of household, educational status of the head of household, type of farming, gender of head of household, availability of farm lands, years of experience, and access to assistance.

4.3.1 Educational Status of Head of Household

Table 4.4 shows the educational status of the respondents. The level of education of the head of household was considered so important because labour productivity is a function of the quality and quantity of labour. The conceptual framework of this study establishes a strong relationship between human capital (labour) and livelihoods of household.

This study shows that majority (85.2%) of the respondents were unlettered. Those who pursued non-formal education constituted 11.5% of total respondents. Only 3.3% of the total respondents had some form of formal education. Those with

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formal education were either diploma or Senior Secondary School (SSS) or Ordinary (O) level holders. The high proportion (85.2%) of illiteracy among the respondents, gives credence to findings of IFAD (2011) that the agricultural sector mainly absorbs the unlettered working population who perceive farming as a last resort (Such illiterate farmers are conservative and do not have better opportunities except to engage in farming to feed their households with little or no surplus output for sale.

Table 4.4: Levels of Education of Household Head

Educational status	Frequency	Percent	Cumulative Percent
Illiterates	357	85.2	85.2
Non-formal	48	11.5	96.7
Educated	14	3.3	100
Total	**420**	**100**	

Source: Author's field survey (2017)

4.3.2 Yield and Mean Expenditure of Households

In the analysis of poverty, it is important to determine who is poor and who is not. In terms of monetary measure of poverty, two well-known indicators for measurement of poverty are cited in the literature (Mowafi, 2004), namely income measure and expenditure measure. The main aim of poverty measurement is to assess the cost involved in purchasing a basket of essential products (goods and

services), which allows a person to reach minimum levels of satisfaction in terms of basic needs.

In a question related to productivity and yield of output, different households recorded different levels of outputs of several crops and species of animals**.** Due to the special difficulties associated with the computation of income levels of households, this study took to the use of mean expenditure per household as proxy for income (consumption-based approach). Since a chunk of household food requirements among smallholder farmers were domestically produced, the adopted consumption-based method used in this study valued self-provided needs of households in monetary terms. The study also took into account the levels of savings and investments made by the households from their earnings. Households mean expenditure has implications on poverty, thus, lower mean expenditure (including investment) is a manifestation of high poverty levels. There is an inverse relationship between poverty and mean expenditure of households (Krishna, 2007). Thus, the lower the mean expenditure, the higher the level of poverty, all things being equal. Table 4.5 depicts the mean expenditure of households.

Table 4.5: Mean Monthly Expenditure of Heads of Household

Monthly expenditure	Frequency (F)	Percentage	Cumulative Frequency	Mid-Point (X)	FX
0 -10	12	2.9	2.9	5	60
11-20	28	6.7	9.6	15.5	434
21-30	26	6.2	15.8	25.5	663
31-40	41	9.8	25.6	35.5	1455.5
41-50	54	12.9	38.5	45.5	2457
51-60	45	10.7	49.2	55.5	2497.5
61-70	27	6.4	55.6	65.5	1768.5
71-80	42	10.0	65.6	75.5	3171
81-90	49	11.7	77.3	85.5	4189.5
91-100	56	13.4	90.7	95.5	5348
Above 100	39	9.3	100	100.5	3919.5
Total	**Σf** = 420				**Σfx=25963.5**

Source: Authors field survey (2017)

The mean monthly expenditure was obtained by dividing the total household monthly expenditures (Σfx) by total number of farm household surveyed (Σf);

Thus, 25963.5/ 420 = Ghc61.82.

The mean daily expenditure was also obtained by dividing the mean monthly expenditure by 30 days (average number of days in a month).

Thus, Ghc61.82/30 = GHC2.07.

According to the historic exchange rate data of the Bank of Ghana (2017), the average exchange rate was Ghc4.2 to a dollar (for the period between April and June, 2017). Therefore, the mean daily expenditure (in dollars) was US$0.49 (Ghc2.07/Ghc4.2 = US$0.49).

The calculated mean daily expenditure of US$0.49 in the study area was far less than the World Bank threshold of US$1.90 which it uses to measure poverty, hence there was an indication of the prevalence of poverty in the study area. Since some farmers consume some of their produce, they indicated that their expenditure patterns varied from time to time. This study captured the average household expenditures during good and lean seasons. Expenditures on foodstuff were imputed since most farm households did not buy food items particularly during good seasons. Calculations of the household daily mean expenditure indicates that smallholder farmers in the study area depend on less than US$1.90 a day, a threshold used by the World Bank to classify the poor.

In spite of the low daily mean expenditure among farm households in the study area, it was observed that a section of them kept part of their wealth in the form of livestock (herd of cattle, sheep, goats, donkeys, pigs, fowls). Since these forms of assets serve as insurance for the farmers especially during 'bad' farm seasons, they did not form part of the regular expenditures of the farm households.

4.3.3 Type of Farming Practice by Household Head

The study reveals that mixed farming (combining crop cultivation with the rearing of animals) is the most popular farming practice in all farming communities in the

study districts. About 330 smallholder farmers or 78.8 % of total number of respondents practiced mixed farming, as shown in Table 4.6. Farmers who engaged in crop farming alone and animal farming alone constituted 14.3% and 6.9% respectively. The farmers who engage in mixed farming as the dominant farming practice cited economic diversification as basis for the practice. According to some farmers, proceeds from the sale of the animals supplemented their incomes from the sale of crops particularly during seasons of crop failure. The study also revealed that most of the farmers who engaged in crop farming only, were those engage in the cultivation of one cash crop or the other. These cash crops included groundnuts, rice, soya beans and cotton. Some of the farmers indicated that the cash crops needed so much attention that they could not divide their attention for other agricultural activities such as rearing of animals. The most popular crops grown in the study area were cereals, legumes and tubers. About 75.4% of the respondents cultivated cereals such as maize, sorghum and millet. These cereals constituted the main source of the staple food in the Northern Region. Growers of legume constituted 13.8% of the respondents and 4.1% of the respondents cultivated tubers. About 6.7% of the respondents cultivated such other crops as cotton, mango and water melon (See responses in Table 1 of Appendix B). In respect of animal rearing, the most popular livestock in the study area, were chicken, goat, sheep, guinea fowl and cattle. About 38.9% of respondents reared fowls (local and exotic breeds), 24.1% of respondents reared goats, 23.2% reared sheep and 10.5% reared guinea fowls. Farmers who reared cattle represented 3.3%. About 14.3% of the respondents were unaccounted for in the rearing of animals due to the sole engagement in crop production by some farmers (See responses in Table 1 of Appendix B). Table 4.6 depicts the responses.

Table 4.6: Type of Farming Practice

	Frequency	Percent	Valid Percent	Cumulative Percent
Crop	60	14.3	14.3	14.3
Animal	29	6.9	6.9	21.2
Mixed	330	78.8	78.8	100
Total	420	100	100	

Source: Author's field survey (2017)

4.3.4 Farm Experiences of Household Head

The study found that majority of farmers in the study area had acquired tremendous experiences in their farming business. Out of the 420 sampled farmers, 243 of them had twenty (20) years or more practical experience in their farming enterprise. Farmers with practical experience ranging between 15 and 19 years were 53 representing 12.6%, while 48 farmers or 11.5% of total respondents had practical farming experience ranging between 10 and 14 years. About 8.6% of the farmers who were interviewed had experience ranging between 5 and 9 years and 9.3% of farmers had less than 5 years practical farming experience. From the available evidence, 70.6% of sampled farmers in the study area had 15 years or more practical farming experience. Table 4.7 depicts the responses.

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Table 4.7: Number of Years of Farm Experience

	Frequency	Percent	Valid Percent	Cumulative Percent
Less than 5	39	9.3	9.3	9.3
5-9	36	8.6	8.6	17.9
10-14	48	11.5	11.5	29.4
15-19	53	12.6	12.6	42.0
20 or more	243	58.0	58.0	100
Total	420	100	100	

Source: Author's Field Survey (2017)

4.4 Logit Regression Estimates of the Socio-Economic Factors Affecting Poverty

This study has used the probability of being poor as the dependent variable. The explanatory variables used in this study include; household labour force, number of dependents, age of head of household, educational status of the head of household, type of farming, gender of head of household, availability of farm lands, years of farm experience, number of crops grown and access to assistance.

The logistic regression model, as specified in chapter three, was used to generate the results of the factors influencing poverty in this study. The regression results are presented in two folds; namely, the aggregate results of all the sampled districts and the district-by-district results (disaggregated results).

The regression results, as depicted in Table 4.8, show the relationship between poverty status as dependent variable on one hand and the determinants of poverty (explanatory variables) on the other hand. The regression results strongly support most of the hypotheses discussed previously in this study.

The estimation was made with 420 heads of household. The head of household was used as the unit of analysis. It was assumed that the characteristic of the household head represents the individual household members. The characteristics are assumed to affect all the household members equally. The logit model reports coefficients of the predictor variables in log-odds units. They show the expected change in the log-odds of being poor for a unit increase in the corresponding predictor variable, holding all other variables constant. Since this study is mostly interested in the marginal effects, only the coefficients of the marginal changes are interpreted. The marginal effects measure the rates of change of the probability of being poor for unit change in any explanatory variable (Richard, 2015) and the discrete changes of dummy variables from 0 to 1 (Halvorse and Palmquist, 1980).

Ten explanatory variables were considered for the estimation, of which six variables were found to be significant determinant factors of household poverty in the study area. The results are shown in Table 4.8. The logit estimation shows that the most influential determinants of poverty in the study area were, labour force (workforce), gender, farm experience, assistance to farmers, and access to farm lands (land holding) and dependency ratio. Access to farm land, farm experience and household laborforce were statistically significant and negatively correlated with poverty at 1 percent. Gender of head of household was significant at 5

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percent. Access to assistance was statistically significant at 10 percent and negatively correlated with poverty. Similarly, the size of dependants was statistically significant at 10 percent and positively correlated with poverty. The rest of the explanatory variables were found to have no significant influence on poverty status of the households as shown in Table 4.8.

Table 4.8: Logit Estimation for All Sampled Districts

S.N.	Variables	Coefficient	Standard error	Wald	*P* value	Odds ratio	Marginal effect
1.	Dependents	.384	.202	3.599	.058*	1.468	.256
2.	Laborforce	-.054	.227	.057	.012***	.947	-.075
3.	Gender (M=1)	.423	.904	.219	.040**	.655	.092
4.	Experience(yrs)	-1.242	.269	21.306	.000***	.289	-.470
5.	Assistance	-.246	.437	.316	.074*	1.279	-.305
6.	Landholding	-.772	.741	1.085	.009***	2.163	-.118
7.	Farmintype	.985	.684	.952	.621	1.001	-.021
8.	No.of crops	.118	.143	.685	.408	1.125	-.113
9.	Age	.038	.017	5.025	.025	1.039	.213
10.	Education	-.124	.686	1.177	.278	1.468	-.007
11.	Constant	2.136	.485	.066	.038**	8.467	-.312

Model Summary

2-Log Likelihood = 25.635, Cox and Snell $R2 = 0.566$ Nagelkerke $R^2 = 0.607$ $n = 420$

Source: Author's Field Survey (2017)

∗Significant at $p < 0.1$., ∗∗Significant at $p < 0.05$., ∗∗∗Significant at $p < 0.01$.

Access to farm land was a statistically significant determinant of poverty at 1 percent significance level. It showed a negative sign, implying that there was a

negative correlation between farmers access to farm lands and levels of poverty. That is, households with larger farm land were less likely to be poor relative to those with smaller farm lands. The marginal effect was 0.118. The implication of the value of marginal effect is that as the total landholding for farming purposes increases by one more hectre, the probability of being non poor increases by 11.8 percent, all other factors remaining constant. The Northern Region is the largest region in the country in terms of land mass hence farmers rarely encounter serious difficulties in accessing land for farming purposes. Similar to the finding in this study, agricultural activities were boasted in countries where land reforms were undertaken to fairly redistribute agricultural lands from landowners who did not themselves cultivate (own lands in excess of their need) to landless farmers with strong desire to engage in agriculture. Zimbabwe and South Africa are cases in point.

Farm experience was also statistically significant at 1 percent significance level. It exhibited a negative sign to imply that there was a negative relationship between the experiences gained by farmers and their levels of poverty. Farmers with richer experiences were less likely to be poor. From Table 4.8, the marginal effect coefficient of farm experience was -0.470, which implies that as farmers gain new skills and experiences on farm practices, then the probability of such farmers being poor reduces by 47 percent, all other factors held constant.

Statistically significant at 1 percent significance level, household laborforce size showed a negative correlation with poverty. Thus, heads of household with lager workforce were less likely to be poor relative to those with less workforce. From

Table 4.8, the marginal effect of laborforce was -0.075, which implies that as the number of households laborforce increases by one more person then the probability of being poor reduces by 7.5 percent, all other factors held constant. The negative correlation between poverty and size of household work- force further explains the critical role human capital plays in productivity and poverty alleviation. The age structure of household members is very critical in terms of economic contribution to household income. Households with large supply of human capital (labour force) are more likely to escape poverty than those with less work force. Better-off households tend to have heads who are somewhat older and energetic.

Gender of head household was statistically significant at 5 percent significance level. With the scale of measurement being male=1, female=0, gender of the head of household showed a positive sign, implying that as the headship of the household changes from male to female, the probability of that household being poor increases by 9.2 per cent, all other factors held constant. That is, households headed by females were more likely to be poor relative to those headed by males. This finding is consistent with studies conducted by Mduduzi & Talent (2017), Mood & Johnson (2015) and Xhafaj & Nurja (2014). The reasons for this result are not far-fetched. In spite of the important role women play in financial management of the household and in the labour market, they appear to face stiff discrimination. They have low levels of education, are lowly remunerated, lack access to land and inheritance and above all, they are largely confined to house chores. A chunk of the economic contributions made by women in relation to the upkeep of the home does not reflect in the household income. A good number of female heads in rural areas are widows hence are compelled to be household heads at very old age; therefore, limiting their

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opportunities to participate meaningfully in the labour market. This finding was consistent with Geda et al. (2005) conclusion that households headed by males have lower probability of being poor with Mastromarco et al, (2010) positing that female heads were more likely to be poor. According to Christopher et al. (2002), there are three major reasons why households headed by women could be poorer than those headed by males; there are more children living with households headed by women (women usually gain custody of the children on marital breakups), women's earnings are lower than men, and gender inequality in government transfers. Female-operated farms cultivate less land area than male-operated farms partly because of limited access to agricultural land by female heads of household.

Access to assistance was statistically significant at 10 percent significance level. It showed a negative sign to imply that there was a negative relationship between the farmers access to agricultural lands and their levels of poverty. Farmers with greater landholdings were less likely to be poor. From Table 4.8, the marginal effect of landholding was -0.305, which implies that as a farmer gains an additional hectre of land for agricultural purposes then the probability of such farmer being poor reduces by 30.5 percent, all other factors held constant. Assistance in the form of finance, inputs, technical know-how etc. serve as catalyst for expansion of farm scale (operations) leading to greater levels of output and income to the farmer. In support of this finding, UNHDR (2005) reported that in the People's Republic of China, microfinance programmes have helped lift 150 million people out of poverty since 1990. Similarly, MkNelly and Dunford (1998), and Mansaray (1999) also found that microcredit beneficiaries in Ghana, Sierra Leone, Nigeria, and Liberia increased their income by US$36 million, compared with US$18 million for non-

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clients. They reiterated that if financial assistance (credit), technical-know-how,
subsidies on inputs, guaranteed markets for agricultural output, among other
assistance, were offered to farmers, they would significantly contribute to higher
agricultural productivity and thereby ameliorate poverty.

Similarly, the size of the household dependents was statistically significant at 10
percent significance level. It showed a positive sign to imply that there was a direct
correlation between the size of the dependents and levels of poverty. Farmers with
larger household dependents were more likely to be poor than those with smaller
number of dependents. From Table 4.8, the marginal effect of the dependency ratio
was -0.256, which implies that as the size of the household dependents increases by
one person, the probability of that household being poor increases by 25.6 percent,
all things being equal. The results of the study depict a positive relationship
between number of dependants and poverty, thus, the higher the number of
dependants the severer the poverty. If there is a change in the age structure which
increases the number of people in working-age and reduces the dependency ratio
(for instance, when children grow and start to work), household income will most
likely improve and possibly change the status of a poor household to non-poor.
These results re-enforce the outcome of the Cambodian CSES of 1993/94 that the
poor tend to live in larger households with the bottom quintile having twice or more
as many children under 15 per family as the top quintile. Audet et al. (2006) found
that household size negatively affected per capital expenditure. The World Bank
(2007) found a positive correlation between household size and poverty in Albania.
Similar findings were reported by Sekhampu (2013), Myftaraj (2011), and Geda et
al, (2001).

Though in this study, educational levels of the farmers, number of crops grown, farm type and the age of the head of household were not statistically significant, they showed the expected signs. For instance, education and training are important indicators of the quality of life as well as key determinants of poor people's ability to take advantage of income-earning opportunities (World Bank, 2005). The negative correlation between levels of education (training) and poverty in this study lends support to the findings made by Alhassan (2012) that education is an important indicator of quality of life which determines poor people's ability to take advantage of income-generating opportunities. Alhassan (2012) reiterates that a literate population is able to apply skills and ideas to fix basic problems to enhance their livelihoods. Household employment is determined mainly by the participation in the labour market, which to a larger extent, depends on skills acquired. Perhaps, the level of education was not significant in this study because majority (85.4%) of the sampled farmers were unlettered.

The number of crops grown by the heads of household was not significant but was negatively correlated with poverty levels. In view of the unpredictable single rainy season in the study area, crop diversification becomes more profitable than absolute dependence on a single crop with high risk of failing. Though most farmers do not cultivate large tracts of land they secure themselves by practicing mixed cropping (a practice of cultivating more than one crop on the same farm land). Farmers usually anticipate either flood or drought hence the decision to blend drought and flood resistant crops to escape complete crop failure.

Similarly, age of the household head was not significant but was negatively related with poverty levels. As people grow older, they gain more experience and become more productive, however, beyond certain age they become less productive as diminishing returns set in. This result was consistent with the report of the World Bank (2007) and inconsistent with the findings of the multivariate analysis in the study of Achia et al. (2010).

4.5 Regression Results of Individual Districts (District-By-District Analysis)

This section examines the effects of the explanatory variables on levels of poverty as they pertain to each of the study districts. The significant variables in the aggregate data affected the individual districts differently.

4.5.1 Logistic Regression Results of the Determinants of Poverty in Bunkurugu District

The most important determinants of poverty in the Bunkurugu District, as depicted in Table 4.9, were; years of experience of the farmer, accessibility to farm land, household labour force and number of dependents. Years of experience of the farmer was statistically significant at 1 percent significance level. Accessibility to farm lands and household laborforce were statistically significant at 5 percent level of significance while the dependency ratio was statistically significant at 10 percent level of significance. Years of experience, size of labour force and access to farm land were negatively correlated with levels of poverty, similar to the findings in the all-district data. The dependency ratio was positively correlated with poverty.

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The impact of years of experience, access to farm land, labour force and number of dependents were stronger in the Bunkurugu district than in the all-district data as determined by the marginal effect coefficients. The variation in the marginal effect coefficients can be attributed to higher per capita landholding, better farm experiences, larger laborfoce and dependency ratio in the Bunkurugu/Yunyoo district than in the other selected districts of the study.

The gender of head of household, access to assistance, farm type, number of crops grown, age of head of household, and educational status of head of household were not significant but showed the expected signs.

Table 4.9: Logit Estimation for Bunkurugu District

S.N.	Variables	Coefficient	Standard error	Wald	*P* value	Odds ratio	Marginal effect
1.	Dependents	-2.575	1.350	3.637	.057*	13.12	.017
2.	Laborforce	1.009	1.067	.895	.034**	.365	-.089
3.	Gender (M=1)	12.255	29.025	1.377	.998	.891	.340
4.	Experience(yrs)	1.607	1.172	1.883	.001***	.200	-.551
5.	Assistance	2.293	2.833	.655	.418	.101	-.445
6.	Landholding	5.304	4.874	1.184	.027**	1.199	-.206
7.	Farmingtype	.909	2.065	.194	.660	2.481	-.531
8.	No.of crops	-.495	.797	.385	.535	.610	-.236
9.	Age	.157	.100	2.473	.116	1.169	.321
10.	Education	-.452	1.846	.060	.806	.636	-.412
13.	Constant	4.728	3.944	1.377	.005***	3.127	-.333

Model Summary

2-Log Likelihood = 20.862   Cox and Snell $R^2 = 0.552$ Nagelkerke $R^2 = 0.844$ $n = 81$

Source: Author's Field Survey (2017)

∗Significant at $p < 0.1$., ∗∗Significant at $p < 0.05$., ∗∗∗Significant at $p < 0.01$.

4.5.2 Regression Results of the Determinants of Poverty in East Gonja District

The critical determinants of poverty in the East Gonja District, as depicted in Table 4.10 were; years of experience of the farmer, access to assistance, household labour force and number of dependants. Years of farm experience, access to assistance and the size of household laborforce were statistically significant at 1 percent level of significance. The dependency ratio was statistically significant at 10 percent level of significance. Years of experience, size of household labour force and access to

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assistance were negatively correlated with poverty levels, similar to the findings in the all-districts data. The number of dependants was positively correlated with poverty. With the exception of the size of household laborforce, the other three significant explanatory variables have greater impacts on the dependent variable (poverty) in the all-districts estimates than in the East Gonja District as determined by the marginal effect coefficients. The gender of head of household, access to land, farm type, number of crops grown, and educational status of heads of household were not significant but showed the expected signs.

Table 4.10: Logit Estimation for East Gonja District

S.N.	Variables	Coefficient	Standard error	Wald	*P* value	Odds ratio	Marginal effect
1.	Dependents	-.140	.358	.153	.069*	.870	.008
2.	Laborforce	.153	.410	.139	.009***	1.165	-.460
3.	Gender (M=1)	1.204	1.068	1.271	.260	.300	.131
4.	Experience(yrs)	1.562	.567	7.583	.006***	.210	-.047
5.	Assistance	.618	.916	.455	.005***	1.855	-.056
6.	Landholding	.348	1.118	.097	.756	1.417	-.069
8.	Farmintype	-.108	1.261	.007	.932	.897	-.351
10.	No.of crops	-.219	.233	.886	.347	.803	-.087
11.	Age	.003	.030	.010	.091	1.003	.085
12.	education	-.375	.792	.225	.636	.687	-.127
13.	Constant	7.479	4.254	3.091	.079**	1.257	.086

Model Summary

2-Log Likelihood = 15.438 Cox and Snell R^2 = 0.587 Nagelkerke R^2 = 0.895 $n = 85$

Source: Author's Field Survey (2017)

∗Significant at $p < 0.1$., ∗∗Significant at $p < 0.05$., ∗∗∗Significant at $p < 0.01$.

4.5.3 Regression Results of the Determinants of Poverty in Savelugu/Nanton Municipality

In the Savelugu/Nantong District, the critical determinants of poverty, as contained

in Table 4.11 were; years of experience of the farmer, gender of head of household

and number of dependants. All three explanatory variables were significant at under

1 percent. Years of experience was negatively correlated with poverty, while the

gender of head of household and number of dependants were positively correlated with poverty. With the exception years of farm experience, the impact of the other two significant explanatory variables in the Savelugu/Nantong District had greater effect on the dependent variable (poverty) than in the all-districts as determined by the marginal coefficients. Labour force, landholding, age of head of household, availability of assistance, farm type, number of crops grown, and educational status of heads of household were not significant but showed the expected signs.

Table 4.11: Logit Estimation for Savelugu/Nanton Municipality

S.N.	Variables	Coefficient	Standard error	Wald	*P* value	Odds ratio	Marginal effect
1.	Dependents	-26.106	40.706	.994	.000***	1.351	.312
2.	Laborforce	.942	1.137	.687	.407	1.050	-.082
3.	Gender(M=1)	-49.636	36.403	.000	.006***	1.397	.214
4.	Experience(yrs)	1.168	1.088	1.151	.000***	1.565	-.297
5.	Assistance	1.812	2.600	.486	.486	.242	-.015
6.	Landholding	-4.259	4.269	.995	.020	1.109	-.038
7.	Farmintype	-9.257	5.412	.283	.999	.100	-.041
8.	No.of crops	.207	1.028	.041	.840	.115	-.012
9.	Age	.128	.099	1.680	.195	.651	.142
10.	Education	.373	1.891	.039	.844	1.604	-.098
11.	Constant	4.789	7.653	.000	.009***	1.115	.461

Model Summary

2-Log Likelihood = 15.438   Cox and Snell R^2 = 0.591   Nagelkerke R^2 = 0.894 $n = 82$

Source: Author's Field Survey (2017)

∗Significant at $p < 0.1$., ∗∗Significant at $p < 0.05$., ∗∗∗Significant at $p < 0.01$.

4.5.4 Regression Results of the Determinants of Poverty in West Mamprusi District

The important determinants of poverty in the West Manpurusi District, as contained in Table 4.12 were; years of experience of the farmer, household labour force and number of dependents. Years of experience and dependency ratio were statistically significant at 1 percent, while the size of labour force was significant at 5 percent level of significance. Level of education was statistically significant at 10 percent. Years of farm experience, size of household labour force and levels of education were negatively correlated with poverty while the number of dependants (dependency ratio} was positively correlated with poverty. With the exception of number of dependants, the other two significant explanatory variables had greater impacts on the dependent variable (poverty) in the all-districts results than in the West Manprusi District as determined by their marginal effect coefficients. Land possession (access to farm land), gender of head of household, access to assistance, farm type, number of crops grown and age of head of household were not significant but showed the expected signs.

Table 4.12: Estimation Result of Logit Model for West Mamprusi

S. N.	Variables	Coefficient	Standard error	Wald	*P* value	Odds ratio	Marginal effect
1.	Dependents	-.158	.384	.169	.002**	.854	.324
2.	Laborforce	.351	.443	.627	.023**	1.420	-.014
3.	Gender(M=1)	-1.172	1.085	1.166	.280	.310	.150
4.	Experience(yrs)	-1.856	.637	8.501	.004***	.156	-.336
5.	Assistance	.718	.816	.455	.018	1.855	-.056
6	Landholding	-1.301	.045	1.004	.056	.216	-.058
7.	Farmintype	-.309	.944	.108	.743	.734	-.083
8.	No..of crops	-.247	.243	1.031	.310	.781	-.243
9.	Age	-.002	.031	.003	.958	.998	.078
10.	Education	-.736	.849	.753	.083*	.479	-.073
11.	Constant	8.617	4.651	3.433	.064**	3.248	.089

Model Summary

2-Log Likelihood = 15.438 Cox and Snell $R^2 = 0.593$ Nagelkerke $R^2 = 0.894$ $n = 81$

∗Significant at $p < 0.1$., ∗∗Significant at $p < 0.05$., ∗∗∗Significant at $p < 0.01$.

4.5.5 Regression Results of the Determinants of Poverty in the Nanumba North District

In the Nanumba North District, the critical determinants of poverty as contained in Table 4.13 were; number of dependents, household labour force, gender of head of household, years of experience of the farmer, and access to farm land. The size of dependents, years farm experience and landholding were significant at 1 percent. The size of the household laborforce and gender of head of household were statistically significant at 5 percent level of significance. Years of experience, size of laborforce and landholding were negatively correlated with poverty, while gender of head of household and number of dependants were positively correlated with poverty. Access to assistance, farm type and age of head of household were not significant but exhibited the expected signs with the exception of level of education of the head of household. Educational level of the heads of farm household in the Nanumba North District did not show the expected negative sign with poverty because more than 90 percent of the sampled households in the District were illiterates.

Table 4.13: Logit Estimation for Nanumba North District

S.N	Variables	Coefficient	Standard error	Wald	*P* value	Odds ratio	Marginal effect
1.	Dependents	-1.786	.004	11.416	.003***	.986	.015
2.	Laborforce	1.044	.595	9.005	.032**	.168	-.004
3.	Gender(M=1)	.781	.610	2.923	.047**	2.840	.082
4.	Experience (yrs)	.416	1.177	.440	.000***	.458	-.031
5.	Assistance	.324	.649	.412	.751	.659	-.103
6.	Landholding	-1.288	1.023	.101	.002***	.723	-.068
7.	Farmintype	-.347	1.365	.468	.728	.393	-.201
8.	No.of crops	-.650	.997	.121	.131	.707	-.009
9.	Age	.001	.301	4.652	.983	.522	.045
10.	Education	-1.212	.913	11.416	.184	1.001	.125
11.	Constant	27.426	7.628	9.005	.000***	1.021	.094

∗Significant at $p < 0.1$., ∗∗Significant at $p < 0.05$., ∗∗∗Significant at $p < 0.01$.

Table 4.14: Significant Levels of Variables (Probability Values) of Selected Districts

S.N.	Variables	All District	Bunkpurugu	Savelugu	East Gonja	West Mamprusi	Nanumba
1.	dependents	.058*	.057*	.000***	.069*	.002**	.003***
2.	laborforce	.012***	.034**	.407	.009***	.023**	.032**
3.	Gender	.040**	.998	.006***	.260	.280	.047**
4.	Experience	.000***	.001***	.000***	.006***	.004***	.000***
5.	Assistance	.074*	.418	.486	.005***	.018	.751
6.	Landholdin	.009***	.027**	.020	.756	.056	.002***
7.	Farmintype	.621	.660	.999	.932	.743	.728
8.	No.of crops	.408	.535	.840	.347	.310	.131
9.	Age	.025	.116	.195	.091	.958	.983
10.	Education	.278	.806	.844	.636	.083*	.184
11.	Constant	.038**	.005***	.009***	.079**	.064**	.000***

Source: Field survey (2017)

As explained previously, the most influential determinants of poverty in the study area were; farm experiences of the head of household, size of household laborforce, household dependency ratio, landholding and access to assistance by the farmers. The level of significance of the explanatory factors differ from district to district as shown in Table 4.14. Similarly, the marginal effects of the explanatory variables on poverty differ from district to district as shown in Table 4.15.

Table 4.15: Marginal Effect of the Influential Determining Factors of Poverty in the Selected Districts

S.N.	Variables	All District	Bunkpurugu	Savelugu	East Gonja	West Mamprusi	Nanumba
1.	dependents	.256	.017	.312	.008	.324	.015
2.	laborforce	-.075	-.089	-.082	-.460	-.014	-.004
3.	Gender	.092	.340	.214	.131	.150	.082
4.	Experience	-.470	-.551	-.297	-.047	-.336	-.031
5.	Assistance	-.305	-.445	-.015	-.056	-.056	-.103
6.	Landholdin	-.118	-.206	-.038	-.069	-.058	-.068
7.	Farmintype	-.021	-.531	-.041	-.351	-.083	-.201
8.	No.of crops	-.113	-.236	-.012	-.087	-.243	-.009
9.	Age	.213	.321	.142	.085	.078	.045
10.	Education	-.007	-.412	-.098	-.127	-.073	-.125
11.	Constant	.312	.333	.461	.086	.089	.094

The marginal effect of the influential determining factors of poverty varied from district to district as contained in Table 4.15.

4.6   Chapter Summary

From the logit estimation of the determinants of poverty in the study area, the prominent variables influencing poverty were; farm experience of the head of household, the size of household laborforce, the dependency ratio, landholding, and access to assistance. With the exception of the dependency ratio, all the other key determinants of poverty correlated negatively with poverty. The marginal effect of the key determinants of poverty varied from district to district.

CHAPTER FIVE

**POVERTY ALLEVIATION STRATEGIES OF GOVERNMENT
AND CIVIL SOCIETY ORGANISATIONS IN THE STUDY
AREA**

5.1   Introduction

This chapter presents strategies used by government and Civil Society Organisations (CSOs) to address poverty in the study area. According to Bourguignon and Chakravarty (2003), poverty reduction is linked to a combination of development strategies mainly because poverty is multidimensional hence broad-based poverty reduction strategies require exploring complementarities of various mechanisms that can potentially alleviate poverty. Bourguignon and Chakravarty (2003) emphasised that anti-poverty strategies address individuals, their culture, the social system in which they are embedded, the place in which they live, and the interconnection among the different factors. These suggest that different anti-poverty strategies look at community needs from quite different perspectives.

Ali and Thorbecke (2003) reiterate the existence of vast, deep and chronic poverty in the rural African setting. In their view, pragmatic strategies are necessary in its reduction. It is against this background that governments, policy makers, development experts and researchers, particularly in developing countries, are focusing attention on poverty reduction as a means of accelerating sustainable community development. In line with the Social Justice Theory which partly underpins this study, appropriate poverty alleviation measures are critical to any meaningful achievement of poverty reduction. Different approaches to poverty reduction exist for different socio-economic environments. The diversity and

complexity of causes of poverty allow for these multiple strategies. While none is wrong, it is consequential from a community development perspective which strategies are applied to particular socio-economic setting. The role of central government and its agencies as well as community-based organisations cannot be overemphasized in the quest to alleviate poverty in any country. Successive governments, likewise community-based organisations in many parts of the developing world have integrated poverty alleviation into their national planning programmes. It is in the light of the critical role governments and non-governmental organisations play in poverty reduction that this section seeks to examine the strategies they use to ameliorate the situation in the Northern Region of Ghana.

The Social Justice Theory guides this objective of the study. The theory seeks to achieve broad based development with emphasis on the marginalised groups in society. If governments, civil society organisations (CSOs) and other stakeholders pursue their roles effectively and efficiently then the poor people will work to overcome the constraints bedevilling poverty reduction, thereby reducing poverty among the smallholder farmers in the study area. The study employed content analysis and descriptive statistics to present the results.

5.2   Poverty Reduction Strategies of Government

As a major stakeholder in the poverty reduction effort, the government plays a key role in addressing the poverty menace as already elucidated earlier (in line with the social justice theory on which this study rests). This study reveals that poverty reduction strategies of government in the sampled districts were similar with slight variations. District assembly representatives acknowledged that poverty reduction

strategies of government administered through the district assemblies in the sampled districts were mainly in the area of education, health, agricultural support (including subsidised inputs and extension services, road network), among other important intervention programmes. The district assembly participants recalled the introduction of poverty alleviation fund (PAF) in each district of the country to specifically address the problem of poverty. According to them, the PAF was developed to target the rural poor with the aim of boasting agricultural production and creating wealth, thereby reducing rural poverty. The respondents further pointed out the failure of PAF was due to its limited scope as government failed to meet its obligation of resourcing the fund.

According to the district assembly representatives and the local experts, many anti-poverty intervention programmes of government were not only limited in scope but were also excessively politicised leading to wrong targeting of the beneficiaries of the programme. In their view, the limited scope of the poverty reduction strategies of the government was mainly due to its lack of commitment and political willpower to address challenges facing rural communities. As a local expert noted.

'If successive governments were committed to supporting rural people then the yawning socio-economic gap between us and the urban population wouldn't exist any longer. There are great economic opportunities in rural areas but lack of financial capital does not permit us to take advantage (local expert, personal interview).

The beneficiaries of poverty reduction programmes feel suspicious about the real commitment of key actors in the poverty reduction agenda. They harbour the

feelings that successive governments used them to achieve political gains without paying the needed attention to their plight as stakeholders in the development agenda of the nation.

5.2.1   Analysis of the Poverty Reduction Strategies of Government

In line with the social justice theory on which this study is anchored, successive governments have made several attempts at ameliorating the economic predicaments of the poor people. As noted earlier, the poverty reduction strategies of government in the study area were mainly in the field of education, health, agricultural support (including subsidised inputs and extension services), access road network, among other important intervention programmes

Education as Anti-Poverty Strategy

In all five districts of this study, it emerged that government employed human capacity building (education) as a conduit to increase productivity levels of labour in the agricultural and other sectors of the Ghanaian economy. According to the district assembly officers, education is considered a medium to long-term strategy to poverty reduction and related socio-economic problems. The district assembly officers lauded the educational policies of previous and present governments but criticised the poor emphasis on science education, technical and vocational training. The respondents indicated that the extension of the Capitation Grant and the School Feeding programmes to their children in schools was very laudable and timely. They stressed that they were relieved of the financial burden as a result of the introduction of such programmes in the educational sector. Some heads of household expressed gratitude for the programmes.

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The Ministry of Education Sector Performance Report (2016) adds credence to the positive impact of the school feeding and capitation programmes of government. The report cited the increasing rate of net enrolment at the basic level of the educational strata as a result of the capitation grant and the school feeding programmes. The Report shows that at the primary level, both gross and net enrolment rates increased by one percentage point from 110% and 91% respectively in 2014/15 to 111% and 92% respectively in 2015/16.

In spite of the educational support packages of government to alleviate the suffering of parents, some families in the study area still had great difficulties absorbing cost not borne by government due to their acute poverty levels. During in-depth interviews, it came out that some families still complain of their inability to provide for the remaining needs of their children in school and often seek assistance from the assemblies and other benevolent individuals and organisations. A District Coordinating Director remarked as follows;

"T*he Capitation Grant and the School Feeding programmes are good and timely because keeping more than two children in school could be difficult task for most parents. We hope government will continue with the programme and absorb the remaining cost of education so that many more children will get educated and become better citizens in future (District Coordinating Director, personal interview).*

In line with the capability and social justice theory, the support for the children from poor households will not only unearth the potentials in them but also contribute to socio-economic development through capacity building.

This study also showed that the education package of government towards improving the human capacity did not affect only formal education but also the non-formal type (functional adult literacy). The non-formal education system which allows for the elderly in particular to pursue basic literacy (usually at night) was operational in most communities within the study districts. Participants in the non-formal education were tutored in functional literacy, numeracy and book-keeping, personal hygiene and other important life support skills.

An agricultural extension assistant remarked:

'*The illiteracy rate in this district is very high, nonetheless the night classes in the various communities have provided the opportunity for many of the village folks to read and write in Dagbani. It is much easier for them now to keep records of their farm business' (Agricultural extension assistant, personal interview).*

Notwithstanding the valuable contribution of human capacity building (education) to socio-economic development of individuals and their communities, this study suggests that an overwhelming percentage of the smallholder farmers in the sampled districts were unlettered. An overwhelming (85.2%) of heads of household (respondents) were unlettered (illiterates) with only 11.5% of the respondents embarking on functional literacy programmes (non-formal education). The level of formal education among respondents constituted only 3.3% (see Table 2 of

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Appendix B). In the light of the high level of illiteracy in the study area, a move towards its reduction becomes so necessary for economic prosperity.

According to Bunkurugu district assembly respondent, the education package of government fails to yield the desire outcomes because of two reasons; first, the strongly held belief of the local people that educating their children implies granting them the independence to lead wayward lifestyles and the second reason he attributed for the failure of the education antidote to poverty reduction in the study area was related to rural-urban drift of the youth which he claimed does not allow youth in rural areas to stay and take advantage of opportunities in the rural communities. '*In spite of the expansion of educational facilities in rural areas, the youth in response to modernity migrate to urban centres in search of non-existing white color jobs at the expense of building their human capital'* (Bunkurugu District assembly representative, personal interview).

According to a senior Programmes Officer of Songtaba, the girl children in the rural areas are the hardest hit in terms of the failure of the education package to poverty reduction. He maintains that many household heads in rural areas prefer to expedite the early marriages of their girl children to keeping them in school for socio-economic empowerment. As the respondent noted:

'*In spite of our efforts to empower the girl child, we often face challenges with parents withdrawing their children to engage them in early marriages*'(senior programmes officer, songtaba).

Primary Health Care (PHC) as Poverty Reduction Strategy

As is often the case, productive labour force lies in a healthy mind and body. According to the World Health Organisation (2010), inequality in health service delivery is significant in most developing countries with many people in deprived communities suffering and dying from easily preventable and/or treatable causes. The Government of Ghana and non-governmental organisations identify primary health care (PHC) as yet another conduit through which poverty can be reduced significantly if not completely eliminated.

Primary Health Care is the first point of call for health service delivery. Primary Health Care (PHC) is the main health approach used by government and the sampled NGOs in the study districts. Primary Health Care denotes 'grass root' level of health services. The World Health Organisation (WHO) defines primary health care as health care made accessible at a cost a country and community can afford, with methods that are practical, scientifically sound and socially acceptable (WHO, 2010).

This study revealed that each of the five sampled districts had a district hospital located in the district capital. Health posts, commonly called the CHPS compounds were available in some other communities of the districts. In addition to efforts of government, some of the selected CSOs particularly Songtaba was also busily engaged in delivery of services in the area of sexual and reproductive health in most parts of its operational area, as captured in the profile of the individual CSOs.

Regarding health service delivery system in the study area, an opinion leader in Chamba, a farming community in the Nanumba North District remarked during in-depth interview:

'Until 5 years ago, this community did not have a health post (CHPS compound) therefore most health conditions were handled traditionally or by relying on drug vendors who come to this area only on market days. Guinea-worm infestation negatively affected productivity until we were directed on the use of filters and the boiling methods to rid of the infestation. As of now, the healthcare delivery in the community has improved significantly though many of the health workers don't stay in this community and often times drugs are prescribed for us to buy either due to absence or not covered by the health insurance scheme' (Opinion leader, personal interview).

The lamentation expressed by some farmers regarding their inability to access basic health care was a clear manifestation that the five principles underpinning primary health care were grossly undermined. These principles are equitable distribution, community involvement, focus on prevention, appropriate technology and multi-sectoral approach. The exclusion and social disparities in health between rural and urban dwellers as expressed by the opinion leader in Chamber, further underscore the socio-economic gap between the rural and urban areas.

Conversely, some opinion leaders and heads of farm households suggest that visitation to the hospitals and clinics in the study area have improved significantly due to the introduction of the National Health Insurance Scheme (NHIS) in spite of the teething problems associated with NHIS. In an interview with an opinion leader

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in the East Gonja District, he pointed out that Christian religious groupings and some politicians often come to the aid of some selected communities in the districts by getting them registered for the National Health Insurance. He remarked:

'Not until the member of Parliament of this constituency registered us for the National Health Insurance, I personally had not visited the hospital because of the high cost of the cash and carry system. Even though the traditional methods of treatment are good, there have been some unusual illnesses that traditional healers are unable to find antidote to hence having access to orthodox treatment through the health insurance facility is of great significance. Our children used to suffer frequently from malaria attacks but now everyone in this house (including children) has mosquito nets. With the use of the mosquito nets, malaria has become a thing of the past. We are healthy and happy now' (Opinion leader, personal interview).

The assertion by the opinion leader supports the position of the United Nation (2006) that poverty manifests itself in so many forms, including; hunger, malnutrition, ill health, limited access to health, education and other basic services, homelessness and inadequate housing, unsafe environments, social discrimination and exclusion.

In spite of the acknowledgement of the role of health service delivery in the study area, a senior programme officer of Songtaba noted that the national health insurance scheme (NHIS) was not producing the desired outcome due to its non-coverage of critical drugs for the treatment of many ailments. The officer indicated that the primary health care delivery strategy of poverty reduction was a failure

because the hard-core poor were still unable to meet the funding for the scheme (the health premium), hence their inability to access health care.

Agricultural Support Services as Anti-Poverty Strategy

According to a district agricultural officer in the Nanumba North District, the Ministry of Food and Agriculture (MOFA), through its district agricultural units, continue to support farmers in various parts of the country with the ultimate aim of preserving the food basket of the country. The officer enumerated a number of agricultural support services aimed at improving productivity among farmers in the study area. He identified major government agricultural support services in the study area as; provision of subsidized inputs, extension services, and provision of feeder roads. He remarked that:

' ….. *though a lot more support is required from government, farmers throughout the country already enjoy some support services provided by the government in the area of road network, subsidised farm inputs (particularly fertilizers) and free extensions services across the country'* (District agricultural officer, Nanumba North, personal interview).

This study reveals further that some smallholder farmers in the study area were encouraged to form farmer cooperatives for purposes of attracting assistance from government or its agencies. According to the district agricultural officer for Nanumba North, tractor services were extended to some farmers who belonged to the farmer cooperatives at subsidized rates with the view to encourage mechanized agriculture. The agricultural officer explained that, with the limited number of tractors in the pools at the various mechanized centres, some farmers expressed

disappointment for either failing to access the services or accessing the service late, which affected their yields.

Majority (72 percent) of heads of farm households lamented the discriminatory practices applied in the allocation of subsidised agricultural inputs, particularly fertilisers. They complained about the man-hours they had to sacrifice to join queues for several days and weeks to secure coupons for subsidised fertilizers. A local expert in kpalbe in the East Gonja District who expressed interest to use the tractors from the 'tractor pool' lamented the failure of the 'first-come, first-serve' method of rationing due to excessive politicisation of the programme. He noted:
'*I was one of those who registered for the tractor services in good time but failed to enjoy the facility because of politicisation of the programme. Because of what happened to me last year I am not interested in expressing interest this year*' (A local expert in Kpalbe in the East Gonja District).

Furthermore, some heads of farm households attested to purchasing fertilizers and treated seeds at subsidized rates from government through their respective district agricultural units. For example, 68% of the respondents indicated they received agricultural assistance either from government or Ministry of Food and Agriculture through the district agricultural units. The remaining 32% of the respondents who indicated they did not receive agricultural support from government or its agency in the last couple of years lamented the bureaucratic, partisan and inadequate nature of such support services of government (see table 4 of Appendix B). An opinion leader and once an award winner (district best farmer) remarked in an interview that:

'Food insecurity in the country will not end until governments pay more attention to the agricultural sector to make it a lucrative business enterprise and not a last-option for subsistence farmers. With the number of farmers in Ghana, the country should not be importing food stuff from other countries including Burkina Faso. Government agricultural support services ought not to be partisan as they have become. The effort of any farmer in the country is for the betterment of the country irrespective of party affiliation' (kukuo naa, 56-year-old opinion leader, personal interview, April 22, 2017).

In connection with the linkage between food producing areas and marketing centres through feeder roads, this study shows that some selected farming communities in the study area were linked to various district capitals through the construction and upgrading of feeder roads. In the Nanumba North District for instance, the Assembly prioritized the construction of feeder roads by linking up yam producing communities to the district capital and other marketing centres. The district is popular for its great potential in the production of high-quality yam tubers. In an interview with an Agricultural Extension Officer in the Nanumba North District, he remarked that:

'This District is naturally gifted with rich soil for the production of high-quality tubers and with the required attention from government and other stakeholders, the returns from the farms will not only uplift this District but the country as whole. Subsidized farm inputs, credit facilities to farmers, mass cocoa spraying, among others, are good moves made by government towards promoting agriculture but more is yet to be done in the north of the country. If government rolls out a special initiative in yam and shea nut production in these naturally endowed areas in the

north then the income inequality gap between the north and the south will get narrower within the shortest possible time. Yam and shea nut production in this District and others with similar potential can lift the north higher than cocoa does for the south. The task of government and other stakeholders is to improve the transport network and create marketing opportunities for export of yam and shea products in commercial quantities' (District Agricultural Officer, Nanumba North, personal interview).

The opinion expressed by the District Agricultural Officer is supported by the literature.

In a study undertaken on agricultural development in the northern savannah of Ghana, Wood (2013) found that the major challenges to poverty reduction in the northern sector of Ghana are; socioeconomic issues, such as inadequate education and health care, fewer economic opportunities, poor infrastructure and government corruption. The study further reveals that environmental issues, such as soil infertility and degradation, harsh and erratic climatic conditions and pest pressures create additional challenges to increasing agricultural production and poverty reduction. In a related development, a study conducted by the World Bank (2015) revealed that in spite of Ghana's success stories in reducing poverty and promoting shared prosperity, the major constraints to poverty reduction in the country were; the growing inequality and polarization in household consumption, the large spatial disparities, and deteriorating macroeconomic environment.

Regarding the impact of the agricultural support services of government on agricultural productivity, some farm households held the view that government was paying lips services to the agricultural sector and by extension to the farmers. They claimed each successive government was interested in the votes from the rural areas but not in the real development of rural people. A local expert in Kpung, a farming community in the Savelugu Nantong District remarked:

'yields from the farms are getting lower year-by year and the returns to the ordinary farmer is deteriorating because government is only interested in the votes of the rural people but not in their welfare. The state of infrastructure is sorrowful in most rural communities' (Local expert, personal interview).

According to a district agricultural officer in Bunkpuru Yunyoo District, the agricultural packages of government towards poverty reduction in the area failed to yield the desired outcomes mainly because of their limited scope, late delivery and excessive politicisation of policy interventions. Regarding poor planning and implementation of some agricultural support programmes in the study area, a district agricultural assistant for West Manprusi remarked:

'The government subsidized fertilizer program seemed adhoc, most farmers will not get the fertilizer and those who will get it will do so far later than the time for fertilizer application on crops. I will not be surprised if the outcomes of the programme are not realised (Agricultural Extension Officer, personal interview).'

Regarding the excessive politicisation of government agricultural support services, district agricultural officers and opinion leaders expressed disappointment about the deliberate failure of some beneficiaries of financial and non-financial credit to repay

such debts. According to the district agricultural officer for Savelugu, the farmers have become their own enemies because of their beliefs regarding loans extended to them. He remarked:

'Any farmer who wins a loan facility from government does not dream of repaying it. They consider such money or inputs as gift from the state. This behaviour has contributed significantly to the inability of government to continue to extend such credits thereby impeding productivity in the agricultural sector (Agricultural Extension Officer, personal interview)'

5.2.2 Analysis of Poverty Reduction Strategies of Selected Civil Society Organisations

In consonance with the social justice theory which underpins this study, community-based organisations are providing different forms of assistance to the poor. Due to competing needs for limited financial resources in the developing world in particular, Civil Society Organisations (CSOs) have often played complimentary roles in filling the development gap left behind by central governments. This section evaluates the poverty reduction strategies of the Civil Society Organisations (CSOs) in the study area. The purpose of this analysis is to examine the extent to which community-based organisations consider smallholder farmers in the matrix of poverty reduction. The analysis will afford government and policy makers the opportunity to assess the contribution of CSOs towards poverty reduction among smallholder farmers.

For the purpose of this study, CSOs comprise all agencies or groups, which are different from government bodies, including Non-Governmental Organisations

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(Samuel & Thanikachalam 2003). Khwaja (2001) argued that CSOs provide closer links to the poor than public sector institutions. CSOs in Ghana are key stakeholders in the development process. They have been involved in economic development and poverty reduction, operating mostly in the fields of education, health, environment and micro-credit (Kebeer, 2003). Similar to the intervention strategies of central government and local authorities, NGOs and Community-Based Organisations have not relented in their effort to assist the poor and vulnerable in society.

Different CSOs have different approaches to poverty reduction. These include macro and micro level, supply-side and demand-side approaches (Suharko, 2007); participatory, people-centred rights-based approaches (Banks & Hulme, 2012); 'asset-based approach' (Sparr & Moser, 2007). All these approaches entail pro-poor growth, microfinance, asset accumulation, basic service provision, and advocacy strategies that define the direct and indirect operations of NGOs in their efforts to reduce poverty (Geraldine, 2017). The poverty alleviation strategies applied by the community-based organisations in the study area are considered below.

CSOs Capacity Building Strategy to Poverty Reduction (Education)

High levels of illiteracy limit the opportunities for the poor illiterate farmers. The primary goal of most CSOs is to alleviate poverty through a set of strategies which enhance the human capacity of the targeted poor people. According to Korten (1990), CSOs are often created in order to expand the capacities of people and government thereby reducing the incidence of poverty. The income inequality gap between the wealthy educated elite and the illiterate poor is mainly attributable to

the differences in educational empowerment. Capacity building is considered a source of empowerment and economic independence to the poor and vulnerable in society. For most CSOs, the starting point of the eradication of poverty lies in the human capacity building of poor people (Korten, 1990).

According to the programmes officers for UrbANet, achieving sustainable development through capacity building is a critical requirement to most anti-poverty Non-Governmental Organisations. As a requirement for accessing support services (investible financial resources) from CSOs, the officer indicated that poor people were expected to imbibe some reasonable levels of skills and knowledge relevant to their socio-economic wellbeing. The programmes officer acknowledged that through capacity building, their CSO has been able to improve the capacity and confidence level of many poor households in their catchment area. Expressing a similar view, the senior programmes officer for Songtabas emphasised that as a first step in rolling out any assistance to the poor people, the existing knowledge and capacities of the poor people are identified. To this end, the senior programmes officer indicated that complementary skills training becomes mandatory to enhance the existing capacities. He remarked that:

'Among others issues, our mission as a CSO is to identify the root causes of impoverishment in the catchment area and address them appropriately. Analysis of poverty in rural communities over the years shows that the major cause of it is illiteracy, therefore to eradicate or at least reduce the menace; the necessary condition will be to improve on levels of literacy of the poor people. Capacity building (education) is the springboard for all other poverty alleviation strategies of our organisation. Thus, building the capacity of beneficiaries precedes the

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implementation of all poverty reduction strategies of our NGO. For instance, no beneficiary qualifies for microcredit without the financial training'(Senior Programmes Officer of Songtaba, personal interview, May 2, 2017).

To support the critical role of capacity building in any quest to reduce poverty, it was observed that all the sampled CSOs in this study considered capacity building as a perquisite for any financial assistance to the poor. Capacity building of the poor people is considered a springboard for poverty reduction. The programmes officer for PAS Mile7 remarked that:

"……….For any educational program to meet the needs of the poor then it has to ensure that children from poor households, in particular, are empowered by increasing their capabilities, assisting them understand their fundamental human rights and above all, increase their levels of confidence'(Programs Coordinator, Presby Mile , personal interview, 23 April, 2017).

Corroborating the critical role of capacity building towards the fight against poverty, a District Agricultural Officer remarked:

'It is obvious that the poor are the illiterate farmers who depend solely on rain fed agriculture. They do not have any predictable levels of income. The only major option for the illiterate rural poor is to resort to farming for survival. To ameliorate the financial and psychological difficulties of the poor farmer however, farmer education (extension services) often plays a critical role in improving the yields of the illiterate farmers' (District Agricultural Officer, personal interview, May 3, 2017).

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The above findings on the critical role of capacity building in poverty reduction are in consonant with the findings of Ulleberg (2009). Ulleberg (2009), maintains that through capacity building, CSOs have reached out to several millions of poor people in many parts of the world, particularly Africa. Ulleberg (2009) argues that the CSOs through skills training, technical advice and exchange of best practices have been able to alleviate poverty in many countries. Additionally, Julius Nyerere, former President of the United Republic of Tanzania once noted that "Education is not a way to escape poverty- It is a way of fighting it" (Nyerere, 2001).

CSOs Microfinance Strategy to Poverty Reduction

One significant obstacle to the growth of most micro, small and medium enterprises (including farm enterprises) is the lack of funding. Several studies (Aryetey et al. 2004; Blakely et al.2002) on poor growth of businesses in Ghana point to hindrances emanating from inadequate funding. Poor access to credit by the private sector operatives remains a major problem to most businesses in Ghana. For a plethora of reasons relating to risk of default in loan repayments, most traditional banks are unwilling to extend credit to micro and small enterprises. The level of reluctance to extend credit to farmers is much worse because of the unpredictable nature of the rain patterns on which an overwhelming majority of farmers depend.

Alluding to production risk and uncertainties closely connected to the vagaries of the weather, the farm households in the study area stressed on their heavy dependency on only a single season for agricultural produce unlike their southern counterpart. Majority of the respondent smallholder farmers' complained of being

financially excluded as a result of such risk and uncertainties. It is worth noting that 32.5% of smallholder farmers in the study area received neither microfinance nor bank loan in the last five years. On the other hand, 47.4% of the farmers interviewed had ever received microfinance either in cash or in kind (farm inputs) in the last five years. Only 4.2% of the farmers interviewed (who were basically cash crop farmers) indicated they obtained loans from the traditional banking sector. The remaining 16% of the farmers that were interviewed indicated they benefited only from technical assistance in the form of skills training (See Table 4 of Appendix B).

Bhandari (2009) cited in Rugema (2014) defined a financially excluded person as one who neither has a bank account nor receives financial assistance. Financial exclusion is considered a source of poverty. In order to address this problem of finance by SMEs, microfinance is thought to have an important role to play since an encompassing and vibrant financial (banking) sector is essential to increasing the level of economic activities of a country. Microfinance is generally understood as the provision of basic financial services including savings, credit, money transfer and even insurance, to the poor or in a broader sense, those who are unable to access such services due to exclusion from mainstream retail banking sector (Stanley, 2008).

All the selected CSOs in this study operated microfinance schemes as part of their strategies to reduce poverty in their catchment areas. The microfinance programmes of all the sampled CSOs were modelled on the Grameen Bank approach where recipients were self-grouped to serve as collateral security. At the time of the

interviews, it was observed that some recipients of the microfinance had benefited twice or more from the facilities. Even though the proliferation of microfinance institutions has increased access to microfinance in many parts of the country, including the study area, loans/finances are seldom large enough to engender any meaningful growth of enterprises. Microfinance beneficiaries in the study area lamented the small loan sizes as well as the short interval within which repayments were expected. Common complaints among the recipients of the microfinance were related to small loan sizes, high interest rate and untimely disbursements of the funds. A local expert narrated his ordeal in an attempt to solicit financial assistance to fund his operations:

'I made several attempts in the past to obtain a loan from Agricultural Development Bank (ADB) but all to no avail. I could not meet the conditions of the loan. Only last year, I got microfinance facility of one thousand five hundred Ghana cedis (GHc1500) from UrbaNet to expand my farming enterprise. ……….as we talk I have finished paying and waiting for another facility to expand my groundnuts farm' (Local expert, personal interview).

As it is the case among some microfinance recipients, Gomda (a local expert) redirected his loan solicited for agribusiness to petty trading.

'I have been in farming for a very long time. My late father introduced me to farming. Infact making ends meet has always been problematic. The risk in farming is so great that even periods of bumper harvest still do not favour the farmer. When the natural factors are favourable and yields increase, producer prices nose dive and the farmer earns less. The situation is worst if natural factors show their dark side to the farmer. The situation is so unpredictable that the farmer constantly

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faces either drought, over flooding, pest/disease outbreak, and bush fire among other disasters. From the lessons I learnt from farming, I decided to invest more than 80% of the loan from the microfinance institution into smock trade. For the past one year, I have been better off economically than the situation was when I was mainly a farmer '(local expert, personal interview).

The study revealed that besides the microfinance from the CSOs operating in the study area, some farmers also accessed support services from friends and relatives and in few cases from the district assemblies. Evidence suggests also that some farmers accessed credit either in cash or kind from 'money lenders' particularly at the beginning of the farming season. The recipients of credit from money lenders complained of usurious interest rates. According to them interest charges ranged between one hundred (100) and three hundred (300) percent per annum. Below is a remark of a farmer:

CSOs Agriculture and Food Security Approach to Poverty Reduction

Agriculture is the main stay of rural communities in Ghana, therefore most CSOs integrate food security into their programmes. All five sampled CSOs in the study area were busily engaged in rolling out intervention programmes to increase agricultural yields. The study found that the NGOs, in collaboration with their donor agencies, assist farmers to adopt best farming practices in order to beef up their incomes and eliminate poverty. Evidence from the study shows that innovative agricultural practices introduced to farmers included; soil management technologies and climate smart agriculture.

This study found that the impacts of climate change such as bush fires, drought and recurring floods are present in the study area. An extension Officer had this to say:

'The impact of climate change is severer in the northern part of the country because of the single rainy season which spans between May and October. Because of the high illiteracy rate in rural communities' vulnerability to climate change is so high which is exacerbated by biophysical and human-related factors as deforestation (mainly for fuel wood and charcoal), overgrazing (herds of cattle) and bush fires (for hunting)' (Agric Extension Officer, East Gonja district, personal interview).

The opinion expressed by the agricultural extension officer reiterate the position of Alhassan (2015) that smallholder farmers in northern Ghana are exposed to plethora of hazards including unpredictable climatic conditions and pest outbreak.

Due to the high susceptibility to climate change in the study area, the sampled CSOs were introducing farmers to climate smart agriculture to build the resilience of the rural farmer. The results of this study show that three of the sampled NGOs (PAS Mile7, ZEFP and UrbaNEt) exist mainly to support rural farmers overcome the adverse effects of natural and artificial disasters. According to beneficiary farmers, the aforementioned three agricultural-based CSOs furnish rural farmers within their catchment areas with relevant and up-to-date agricultural information. For example, about 67.5% of farmers in the study area indicated that they had benefited from financial and technical assistances from either government or its agency or from a CSO (see Table 4 of Appendix B). They also indicated benefiting from the education on weather conditions, resilient seed variety, soil management

practices among others. According to the CSO officials, farmers are encouraged to regard farming as business (professional career) rather than just a way of life. A Programme Coordinator of a CSO remarked as follows:

'….to a great extent, most farmers do not consider their farming engagements as business enterprises which ought to yield them great returns to meet their economic needs' (Programmes Coordinator, PAS mile7, personal interview, April 23, 2017).

CSOs Humanitarian and Relief Services Strategy to Poverty Reduction

Every non-governmental organisation has a stated mission and or goal(s) to achieve. However, often times, CSOs roll out intervention packages to deal with emergency situations within their catchment zones and even beyond. Relief services have become an integral part of the roles of every CSO. These relief services are purely on humanitarian grounds. Disasters, either natural or man-made are often accompanied by serious economic hardships. Victims of such disasters often have serious difficulties meeting the basic needs of food, clothing and shelter. In addition to hunger and starvation are diseases that characterize such disasters. To ameliorate the suffering of victims of disasters, relief items including drugs, food, clothing, shelter, are often extended to them as remedial measures.

According to Kpaka (2007), relief services are the surest and fastest means of fighting poverty and deprivation. He reiterated that relief services, unlike other forms of poverty alleviation assistance, are rightly targeted. With the exception of rainstorm, drought, flooding and 'fall army worm' infestation in the north of the country, there were no other known cases in any of the districts under study with regards to natural disaster. Some respondents, however, recounted their experiences

during some ethnic conflicts which hit some parts of the north in the recent past. Most of the narrations of the respondents about the ethnic conflicts in the north were related to Dagombas and Kokombas. In a question posed on the impact of relief services during the period of the conflict, an opinion leader remarked:

'I lost my husband and son during the war, life became so difficult for me and my dependants. We relied on the benevolence of our neighbours and relatives until two different CSOs came to register us for some humanitarian/relief services. We were provided with clothing, food stuff, among other items on monthly basis for a period of nine (9) months. At the end of the 9th month we were given various sums of money as start-up capital' (Opinion leader, personal interview).

CSOs Self-Help Strategy to Poverty Reduction

The self-help strategy of community development operates on a principle that recipients of any form of assistance have primary responsibility of putting to good use the assistance extended to them and to further ensure that benefits of the assistance become sustainable. From the community development perspective, local people are required to demonstrate their readiness and willingness to apply their own effort and resources to improve their lot even without external assistance. As modus operandi, CSOs and other development partners identify the potentials of the local people and direct such potentials towards achieving socio-economic development. Self-reliance improves the socio-economic wellbeing and independence of the local people. This view was supported by a respondent as follows:

'….. even before we introduced our intervention programmes to alleviate poverty in our catchment area, many of the communities had their own initiated self-help

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projects. Our intervention served as catalyst to boast their effort at community development. We coordinated their activities and networked them with other communities for mutual benefits' (Senior Programmes Coordinator, Songtaba, personal interview, May 2, 2017).

5.3 Poverty Alleviation Strategies of Sampled Civil Society Organisations

This study reveals that several CSOs apply poverty reduction strategies differently in different communities depending on the vision and mission of the CSOs and perhaps the felt needs of the beneficiary communities. Responses from the farmers and the CSO officials show that the sampled non-governmental organisations poverty reduction strategies were mainly in the area of education (capacity building), health and nutrition, microcredit, agricultural support (food security), water and sanitation, women's rights and good governance, peace building, humanitarian/relief services, among other important intervention programmes. It is worth noting that none of the sampled CSOs implements all the poverty alleviation strategies enumerated above. The poverty alleviation strategies of the different CSOs per the interviews with the stakeholders are presented as follows:

5.3.1 UrbANet Ghana

According to managers of UrbANet, the organisation was initially focused mainly in promoting urban agriculture in its formative years (2000-2006). Following the trends of development challenges in the operational areas however, the organization broadened its mandate to incorporate micro-finance for smallholder farmers and rural agriculture programmes that have forward and backwards linkages to urban agriculture and food security in general.

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According to the programmes Co-ordinator, the main poverty alleviation strategies of UrbANet are; capacity building and food security, microfinance, and promotion of networking among smallholder farmers.

Programme for Capacity Building and Food Security

Operating on the principle that 'knowledge is power', UrbANet offers periodic trainer of trainers programmes to its beneficiaries to equip them with the requisite operational skills to overcome poverty and food insecurity. UrbANet in collaboration with Ministry of Food and Agriculture (MoFA), organises special sessions for Agricultural Extension Agents (AES) from each community within the catchment area on best farming practices. The AEAs or the master farmers after each training go back to their respective communities and train the other farmers to kick-start the project. According the programmes Co-ordinator for UrbANet, the organisation in the last couple of years focused its attention on areas such as; training workshop on preparation of compost (manure) and nitrogen fixation, two-step seed inoculation, seed coating technologies, assessing response to inoculation, training workshop on leadership and basics of advocacy and negotiation, training workshop on value chain development and strategic and business plan development for the farmer unions in the catchment area.

A beneficiary farmer remarked as follows:

'*We have struggled so much in the past to use our hard-earned income to procure fertilizers to apply on our crops. With UrbANet capacity building programme, every farmer in this community now knows how to prepare compost (manure) to enrich our farmlands. The preparations are as good as the fertilizers we use to buy.*

Thanks to UrbANet, we no longer spend our hard-earned incomes on imported fertiliser' (A beneficiary local expert).

Programme for the Promotion of Networking to Improve Food Security

According to the programmes co-ordinator of UrbANet, the organisation identified poor network among farmers themselves and between farmers and institutions working in the area of food security as a challenge militating against poverty alleviation and food security. He intimated that considering the importance attached to the collaboration between farmers and other stakeholders in the value chain, UrbANet as part of its core mandate creates platforms for the sharing of vital information among the stakeholders in agriculture. He noted that UrbANet in the last couple of years was able to network smallholder farmers in its catchment area with agro-processors, officials of ministry of food and agriculture (MoFA) and other stakeholders in the value chain. He remarked:

'O*ne of the serious challenges to food security in this district and the region at large is the absence of effective collaboration and networking among institutions working in the area of food security. therefore any effort at addressing this challenge is worth considering. We have all been doing our small bits without much reference to what others do and so can only achieve little results. We sometimes even duplicate our efforts. What happens to the district food security networks is nothing but our inability to forge collaboration and networking. The initiative of UrbANet reinvigorates the sprite of network in us and we are achieving better results than ever before'* (Programmes Co-ordinator, UrbANet, personal interview).

Microfinance Programme

According to the programmes co-ordinator at UrbANet, in response to the deepening levels of poverty in the northern region, particularly in the rural settings (as already discussed in this study), the organisation in 2007 rolled out the 'Rural Livelihood Group Empowerment Credit Scheme' as a strategy to addressing the issues of food insecurity and poor conditions of life in its operational zone. The overall aim of the project was to improve upon food security and livelihoods in general of the poor and vulnerable groups through the establishment of a sustainable microfinance scheme for the promotion of small-scale farmer and agro-based groups in some selected deprived communities. According to the Programme Coordinator the specific project objectives of the microfinance programme include:

1.   To increase income levels of smallholder farmer by about 45% over a period of two years from current levels through the provision of credit and savings services.

2.   To empower agro-based groups (particularly, women) through increased access to credit, entrepreneurial education and participation in group activities.

3.   To deliver appropriate and quality financial services through the establishment of an efficient financial administrative system and the training of staff on credit management.

The programmes co-ordinator indicated the organisation sought to achieve the above objectives through strategies to facilitate efficient and effective operations which strengthen existing livelihood groups within the working communities through animation and sensitization, mobilizing and animating potential livelihood

groups within the working communities and linking them with the scheme, facilitating the development of principles and values by way of byelaws/constitutions for these livelihood groups, designing simple contractual agreement together with groups to facilitate the credit administration with the groups, and establishing gestation and repayment period of the credit with groups' based on groups' activities. These strategies formed the basis for the administration of the credit which commenced in November 2007.

5.3.2 SONGTABA

As a gender sensitive non-governmental organisation, Songtaba works to achieve a society free from inequality and injustice in which women and other vulnerable groups enjoy their fundamental rights. The organisation focuses on the following strategies to achieve the desired results; women's rights and governance, sexual and reproductive health rights, food security and livelihood, and capacity building (education).

Women's Rights and Governance Programme

As a women and children rights organisation, the core mandate of Songtaba is women's and girl child empowerment. The organisation works to facilitate women and girls' power in their communities, schools and local assemblies. The underlying principle of the organisation is that women are powerful forces for change. The organisation abhors all kinds of gender-based violence. Through Community Advocacy Teams (CAT), the organisation strengthens and encourages women's participation in community governance, increases women's participation in

agriculture, addresses the educational disparities to reduce the gender gap in education.

Through the 'Stop Violence Against Girls in School (SVAGS) programme, the organisation addresses girls' rights to violence free lives and access to education. SVAGS established girls' clubs in first and second cycle institutions that bring girls together to discuss and learn new ways of improving their conditions not only in schools but also at home. These girls' clubs support them to build their confidence and other leadership qualities to resist all forms of abuse and violence. In collaboration with Community Advocacy Teams, DOVVSU, CHRAJ, Parent-Teacher Associations (PTAs), School Managements, traditional and religious leaders, Sontaba had developed a comprehensive strategy to fight sexual abuse and all forms of violence which deny girls from staying and completing school. A senior programmes officer of the organisation remarked:

"In the last five (5) years, our organisation has assisted women accused of witchcraft in kukuo and Gnani witch camps in the Northern Region. We managed to secure freedom for some and supported many others in the camps with clothing, foodstuff and toiletries. Our advocacy for society free of inequality and injustice continues unabated.'

He however lamented that in spite of the tremendous contributions of the organisation to end gender-based discriminatory practices, socio-cultural factors which are pervasive in most rural communities continue to hinder progress.

Sexual and Reproductive Health Programme

As important as health is in productivity, the organisation has designed programmes and projects to address the health challenges most women and girls face in their communities. Through a strategy of using community led volunteers and mother to mother support groups, Songtaba works in communities to promote sexual education, access to healthcare, safe sexual practices and other related issues. Girls and women in their reproductive ages are educated on the dangers of sexual and reproductive related illnesses and how to mitigate them. In an interview with a senior programme officer of Songtaba, he remarked;

'*owing to our intervention in the area of sexual and reproductive health in our operational districts, girls enrolment in schools within our area of involvement has increased by an average of 20%, violence against girls and women has also dropped by about 50% and substantial progress is made towards gender parity in education.'(Senior Programmes Officer, personal interview)*

Food Security and Livelihood Programme

Operating on the principle that 'everyone has the right to constant access to adequate and balanced diet' Songtaba works to achieve this goal through three main programme areas; smallholder farmer group development, farmer education and training, and climate change resilient agriculture.

In the area of smallholder farmer group development, the organisation works closely with smallholder farmers, especially women who are often unable to access productive resources such as inputs, financial credit, extension services, and

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marketing opportunities, among others. Such smallholder farmers are assisted to form networks such that they can gain access to these resources as well as collective voice to participate in agricultural discourse to influence policy decisions. Agricultural Extension Agent (AEA) in the nanumba north district remarked:

'Most of the yam farmers in this district have been supported to form networks with middlemen in the value chain to ease their difficulties associated with marketing of the product.'

In the area of farmer education and training, smallholder farmers who are largely illiterates and farm with traditional methods are targeted for extension services to upgrade their skills on improved technologies of farming. In spite of reports of improved yield among beneficiaries of such capacity building exercise, a few conservative farmers remained in the past by insisting and practicing the farming traditions of their forbearers. A senior programme officer of Songtaba remarked that with the exception of a handful of farmers, a good proportion of those who received their agricultural extension services have better livelihoods than the situation before the intervention programme.

On climate change resilient agriculture, the organisation through its collaborative partners assist farmers to make farming promising and sustainable economic activity. As climate events such as thunderstorm, drought, and erratic rainfall impact the environment negatively, crop yield continues to dwindle and causes serious food insecurity in the country. To help combat the changing environment, Songtaba supports smallholder farmers achieve sustainable agriculture through smart intervention programmes such as composting, green manuring, mulching, and

multi-cropping. On the impact of these training programmes on productivity of the smallholder farmers, the senior programmes officer of the organisation remarked:

'The impact assessment of our climate change programme conducted by an independent consultant revealed that beneficiary farmers increased their yields by more than three (3) folds' (Senior Programmes Officer, personal interview).

Capacity Building (Education) Programme

Operating on the belief that education is not only a fundamental human right, but also the pathway to a better future, Songtaba since 2005 has established an education unit to empower marginalised and vulnerable groups in its catchment area. The organisation instituted a non-formal education programme for adults who could not fit into the formal educational system. Such people are exposed to basic arithmetic and costing, personal hygiene, sexual and reproductive health, among others. Also, children are assisted to gain sponsored quality education. The organisation also works closely with schools, Ghana Education service and other stakeholders to tackle gender-specific problems in schools. Girls in schools are groomed for leadership roles. According to the programmes Officer, the organisation has since 2015, provided free education to over three hundred (300) children in the Northern Region through the Complimentary Basic Education Programme. In spite of the role of the organisation in getting every child of school going- age in school, a lot more children of school going-age are not in school due to socio-cultural and economic reasons. The senior programmes officer noted:

'Many children of school going age are still not in school because their parents use them to boast income generation either on the farms or markets. The very young ones who are not yet economically active are the ones they push to schools, when

they grow they substitute them with other young ones' (programmes officer, personal interview).

5.3.3 PRESBYTERIAN AGRICULTURAL SERVICES (PAS)

As an agricultural oriented organisation, PAS is engaged in the field of agricultural development, specifically in food security and nutrition, agribusiness and entrepreneurship, environmental management and climate change. Through the aforementioned programmes, the organisation seeks to improve livelihoods, household food security and poverty reduction. The organisation focuses on the following strategies to achieve the desired outcome of food security and poverty alleviation; food security and alternative livelihoods, capacity building (education) and facilitate access to finance and markets.

Food Security and Alternative Livelihood Programme

In the area food security, PAS has since 2010 launched a programme dubbed 'Hunger Free Project'. The primary objective of this project was to facilitate the improvement of food security and income in selected poverty endemic communities in the catchment area. Through 'smart Agriculture', PAS has introduced resilient and high yield variety of crops (mainly cereals) to increase food sufficiency. Coupled with the appropriate extension services, farmers in the selected communities were provided with improved seed varieties for three (3) consecutive seasons (2010-2012) farming seasons as starter packs. To ensure all year-round food security for farmers in the catchment area, PAS has also introduced dry season farming by constructing dams and drilling boreholes in some selected communities with good water profile. Such dams and boreholes do not only support dry season

farming but also served as sources of water for households. On the usefulness of the constructed dams and boreholes, an opinion leader in the East Gonja District shared the following experiences:

'*the dry season gardens keep us busy and supplement our incomes from regular farm operations. Youth of this village are not motivated to travel to the south of the country for greener pastures. The vegetables and green leaves from these gardens are a source of huge income for all. Sometimes we sell the produce from these gardens to buy foodstuff when we are running out of stock. We are thankful to the non-governmental organisation for constructing these water sources' (opinion leader, personal interview).*

Additionally, PAS has over the last decade assisted farmers to construct warehouses and silos to prevent postharvest losses, an agricultural officer for PAS remarked.

On alternative livelihood programmes and in line with sustainability programme focus on women empowerment, PAS has supported women groups in its catchment area to empower them economically and politically. PAS has mobilised women shea collectors and processors by training them on production of quality shea kernels and butter for both local and international markets. Using the Ghana Standards Authority (GSA) guidelines for best practices on quality shea nuts, PAS has since 2010 trained 4,000 women on quality shea nut processing. According to an agricultural officer for PAS, the organisation's training programmes have equipped the women with optimal techniques for collecting, drying and roasting the shea kernels with greater ease. The officer added that micro credit facilities were

extended to beneficiary farmers and processors to overcome the lack of cash and aid investment in productive technologies and practices.

Capacity Building (Education)

Operating on the principle that agricultural information and extension services are the surest way to increase farmer creativity and productivity, PAS is adopting the pedagogical model in the study area to improve information dissemination among farmers by using information and communication technology to reach farmers directly with more tailored and timely information, incentivising trainers based on learning outcomes and leveraging social networks to increase diffusion of information. To ensure that the capacities of farmers and farmer-based organisations are improved, PAS has over the years equipped their agricultural services stations in their operational areas to effectively manage their programmes and deliver quality services. The Presbyterian Agricultural Services Poverty Action Lab (PASPAL) focuses on improving agricultural systems of their farmers including strategies to help farmers adopt practices and technologies that are profitable and environmentally sustainable. Using an integrated approach, PAS provides technical skills training to all their beneficiary farmers. For instance, in 2013 farming season about 125 livestock farmers in East Gonja District were taught how to rear livestock, including vaccination, feed and treatment of diseases. Regarding the dissemination of relevant information to the farmers at the right time, PAS agricultural officer remarked; '*agricultural extension is the most common programme model used to transmit information to farmers in this District. Farmers may benefit more when information helps to overcome behaviourial biases such as procrastination. Extension is also critical when learning through direct observation*

is difficult. In this era of Information telecommunication technologies, extension services are transmitted to farmers with access to mobile phones at the right time thereby replacing the traditional extension model of relying on in-person visits with standard training messages for a small number of farmers at a time. Through farmer education, most farmers in this District are protected against losses due to climate change, floods, drought, pest and disease outbreak, among others' (agricultural officer, PAS, personal interview).

Access to Finance and Markets Programme

On the heels of complaints of inadequate financial capital availability to farmers in its operational zone, PAS has integrated credit facilities in its programmes to assist the poor farmers to achieve higher productivity. The credit package of PAS is similar to the Grameen model in which a group of borrowers jointly hold responsibility to repay one another's debt. Farmers are put in groups of between 15 and 20 members for financial and input assistance. The assistance for inputs enables many farmer beneficiaries to procure bullocks, implements, fertilizers, improved seeds, among others. A beneficiary local expert remarked; 'since modern farming practices require cash, most of us in the rural areas are unable to engage in large scale farming, however, the financial assistance from PAS over the years has enabled us to expand our farms (local expert, East Gonja District, personal interview).

Besides the provision of financial support, PAS has also created a platform for farmers to dispose of their produce. During periods of harvest, farmers are assisted to achieve guaranteed pricing system. Through market linkages, the farmers are

linked to produce buying companies. These produce buying companies offer between 15 and 25 percent price mark-up on the prevailing market prices thereby saving the farmers from severe price fluctuations.

5.3.4 ZASILARY ECOLOGICAL FARMS PROJECT (ZEFP)

As a local non-profit making organisation, ZEFP's principal objective is to fight rural poverty and improve livelihoods in the Northern Region of Ghana through innovative approaches in food and cash crop production. The organisation focuses on the following strategies to achieve the desired outcome of improved livelihood and poverty alleviation; sustainable natural resource management, capacity building (education) and microfinance products.

Sustainable Natural Resource Management

In response to climate changes, desertification and unsustainable approaches to agriculture which are increasingly threatening the savannah biodiversity, ZEFP is particularly working to upscale environmentally friendly innovative approach to food and cash crop production to improve livelihoods of the rural farmers in the Northern Region of Ghana. The organisation's ecological agricultural technology supports the poor rural farmers to arrest the rapidly dwindling soil fertility situation for improved crop yields. ZEFP provides ecological agricultural education to individuals and groups of farmers in the northern savannah to empower them to integrate biodiversity and sustainable resource use.

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Capacity Building (Education)

Operating on the principle of 'hunger free through agricultural education' ZEFP has organised series of training programmes targeted at youth, both educated and non-educated who are willing to adopt and practice agriculture either on full-time or part-time basis. The prospective farmer trainees are usually taken through a two-year training and practical courses in agriculture and related issues. Farmer trainees are usually equipped with relevant skills in soil management technologies, compost making and applications, planting systems and engineering technologies. Farmers are also trained to integrate crop production with livestock production using climate smart agriculture technologies. The organisation also disseminates information on the best practices involving integration of tree planting with crops for improve soil fertility, food, fodder, etc.

Microfinance Products

Following a baseline survey on the financial position of smallholder farmers in its catchment communities, ZEFP in 2009 introduced a microfinance package to assist selected poor farmers to obtain cash and farm inputs to boast their productivity levels. The microfinance programme targeted small scale farmers willing to adopt and practice sustainable land management technologies for improved yields. In addition to farm inputs, farmers were availed with cash credit repayable upon harvest. ZEFP adopts two modes of credit delivery, namely, the individual and group loans. The farm inputs are on individual basis while the cash loans are on group basis in line with the Grammeen model. Since 2009, more than 3000 smallholder farmers are reported to have benefited from the microfinance facility of

ZEFP. Farmers who benefit from the microfinance facility do so for a maximum of four (4) farming seasons to enable other farmers access the facility.

To sum up on the anti-poverty measures adopted by the CSOs to ameliorate the economic hardship facing the rural farmers, it is worth noting that the poverty alleviation strategies of these selected CSOs in the study area have not changed significantly over time. The study observed that the selected CSOs continue to rely heavily on capacity building (education) and microfinance in their poverty alleviation efforts. However, microfinance beneficiaries (farmers) in the study area lamented the terms and conditions of the small sizes of loans granted to them for their operations. The study also found that some of the innovative and so-called best practices introduced to the beneficiary farmers by the CSOs were inappropriate to the local environments. An agricultural extension assistant remarked on the unsuitable nature of some of the practices the CSOs introduced to farmers as follows*; 'this foreign practice of climate change resilient agriculture being introduced to farmers in this community is never suitable for tropical climate such as ours. It requires some modifications which the CSOs have failed to do'* *(Agricultural Extension Officer, personal interview).*

5.3.5 Similarities and Differences between the Poverty Alleviation Strategies of the CSOs across the Selected Districts

The study found that the selected CSOs looked similar in terms of their perception of capacity building of their clients as a tool for poverty alleviation. The study observed that all four selected CSOs as a first step in alleviating poverty among their clients provided education (capacity building) in conformity with their mission

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and visions. The general believe of the CSOs is that the poverty menace cannot be eradicated if the poor people are not well educated on the causes and multiplier effects of poverty and deprivation. With respect to poverty alleviation through capacity building, each of the selected CSOs emphasise the role of capacity building as follows; 'education the pathway to a better future' (Songtaba), 'knowledge is power' (UrbANet), 'agricultural education and extension the surest way for improved agricultural productivity' (Presbyterian Agricultural Services), and 'hunger free through agricultural education' (Zansilari Ecological Farm Project). So important is education that Songtaba in particular emphasises girl child education as well as non-formal education for those who are unable to access formal education. In support of the need for capacity building of the poor people, Ferguson (2011) posits that an effective policy for poverty alleviation must first address the root causes of poverty and in order to accomplish this, such policies must overcome three challenges; technical and educational gap, financial inadequacy and poor political and administrative governance.

Similarly, in response to the vicious circle of poverty in the study area, all the selected CSOs have introduced microfinance programmes to support the rural poor farmers in cash and in kind. The selected CSOs with the exception of Songtaba provided individual and group loans to beneficiaries. The group loans are modelled on the Grammeeen Bank where between 15 and 30 people are usually granted a group loan such that each member of the group serves as a guarantor for the other members. Songtaba on the other hand offers individual loans to farmers' and scholarships for girl children of school going age.

With the exception of Songtaba, the rest of the selected CSOs are agricultural oriented non-governmental organisations and therefore focus on rural farmers. The similarity in their operations lie in the reality that they all encourage the rural farmer to discard outmoded farm practices and adopt best modern farm practices to improve yield and create wealth. For instance, Zansilari Ecological Farm Project (ZEFP) specialises in the upscale of environmentally friendly innovative approach to food and cash crop production to improve livelihoods of the rural farmers in the Northern Region of Ghana. The organisation's ecological agricultural technology supports the poor rural farmers to arrest the rapidly dwindling soil fertility situation for improved crop yields. UrbANet on the other hand is focusing on the promotion of rural agricultural programmes that have forward and backward linkages for improved agriculture and food security. UrbANet creates networks for rural farmers to derive benefits associated with such backward and forward linkages. Also, the Presbyterian Agricultural Services (PAS) popularises 'smart agriculture' through the introduction of resilient and high yield variety of crops to increase food sufficiency among farmers.

Another similarity among the selected CSOs in the study is the fact that all of them are local non-governmental organisations headquartered in the study region (northern region of Ghana). These CSOs tend to depend heavily on well-endowed international CSOs such as Action-Aid, Oxfam, and CARE international, among others, for funding.

In terms of differences, the catchment areas of the selected CSOs are different since none of them operates in all five selected districts. The Presbyterian Agricultural

Services focuses its attention in the East Gonja District of the Northern Region, Zansilari Ecological Farms Project in the West Manprusi District, Songtaba in the Nanumba North District and UrbANet in the Savelugu-Nanton District. Besides their varying missions and visions, they also differ in their products/services and clientele-base. The selected CSOs also vary in terms of the sources of funding for their operations. Table 5.1 summarises the similarities and differences among the selected CSOs.

Table 5.1: Similarities and Differences among Selected CSOs

S/No.	Similarities	Differences
1	Common belief on the capacity building of poor people as a first step to poverty reduction.	Operate in different catchment areas
2	Common belief in group loans based on the Grammeeen Bank model.	Varying missions and visions
3	Agricultural-Oriented in character	Differentiated service products
4	Are all local CSOs headquartered in the study region	Varying sources of funding
5	Complementary service to government's efforts	Varying levels of involvement in grass root participation.

5.4   Critique of the Poverty Alleviation Approaches to Rural Development

There is a wide range of NGOs operating in the Northern Region with varying visions and missions. According to the USAID (2010), there were an estimated 4463 civil society organisations (CSOs) working in Ghana by the close of 2009. A

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good number of these CSOs operate in the deprived regions of the country of which Northern Region is key. They complement government efforts at promoting socio-economic wellbeing of the people. Some of these CSOs are purely local, head-quartered either in the region or within the country whilst some are international in character. While some believe that the astronomical increase in the number of CSOs in the Northern Region in particular can serve as a catalyst to reduce poverty related problems, sceptics maintain that the hyper-proliferation of CSOs is to serve the interest of the privileged class rather than relieving the poor (Hearn, 2007).

In Ghana and many other African countries, non-governmental organisations have come under intense criticisms for either implementing inappropriate development models or for financial impropriety. Of critical relevance to this study are the development strategies (models) employed to eradicate poverty in the Northern Region. According to Bigg (2001), approaches to rural development are either a top-down or bottom-up. The top-down approach is supply-driven, typically focusing on a particular sector of the economy and most frequently manifested in technical assisted projects. Most often than not it is not easily adaptable to local settings and tend to leave development gaps at places of implementation. Nonetheless, it is a useful approach in determining the effectiveness of programmes, Sabatier (1986).

On the other hand, the bottom-up approach to development focuses on local implementation structures and, thus, is better for assessing the dynamics of local variation (Sabatier, 1986). The bottom-up approach applies participatory methods involving all stakeholders. It recognises the grassroots by focusing on the felt needs of indigenous communities and seek to address developmental gaps.

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From the results of the individual interviews with the opinion leaders, CSO staff, farmers and local experts in all five selected districts, it was evident that the approaches to poverty reduction by civil society organisations (CSOs) and government are failing to yield the desired outcomes. Respondents attributed the failure of the poverty reduction strategies in the region to four major reasons, thus, limited scope of the intervention programmes, unsustainability of the anti-poverty programmes, inappropriate delivery mode and wrongful targeting of the poor (mainly due to politicisation of intervention programmes).

Regarding the scope of the poverty reduction strategies of the selected CSOs, some key informants noted that resources directed at poverty reduction were woefully inadequate to make any meaningful impact. As local CSOs, all four selected organisations were heavily dependent on sponsorship (funding) from more resourced international bodies or on their meagre internally generated funds. Admittedly, the programme officer for Songtaba noted:

'In complementing central government efforts at addressing poverty, we as CSOs are equally constrained financially to meet the needs of every poor person. We fund poverty alleviation programmes only in few selected communities due to funding constraints. In terms of microfinance for poverty alleviation, we are unable to meet a fourth (25%) of the applications for microfinance support'.

Due to the limited scope, the poor people receiving support from the CSOs lamented the small amounts of seed money extended to them to either commence a new enterprise or expand an existing one.

On the issue of unsustainability of the anti-poverty programmes, a local expert expressed concern about their short-term nature. For instance, he complaint about the short-term duration for the repayment of the loans extended to them. He remarked that:

'*We do not get loans from banks but the CBOs offer us microfinance. We often get less than the amount we ask for. They say each person is limited to a maximum of three cycles of loan thereafter we are weaned from the programme. Once we receive the microfinance, repayments start a month later. Sometimes we take money from the loan amounts to repay as we might not yet have started any business with the loan (local expert, personal interview)*'.

Loan officer for UrbAnet corroborated the assertion on the short life span of certain microfinance products in the following statement.

'*As a revolving fund, we often wean beneficiaries after two or three cycles of loans to enable access to other potential beneficiaries (loan officer, UrbAnet)*'.

Arguably, the various financial assistance to the poor people do not make any meaningful impact because the poor are unable to sustain the enterprises they started with the microfinance once they are weaned from the programme over a shorter period.

Another reason assigned by the respondents for the failure of the CSOs anti-poverty programmes relates to the impropriety of the mode of service delivery. The respondents argued that most CSOs adopt the top-down approach to rural development thereby downplaying the involvement of the poor people. Self-help developmental projects ought to be self-determined, self-directed, and self-

delivered (bottom-up approach). In view of the dependency of the selected local CSOs on external partners, they turned to adopt an external-expert-problem-solver approach to rural development thereby pursuing self-help programmes without the so-called self. They tend to initiate projects that they think will be most fundable by the external donor agencies. Most projects and programmes implemented by the CSOs were driven by donor priorities rather than community needs (top-down). A local expert expressed the defects of the top-down approach to poverty reduction in the following statement:

'.……since we are poor and needy we do not have any choice but accept all kinds of offers from philanthropist whether appropriate or not. No one knows our problems than ourselves therefore we need to be part of all anti-poverty programs from inception to the end. (opinion leader, personal interview).

A loan officer for UrbANet expressed the necessity for the occasional application of the top- down approach to poverty reduction by CSOs in the following statement;

'Local CSOs receiving funding from external sources are obliged to operate in accordance with the terms of engagement with the external party. This is common practice among many local CSOs in the country'.

Excessive politicization of anti-poverty programmes was yet another reason assigned by the respondents for the failure of the CSOs to effectively address the poverty menace. Rather than targeting the truly poor people, anti-poverty strategies are reportedly directed at sympathizers of the ruling political party. An opinion leader expressed the polarization of the entire socio-economic system in the following statement;

'Political polarization impedes the efforts at addressing poverty therefore government officials need to know that poverty has no political colours. Subjectivity and favoritism ought to give way to objectivity and fairness, else the battle against poverty will never be won' (opinion leader, personal interview).

The political polarisation of poverty reduction strategies in this study is confirmed by Mayoux (2001) who reports of growing evidence that many CSO programmes supposed to be focusing on the poorest communities are working with relatively better-of people. Osei (2015) re-iterated that Ghanaian CSOs typically employ problem-focused approaches that are Asian in character in their rural development efforts and tend to view the causes of rural challenges as those requiring solutions through external efforts. Osei (2015), further observed that the Ghanaian CSOs often gloss over the wealth of human capacity and community resources that could be tapped and used in rural development processes. Porter (2003) argues that decentralisation is commonly presented in many countries including Ghana as a means to popular participation by the poor and powerless but the reality is a shocking marginalisation of the grassroots. Porter (2003) also emphasised that most international NGOs hide under the concept of decentralisation by establishing local offices which can be used to represent the international CSO as a local CSO and thus access embassy funds. Thus, rather than local administrators working in partnership with CSOs and Civil Society Organisations (CSOs) to build a strong civil society to catalyse local development efforts, CSOs tend to be patriarchs.

Osei (2015) argues that the greatest shortcoming of CSOs in Ghana has been their failure to make rural people part of their rural development initiatives. They tend to

be administratively separate from the rural communities that they ostensibly aim to serve. The longstanding limitations of CSO poverty reduction strategies might have significantly contributed to rural underdevelopment in Ghana rather than development and that if they are to contribute meaningfully to rural development in the country then their strategies ought to change.

In terms of financial management of CSOs, many of them operating in the region are reported to be using up to 80 percent of their funding for administrative costs (BBC News, 2014). Others are accused of earning unrealistically fat salaries at the expense of the poor people they claim to be supporting (Gibelman and Gelman, 2001, Pollack, 2011). This viewpoint was captured during an interview of an opinion leader in Nanumba North District as follows:

'The CSOs working in this community claim they are ameliorating our plight but the bitter reality is that they are protecting their own interest and those of their families. They live comfortable and extravagant lifestyles as we continue to suffer day-by-day' (opinion leader, personal interview).

5.5 Chapter Summary

This chapter presents remedies employed by selected CSOs and government in the study area to reduce poverty. As supplementary players in the fight against poverty, the selected CSOs pursue similar anti-poverty programmes as central government and its affiliate agencies. Remedial measures implemented by government and CSOs to address poverty and related issues included; capacity building of the poor people, microfinance, agricultural support services and food security, health and nutrition, water and sanitation, women's rights and governance, peace building,

humanitarian/relief services and self-help community projects. The study further revealed that CSO beneficiaries expressed misgivings about some of the strategies employed to deliver self-help programmes. As discussed in previous sections, the beneficiaries contend that they were not consulted in the development and implementation of the poverty reduction strategies. The rural poor accused the CSOs for typically adopting an external-expert-problem-solver approach to rural development through the application of the top-down approach to poverty reduction. The beneficiaries of the CSOs claim that most projects and programmes implemented by CSOs are driven by donor priorities rather than being self-determined, self-directed, and self-delivered to meet community needs (bottom-up approach).

CHAPTER SIX

STRATEGIES USED BY SMALLHOLDER FARMERS TO

ALLEVIATE POVERTY

6.1   Introduction

In line with the capability theory employed in this study, rural farmers tend to be very conscious of their own livelihoods and welfare. In consonance with the portfolio theory, farmers in Africa and most parts of the developed world often adopt different strategies to improve their yields and earnings. Though, the strategies of smallholder farmers in the study area differ from household to household, they often adopt one or a combination of two major strategies; namely, agricultural intensification and diversification into non-farm businesses. This chapter seeks to examine the livelihood strategies employed by the farmers themselves to cope with the economic conditions and thereby alleviate poverty. Descriptive statistics and content analysis were employed to present the results of the study.

6.2   Livelihood Strategies of the Farmer

As explained in the conceptual framework, there are three broad clusters of livelihood strategies identified from the sustainable livelihood framework, namely, agricultural intensification, livelihood diversification and migration. Thus, rural people either gain more of their livelihood from agriculture (including crop cultivation, livestock rearing, aquaculture, forestry etc.) through processes of intensification (more land per unit area through capital investments or increase in labour inputs or extensification (more land under cultivation), or they diversify to a range of off-farm income earning activities or they move elsewhere to seek

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livelihood, either temporarily or permanently or they pursue a combination of strategies (Scoones, 1998).

Agricultural intensification involves focusing maximum attention and resources into the farm enterprise with the view to maximising yield and earnings. Often times the farmers increase their landholdings in addition to the use of modern farm technology. An Agricultural extension officer in the Bunkurugu/Yunyoo District expressed concern about the inability of farmers to obtain higher yield amid agricultural intensification. He remarked that;

'*In spite of the efforts of the smallholder farmers at boasting productivity through agricultural activities, they often suffer huge disappointments from the failure of the rainfall pattern and/or the poor market. As a result of the high levels of risk related to the agriculture sector in the country (particularly, northern Ghana), most farmers usually diversify their portfolio into non-farm activities*' (District Agricultural officer, personal interview).

The portfolio diversification alluded to by the district agricultural officer derives its roots from the portfolio theory. In relation to agriculture, portfolio diversification is occasioned by three major reasons; high risk inherent in rain-fed agriculture (Reardon et al 1998), market failure in respect of farm output (Reardon 1997; Bryceson 1999; Barrett et al 2001; Thirtle et al. 2003a) and positive linkage between farm and non-farm investments (Mathenge and Tschirley, 2007; Oseni and Winters, 2009). Remedy from portfolio diversification include but not limited to risk management by combining non-farm portfolios of varying risk profiles and the

application of non-farm incomes to support improved agricultural practices and the vice versa.

The results from the study, as shown in Table 6.1, show that smallholder farmers in the study area are engaged in wide range of economic activities for sustenance (livelihood strategies). It was further observed that the farmers who were interviewed were either engaged in farming alone or with other non-farm activities. The study reveals further that the most popular livelihood strategies of the farmers in the study area were; farming, petty trading, agro-processing, fuel wood/charcoal processing, beekeeping, and wage labour (migrant remittances). In a ranking order of importance, farmers who were interviewed revealed their livelihood strategies during on-farm and off-farm seasons. Farming, petty trading, manufacturing (agro-processing), wage labour (migrant remittances), charcoal processing, beekeeping and other less known livelihood strategies were ranked from first to seventh respectively. The summarised statistics in Table 6.1 show that all the farmers at one point in time or the other were engaged in one or a combination of the livelihood strategies identified above. Since the study was focussed on farmers, all 420 respondents were engaged in farming as major source of livelihood. Another 368 respondents, representing about 87.8 percent were engaged in petty trading as well. Respondents who combined agro-processing with farming were 285 (68 percent of the respondents) whiles 200 respondents (47.7 percent of respondents) occasionally engaged in wage labour to supplement household income from farming. The study revealed further that 181 respondents (43.2% of the farmers) also occasionally engaged in charcoal processing to support their incomes from farming. The study further observed that 116 respondents (27.7% of the farmers) often engaged in

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beekeeping activities to supplement their farm income. Some 60 respondents (14.3% of the farmers) also occasionally engaged in other activities such as hunting, picking and sale of wild fruits, circumcising children, soothsaying and/or commercial transport services including the use of motorcycle, popularly known as 'ukada' in local parlance. Table 6.1 showcases the ranking of the livelihood strategies used by farmers in the study area.

Table 6.1: Livelihood Strategies of Farmers in the Study Area

Rank	1st	2nd	3rd	4th	5th	6th	7th
Livelihood Strategy	farming	petty trading	Manufacturing (Agro - processing)	Migrant remittances and wage labour	charcoal processing	Bee keeping	Others
Valid	420	368	285	200	181	116	60

Source: Author's field survey (2017)

The most common livelihood strategies among the farmers in the study area were farming, petty trading, agro-processing, migrant remittances and wage labour, charcoal production, and bee keeping, as per Table 6.1. Since the study was targeted at farmers, all the respondents ranked farming as first priority livelihood strategy. Petty trading, agro-processing, migrant remittances (wage labour), charcoal production and bee keeping were ranked second, third, fourth, fifth and sixth respectively. Other minor economic activities farmers engage in (which were ranked seventh) included, hunting, picking and sale of wild fruits, circumcising of children, 'ukada' and soothsaying.

The level of involvement of the farmers in other livelihood portfolios in the study area are exhibited in Table 6.2.

Table 6.2   Livelihood Strategies of Small holder Farmers

Livelihood Strategy	Rate of Involvement
Farming	100%
Petty Trading	87%
Manufacturing (Agro-processing)	68%
Migrant remittances	47.7%
Charcoal processing	43.2%
Bee keeping	27.7%
Others (hunting, soothsaying, sale of wild fruits, commercial transport services)	14.3%

Source: **Author's field survey (2017)**

6.2.1 Farming Systems in the Study Area

In view of the reality that the study was targeted at smallholder farmers, all 420 farmers who were interviewed ranked farming as first strategic source of income and livelihood. The study observed further that as a result of differences in resource endowments in the study area, different farming systems were practiced in different localities. According to the Food and Agricultural Organisation (FAO, 2001), a farming system is defined as a population of individual farm systems that have broadly similar resource bases, enterprise patterns, household livelihoods and constraints, and for which similar development strategies and interventions would be appropriate.

The classification of the farming systems in this study are based on three important factors, namely, resource endowment, dominant pattern of farm activities and household livelihoods and the intensity of production activities. Based on the above three criteria, four broad categories of farming systems were delineated from the study.

- Mixed Crop System; all of the farmers interviewed practiced mixed cropping; a practice of cultivating more than one crop in a single farming season on the same farm land. A local expert indicated that the mixed cropping farming method save most farmers from complete crop failure since different crops require different climatic conditions. Evidence adduced by the local expert suggests that most farmers cultivate a mixture of crops that are resistant to drought and flood. The main source of vulnerability was drought. Crops commonly grown on the same farm land include maize with sorghum, maize with rice, cassava with maize, among other combinations. The use of the mixed crop system was justified by a local expert as follows;

  '*Nowadays nobody knows the pattern of the rainfall therefore it is better to spread the risk by engaging in the cultivation of more than one crop in a single farming season. There is no harm planting drought resistant and flood resistant crops to guard against unpredictable natural factors such as the rainfall pattern' (district best farmer, personal interview).*

  The heavy reliance on red-fed agriculture espoused above by the opinion leader reinforces the position of the modernisation theory that drastic transformation of traditional society is necessary in order to modernise agriculture to overcome key developmental challenges (Hussain and Tribe, 1981; Lenin, 1964, cited in Elis and Biggs, 2001).

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- Small-scale cereal-livestock system; majority of farmers in the study area through diversification combine crop production with the rearing of animals. The system allows for the use of the waste materials of the animals as manure. Also, in times of crop failure, the livestock supplement farm household incomes. The application of this mode of farming system was supported by a local expert in the following remarks;

  '*Every farmer in this community practises crop production as well as rearing of livestock. These are two inseparable and complementary agricultural practices of each farmer. The livestock is used for sacrificial activities as well as for organic manure for improved yields (district best farmer, personal interview).*

  The district farmer's assertion is explained by the conceptual framework discussed earlier that rural farmers make do with one or a combination of three livelihood strategies; namely, agriculture, livelihood diversification and migration.

- Urban-Based Farming System; A farming system typically focussed on horticultural and livestock production in urban areas. Backyard gardens engaged by urban dwellers fall within this category. Since the study was conducted in rural settings this system of farming was rarely observed in peri-urban settlements in the Savelugu and East Gonja Districts

- Irrigated Farming System is a system of farming, particularly in the dry season with the support of existing water bodies such as streams, lagoons and lakes.

Irrigated production is often supplemented by rain-fed cropping. Landholdings for dry season farming (near water bodies) are very competitive in the Northern Region. They are usually used for vegetables and other leafy crops. The study observed that the irrigation system was fairly common in the West Mamprusi and East Gonja Districts along the White Volta. Some of the farmers in the study area earn living through dry season farming (mainly by cultivating vegetables) along water bodies. An agricultural officer in the West Mamprusi District expressed the positive impact of irrigated farming system on the economic life of some farm households in the following remarks;

'*Most farmers engage in the cultivation of various food crops during the raining season (rain-fed agriculture) and during the dry season some of them cultivate vegetables and related stuff along the river banks. Though the farm land along the river banks is limited, the farmers earn more from the dry season vegetable farming than from the main rain-fed agriculture (agricultural officer, East Gonja, personal interview).* From the views expressed by the agricultural officer, it is expected that those living along river banks and other water bodies are likely to remain productive throughout the year by engaging in dry season farming to supplement household income.

6.2.2 Petty Trading as a Livelihood Strategy

Petty trading was commonly associated with most farmers in the study area. They engaged in the disposal of their farm produce either at the farm gates or nearby markets. Beyond their farm produce, it was observed that some farmers were busily involved in the trading of other non-farm produce, particularly during the off-farm

seasons. Farmers lamented the poor market conditions they had to contend with.

Regarding the unfavourable marketing link in the study area, a local expert shared

the following experience;

'*As poor farmers, we continue to labour for the benefit of the middlemen in the chain of distribution of the agricultural produce. Prices offered for our produce during harvest are pitifully unattractive. The exploitation of the farmer has compelled many of us to resort to trading as a way of improving the returns on our farm output (local expert, personal interview).*

The above views are in synch with the structuralist theories of poverty that the imperfections of the socio-economic and political system can cause poverty. The imperfections of the market forces contribute to the exploitation of rural farmers by the middlemen (as expressed by the opinion leader).

6.2.3 Agro-Processing as a Livelihood Strategy

On agro-processing, the study also revealed that some farmers usually engage in agro-processing particularly in the off-farm season. The results (as contained in Table 6.3) show further that during off-farm season, male farmers often engage in weaving (baskets, mats,) and their female counterparts engage in the processing of nuts and pulses into edible oils, processing of rice, processing of cassava into dough and gari, fish processing, shea butter processing, and processing of grains into pito, among others. Some female heads of household indicated their involvement in grouped-enterprises facilitated and funded by CSOs. A female opinion leader who was a member of *Gubkatimali* (unity is power) association in

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the West Mamprusi District expressed the role of agro-processing in the economic empowerment of women in the District in the following remarks:

'*As home-keepers, we support our families in various ways. Most of us engage in the processing of the agricultural produce as a value addition mechanism to beef-up household incomes. These economic engagements have significantly improved our worth in the upkeep of the homes (opinion leader, personal interview).*

The views support the capability theory that rural people are capable of delivering themselves out of poverty and contributing significantly to socio-economic development if they obtain the necessary support from stakeholders.

6.2.4 Migrant Remittances (Wage Labour) as a Livelihood Strategy

Wage labour was yet another popular economic engagement among rural farmers in the Northern Region of Ghana. According to Alhassan (2015), often times, some farmers offer their labour services to other farmers in return for some reward either in cash or kind. Relatively wealthy farmers hire the services of other less privileged farmers to execute certain assignments on their farms. In extreme cases, some farmers migrate to the southern part of the country during off-farm season in the north to work on plantations for cash reward.

Charcoal Production as a Livelihood Strategy

In spite of the 'war' against deforestation by government and other stakeholders, felling of trees and charcoal production continue to gain momentum in some parts of the Northern Region. In the study area, it was observed that fuel wood and charcoal serve as sources of income for some households. The activity is mainly undertaken by females and teenagers to support household incomes. Evidence from

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the study suggest that commercial quantities of charcoal are transported daily from the north to the south of the country for sale. Charcoal production is easier and often carried out in the raining season when the grounds are softer and allows for burying of the fuel wood for conversion into charcoal

6.2.5 Bee Keeping as a Livelihood Strategy

Bee keeping was yet another economic opportunity for some farm households in the study area. The study revealed that the selected CSOs use bee keeping as a source of livelihood and a means of eradicating poverty among some smallholder farmers in the study area. Songtaba and Presbyterian Agricultural Services (PAS) Mile7 assist smallholder farmers in the Nanumba North and East Gonja Districts respectively to keep bees for honey. Similarly, UrBaNet and ZEFP also assist smallholder farmers in the Savelugu and West Manprusi Districts respectively to keep bees for livelihood. A programmes co-ordinator for Zansilari Ecological Farms Project (ZEFP) emphasised the economic significance of bee keeping as a critical strategy to poverty reduction in rural Ghana as follows;

'Though bee keeping is not yet commercialised in most parts of northern Ghana it has a great potential to alleviate poverty. As most people are becoming aware of the dangers of white sugar, honey as a substitute is becoming increasingly popular. If greater attention is paid to bee keeping, Ghana can become a major exporter of honey as non-traditional export product' (Programmes co-ordinator, ZEFP, personal interview).

In consonance with the portfolio theory, the discovery of new economic ventures in commercial magnitude can contribute to propel rural economies to greater heights, thereby reducing poverty.

The study also revealed that some farmers in the study area also engaged in other economic activities as hunting, picking and sale of wild fruits, circumcising and soothsaying. The results of the study suggest that these other sources of livelihood though on a low scale, support farmers to cope during the lean farm seasons.

6.3 Chapter Summary

The chapter presents remedies employed by the farmers themselves to improve their livelihood and combat poverty in the study area. The study reveals that farmers in their own efforts at improving their socio-economic wellbeing resort to different sources of livelihood. Farmers in the study area employed farming, petty trading, agro-processing, migrant remittance and wage labour, bee keeping, charcoal production, hunting, soothsaying as their livelihood strategies.

CHAPTER SEVEN

CHALLENGES OF POVERTY REDUCTION AMONG SMALLHOLDER FARMERS IN THE SELECTED DISTRICTS OF NORTHERN REGION

7.1   Introduction

This chapter seeks to examine the challenges militating against poverty reduction among smallholder farmers in the study area. Poverty in the study area persists in spite of the series of efforts made by government and non-governmental organisations to curb it (as already discussed in previous sections). In line with the Progressive Social Theory**,** constraints imposed by economic, political, and social system expose the poor people to limited opportunities to resources with which to achieve income and wellbeing. This theory blames the failure of the socio-economic and political system in working to perfection (Quigley, 2003). The theory ascribes poverty to economic, social and political structures that make the poor fall behind regardless of how committed they may be. Voelwoen, (2017) argues that systemic flaws associated with poverty relates to groups of people being discriminated against based on personal attributes such as race, gender, disability, location and religion, which limit their opportunities in spite of their personal capabilities.

 In broader terms, the study delineates the challenges militating against poverty reduction in the study area into; political, economic, climatic and socio-cultural factors. These bottlenecks to poverty reduction in the study area are analysed below using content argument and descriptive statistics.

7.2   Political and Administrative Obstacles

In consonance with the sustainable rural livelihood framework (which guides this study), various institutions and organisations ought to be assigned critical roles through which intervention programmes would reduce poverty and improve livelihood outcomes. When the institutions and organisations play their roles effectively then positive outcomes are expected.

Different respondents expressed various views regarding the role of political mal-administration on the levels of poverty in northern part of the country. Tracing the route to political independence of Ghana, an opinion leader in the West Manprusi District recounted the long-standing history of unparalleled relationship between the north and south of the country. He remarked that: '*In Ghana the colonial political legacy created a huge developmental gap between the north and south. Owing to large deposits of natural resources (gold, diamond, bauxite, cocoa, etc) in the southern part of the country, the colonial masters concentrated their effort to exploit such resources. Infrastructural development (physical capital) proliferated in the south than in the north of the country. For instance, education started in the south of the country for more than a century before the north for which reason the north lag behind*' (Opinion leader, personal interview).

The above claim expressed by the opinion leader confirms the position in the literature that the economic disparity between the north and the south is partly political in terms of the pre-colonial relationships between kingdoms and tribes. The colonial dispensation ensured that northern Ghana was a labour reserve for the southern mines and forest economy, an established pattern which persists till now (Aryeetey et al., 2004).

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Another challenge identified as a contributory factor to the level of poverty in the study area relates to corruption and misappropriation of public funds. Political corruption and/or mis-appropriation of public funds appeared more prominent. Some respondents (local experts) were of the view that the responsibility bearers in the various district assemblies and even non-governmental organisations applied resources of the assemblies and their organisations respectively to promote their personal agenda rather than enhancing the welfare of the populace. They reiterated that political polarisation exacerbates the menace of corruption in most cases. As one opinion leader complained that government assistance to farmers in his community was unfairly distributed on the basis of party affiliations. He remarked:

'*When heavy storm and insect infestation hit this community a couple of years back, we were denied assistance because of our perceived political affiliation. Credit facilities are disbursed on the basis of political affiliation. Even some of the non-governmental organisations operating in the district are not neutral, they do not really target the poor but those they want to favour. Funds designed for poverty reduction are directed at the rich to worsen the economic disparity between the rich and the poor*' (Chief of Kukuo, personal interview).

Similar claims were expressed by officials of non-governmental organisations in the study area. They complained about public corruption, heavy bureaucracy and difficulty in collaborating with government officials. They contend that NGOs are expected to collaborate with the District Assemblies (in line with the principle of decentralisation) to build civil society thereby catalysing local developmental efforts to benefit the poor. An NGO staff expressed dissatisfaction over the

unfulfilled obligations of some district assemblies thereby leading to poverty reduction programme failure. He remarked;

'Poverty in the region remains a major problem due to non-compliance and misappropriation of public funds. If the District Assembly Common Fund and other donor funds were applied properly in the various districts then the yawning developmental gap between the south and the north would have reduced tremendously. Political considerations and personal interests override the agenda of the poverty alleviation programmes' (Senior Programme Officer of CSO, personal interview).

The claims expressed by the officer of the CSO confirms the position of the structuralist theory of poverty that the poverty menace is triggered by the failure of the socio-economic system to address the concerns of the poor majority.

7.3   Economic Barriers

Different views expressed by the respondents on the impact of economic obstacles to the poverty menace in the study area were captured under three major issues, namely, *market volatility, inadequate financial capital and rural-urban migration (human capital).*

Regarding the issue of market volatility (price volatility), it was noted that for most produce of the farmers, prices fall to very unattractive levels during the peak (harvesting) season and pick up during the lean season. In the Nanumba North District in particular, yam farmers lamented the poor patronage of their produce leading to their earnings dropping drastically in the face of bumper harvest. Many

farmers claimed that middlemen (agents) in the chain of distribution of agricultural produce take advantage of the unsuspecting poor farmer to enrich themselves. They attributed the unfavourable dealings with the middlemen to inaccessibility of markets particularly during the raining season, compelling them (farmers) to succumb to the dictates of the middlemen. An opinion leader in West Mamprusi district expressed concern about the unattractive nature of the agricultural system for the smallholders. He commented thus: '*In order to meet certain demands, many farmers dispose of their produce to middlemen immediately after harvest when prices are very unattractive. My son, farmers cannot be rich because when they get good harvest, prices of their produce fall and when prices are good then harvests are poor (or are already disposed of), making the farmer perpetually poorer'* *(Opinion Leader, personal interview, May 11, 2017).*

The above claims on price volatility confirm the position in the literature that variations in prices become problematic when they are large and cannot be anticipated and, as a result, create a level of uncertainty which increases risks for producers and government and may lead to sub-optimal decisions (World Bank, 2011). Also, besides the marketing opportunities to dispose of farm produce, farmers equally require markets for their inputs. Faced with double agony, the poor farmers receive less for their produce and part with more for farm inputs. According Stathopoulos et al. (2004), because of remoteness, the rural poor are often disadvantaged in market transactions. Apart from incurring significant transportation costs to access markets, their products which are seasonal, mostly attract low prices while their needs command high prices, for example, farm inputs.

Poor infrastructure development (physical capital) in the study area was yet another canker which caught the attention of all the sampled CSOs operating in the area as well as the farmers who suffer the consequences of the poor state of affairs. According to the respondents, the poor transport network in the districts prevents the flow of humans, goods and services to certain remote areas. The respondents indicated that the communities easily cut off from other areas during the rainy season were commonly referred to as 'overseas'. In order to reduce cost of operation, some development partners have tended to marginalise 'oversea' communities in the study area. In defence of their inability to operate in certain 'overseas' communities within the catchment area, a CSO official remarked '…*it is better to concentrate on communities which are accessible to deliver efficient service than spending extra efforts to reach out to everyone (including 'overseas') in an inefficient manner' (Programme Officer, ZEFP, personal interview, May 8th, 2017).*

As indicated in the conceptual framework, road network in particular, plays a significant role in the socio-economic development of rural areas. Transportation and transport cost constitute significant cost element in pricing of agricultural produce (Fafchamps and Gabre-Madhin, 2006; Jayne et al., 2010). During the study, I had the opportunity to trek between the sampled districts in the region. The experience was really a bitter one due to the deplorable nature of the roads. Connecting Bincherataaga community to Nakpaa community, both in the Nanumba North District on a motorbike during the rainy season was an eye sow of the real conditions the local people contend with. It is worth noting that with the exception of Savelugu District, the rest of the study districts did not have good roads

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connecting them to the regional capital, Tamale. In spite of the great economic opportunities in these study districts the people remain largely poor due partly to inaccessibility of their communities, particularly during rainy seasons. During interview, a local expert in the Bincherataaga community in the Nanumba North District remarked:

'This community is endowed with fertile land for the cultivation of various crops, particular grains and tubers, yet it is inaccessible during rainy season. Through communal labour, we occasionally use stumps and other local materials to build bridges to connect the community to the neighbouring ones. Due to its inaccessibility, marketing our agricultural produces remains a huge problem. In most part of the rainy season, most of us are compelled to use very long alternative routes to get access to other communities to execute economic activities' (local expert, personal interview).

The views expressed on the inaccessibility of many rural communities during the rainy season due to bad transport network confirms the position in the literature that post-harvest losses arising from bad road network continue to keep many rural people in poverty (World Bank, 2010).

Closely linked to poor transport network was the issue of post-harvest loses. Respondents across the study districts alluded to economic losses arising from their inability to transport their farm produce from the farm lands to homes/market centres due to poor roads. An agricultural extension officer in the Bunkurugu District remarked:

' ……. *Farmers in the district get good harvest but close to 30% of the farm produce remain on the farms as waste because of the difficulty in transportation. A chunk of the crops harvested before the stoppage of the rains get loss on the farms'* *(Agricultural officer, personal interview).*

As explained in the section on conceptual framework, financial capital is an important resource to complement natural, human and social capital for improved productivity and poverty reduction. Economic (financial) capital comprises of financial resources such as cash, savings, credits, production equipment, infrastructure etc. which are essential for the pursuit of any livelihood strategy. As a result of the vicious cycle of poverty in the study area (as showcased in the literature), financial capital is typically inadequate. Poor savings and low agricultural output resulting from erratic climatic conditions work to the disadvantage of the farmer in terms of income earnings. Financial capital is an important requirement in modern farm practice, since a significant proportion of the inputs of the farmer has to be procured. Many of the respondent farmers' complaint bitterly about the rising cost of fertiliser, insecticide, weedicides and other farm inputs. Due to poor savings, farmers who supplement crop cultivation with animal rearing indicated they often dispose of some animals (cattle, sheep etc) to support themselves to commence farming seasons. Other respondents indicated they resort to private money lenders for assistance. Those who depend on private money lenders complained severely about the usurious interest rates imposed on the borrowed funds. As one respondent in Nambagla commented:

'If one does not have money to farm then you will toil for others, greater part of the yield would be used to settle the loan with the interest. In some unfavourable cases

the yield from the farm may not suffice and the remaining credit is deferred to the next season. During the previous planting season, I had no groundnut seed neither did I have money to procure same, so I borrowed a bag of groundnuts, after harvest I paid back with two bags (Local Farmer, personal interview, April, 12th, 2017).

Another prominent local expert in the Zagsilari farming community expressed similar views. He remarked:

'*Due to continuous cropping of the farm lands coupled with the application of obnoxious chemical commonly known as 'condem' the soils have become less fertile and the only way to improve fertility is to apply fertilizer. Unfortunately, the cost of fertilizer is so high that the average farmer cannot afford' (local expert, personal interview).*

Rural-urban drift was yet another hindrance to agricultural growth in the study area. As agricultural activities in the north becomes increasingly unattractive due to high risk, the resulting trend is a drift of the youth from rural north to urban south in search of better economic engagements. The situation poses serious danger to the future of the agricultural sector in the north because the able-bodied (human capital) are migrating in search of wage employment. While the male labor force migrate to the south to engage in petty trade (scrap dealing, sale of cocoanut, dog chains etc), their female counterparts engage in 'kayaye', (head porters). Though some respondents indicated they get remittances from their children who have migrated to the south, the flow according to them was highly irregular. Farm sizes are becoming increasingly smaller due to drift of these able-bodied to southern part of the country). An agricultural extension officer in the Nanumba North District expressed the following opinion;

'The future of agriculture in rural areas is in jeopardy as more and more youth drift to urban centres to the detriment of farming. When we were growing up, the agricultural sector was promising but the tables have since turned due to serious challenges including global warming, undesirable bush burning, farm theft, poor producer prices, among other bottlenecks. The youth now prefers to engage in menial jobs in cities to farming in rural areas. These youth are basically found in Tamale, Kumasi and Accra, working as labourers and head porters, commonly known as 'kayaaye'(Agricultural officer, personal interview).

7.4   Climatic Barriers

Unfavourable climatic conditions appeared prominently in the study as a major contributory factor to the poverty levels in the study area. As elaborated in the previous section (*profile of the study area*), the climate of the study area is relatively dry, with a single rainy season that usually begins in May and ends in October. The dry season starts in November and ends in March/April with maximum temperatures occurring towards the end of the dry season (March-April). The harsh climatic condition exacerbates the cerebrospinal meningitis to endemic proportions and adversely affects productivity in the Region. The study area also falls within the onchocerciasis zone. Given Ghana's heavy reliance on rain-fed agriculture, drought causes the highest level of cumulative losses with the greatest impact on livelihoods, particularly in the Northern Region. Drought events are most likely to affect sorghum, millet, maize, and groundnut production, which constitute the common crops grown in the study area. In addition, flash flooding resulting from excessive rainfall occurs with relative frequency across Ghana. Crops mostly affected include cassava, rice, yams, and groundnuts (World Bank, 2016).

In every research community, the major complaint was the erratic and unpredictable rainfall pattern. To buttress the point on the unpredictable pattern of rainfall in the study area, some farmers suggested that even the Meteorological Services Agency was unable to predict rightly on the rainfall pattern. A local expert recounted instances when the forecast of the Agency failed to materialise. He remarked that;

'*…..we were told to prepare for heavy rains last year but the situation turned out to be drought. In response to the forecast of the Meteorological Services Agency, most of us cultivated several tracts of land for rice in anticipation of good rains, only to be faced with the practical realities of drought' (local expert, personal interview).*

Another opinion leader in Naabulgu expressed similar sentiments as follows:

As young farmers growing up, we were always told the start and end times of farming seasons accurately by our forebearers. Predictions about weather and the climatic conditions are very difficult these days. Of late, the rains start late and the farming season ends abruptly (Opinion leader, personal interview).

These lamentations feed into the failure of socio-economic system to address basic concerns of the poor people espoused by the structuralist theorists. The conceptual framework for this study identifies climatic factors as one set of challenges hindering poor farmers in many parts of the country. Indeed, at the time of collecting data from the field (March-July 2017), the local people were already complaining of late start of the farming season due to the late start of the rain.

Besides the erratic rainfall pattern in the study area, poor fertility of the land was equally a cause for concern. Respondents attributed the poor fertility of the

cropping fields to two factors; excessive use of the farm fields and application of unsuitable chemicals.

Though it emerged that there still exist large tracts of land for agricultural purposes in all the study districts, some key informants cited problems of accessibility to the farm land since the fertile ones were distant from the permanent settlements of the local people. A key informant reiterated that with the exception of few farmers who were prepared to relocate to temporary farm settlements to access fertile lands, many more preferred to continue to engage existing farm lands which were becoming increasingly unfertile with the accompanying reduction in yield due to diminishing returns. He noted that:

'*For the past seven years I have been cultivating maize and groundnuts on the same piece of land. Due to old age I can no longer travel long distance in search of fertile farm lands, (opinion leader, personal).*

Adverse consequences of the application of unsuitable chemicals on the farm lands leading to further deterioration of the fields and crop yield also emerged strongly. Unsustainable agricultural practices have dominated most farming communities in the study area. To reduce fatigue associated with laborious farm activities, most respondents affirmed the use of weedicides and other forms of chemicals to control weeds on their farms. Across all the districts under study, respondents alluded to the use of the popular weedicide known to the local people as 'condemn' to control weeds on their farms. An agricultural officer in the West Mamprusi District commented:

'We have constantly educated farmers on the medium to long term dangers of the use of certain chemicals including 'condemn' on the fertility of farm lands, yet most farmers continue to abuse them. The application of 'condemn' and other related chemicals on farm land is profitable only in the short term, subsequently the land is rendered less useful for agricultural purposes thereby reducing agricultural productivity' (agricultural extension officer, personal interview, May 19, 2017).

views expressed by the agricultural officer are in synch with the cultural theory of poverty which argues that poverty is caused by the transmission over generations of a set of beliefs, values, and skills that are socially generated but individually held (Blank, 2010, Lewis, 1965, quoted in Townsend, 1979). Technically, the culture of poverty is a sub-culture of poor people who develop a shared set of beliefs, values and norms that are embedded in the culture of the main society, Bradshaw (2006).

Closely related to deteriorating fertility of farm lands was the issue of high cost of fertilizers. As a remedy to deteriorating land fertility, farmers often consider the application of fertilizer on their farm lands. Unfortunately, however, the cost of procuring fertilizer has so sky-rocketed outside of the reach of the ordinary smallholder farmer. Almost every respondent lamented the cost of acquiring the commodity to enrich the soil for good yield. The use of animal waste is gaining currency especially among those who rear animals. As a respondent indicated;

'I could not afford to buy fertilizer for my crops the previous farming season hence the yield was low. This farming season, am relying on the use compost to enrich the farm lands since I cannot afford to buy fertilizer' (52 year old farmer, personal

interview, April, 23, 2017).

This finding confirms the position of the World Bank that the poor farmers know the various remedies to employ to enrich soil fertility (including the application of fertilizer) but they lack the necessary income (financial capital) to undertake such measures (World Bank, 2001c).

Related to challenges of climatic conditions in the study area was the issue of storm, pest and disease outbreak. It was noted that harsh storms occasionally accompanied by thunder have been a major cause of worry to farmers as serious destruction to crops were usually experienced. Pre and post-harvest losses attributable to pest and disease outbreak was yet another complaint of most respondents. At the time of soliciting field data for this study the worrisome 'fall army worm' infestation was a major issue for farmers in all the districts for this study. As one local expert lamented:

'P*oor rainfall pattern was the issue last season, this year it is 'army worm' infestation (56 year old local expert, personal interview, May 3, 2017).*

7.5   Socio-Cultural Barriers

The major socio-cultural factors considered in this study relate to conflicts, and beliefs towards women empowerment. The long-standing developmental gap between the north and south is reported to be partly due to chieftaincy, ethnic and political conflicts. According to Sulemana (2009), the proliferation of ethnic conflicts in the Region is so widespread that there is hardly any district where the problem has not reared its ugly head. The ethnic conflicts in the Region involved

Abudus and Andanis (Dagbon intra-ethnic conflict), the Konkomba and Nanumba, the Konkomba and the Gonja, the konkomba and the Dagomba, the Konkomba and the Bimoba, Gonja and Nawuris and between the Konkomba on one hand and the Nanumba, Gonja and Dagomba on the other hand. The remote causes of the conflicts have been centred either on land (natural capital) or paramouncy and autonomy (social capital).

In the last couple of decades, two out of the five sampled districts in this study, namely; Nanumba North and East Gonja Districts had been the hardest hit with violent conflicts. As it is often the case, women and children suffer the greatest ordeal during such violent conflicts. Economic activities were halted as recounted by a local expert in Nakpaa in the Nanumba North District;

'.......*My son, the greatest assets for mankind are health and peace, there has never been a winner during violent conflict. For several weeks, no soul in this community could dream of stepping foot to the farm during the conflict. ....Our wives and children had become refugees in other communities. Everyone regretted for the conflict (local expert in Nakpaa, personal interview, May, 25, 2017).*

The above revelation on the adverse consequences of violent conflict is in twin with the findings of Williams (2016) who maintains that safety, stability and security are essential for subsistence, economic prosperity and growth. William (2016) reiterated that without these basics, natural resources cannot be harnessed individually and collectively, and no amount of education, talent or technological know-how will allow people to work and reap the benefits of their labour.

Another social challenge to poverty reduction in the study area had to do with the position of women in society. Inequalities in rights and entitlements, whether economic, civil or family are a powerful source of discrimination against women which limit their access to and control over resources that are crucial to starting and consolidating a sustainable enterprise. Although discrimination against women is illegal, it is common in many rural settings including those in the study area. Typically, a good proportion of women in the study area are more of subjects of their husbands rather than partners in development. Their rights are subordinated to their husbands. Their rights to inheritance are very much limited. Reflection emerging from discussions with some opinion leaders revealed that women cannot freely engage in any economic activity without prior approval of their husbands. For example, a 48-year-old woman in Janton – Daboashei in the East Gonja District indicated that she and other colleagues could not dare avail themselves of microfinance loans or any form of assistance from any organisation without prior permission of their husbands. She also indicated that some women had to surrender their share of microfinance loans to their spouses unwillingly. It was observed that microfinance opportunities existed for women than their male counterparts. Therefore, some husbands took advantage of the assistance extended to their wives.

Similar views were expressed by an opinion leader in the East Gonja District in respect of the position of women in socio-economic development; '…*Anything a wife has is for the husband. A wife must not be prosperous than the husband else she will disrespect the man. A wife must just be confined to child-bearing and household chores'* (54-year-old opinion leader, personal interview, May, 27, 2017).

7.6   Chapter Summary

The chapter presents challenges militating against poverty reduction among smallholder farmers in the study area. In broader terms, the study delineates the challenges militating against poverty reduction in the study area into; political, economic, climatic and socio-cultural factors.

The political factors which threatened the poverty alleviation efforts in the study area included but not limited to the following; long standing history of unparalleled relationship between the north and south of the country, mal-administration by state and non-state institutions in the poverty alleviation chain, and politicisation of poverty reduction programmes.

The key economic challenges militating against the poverty reduction efforts among farmers in the study area included; poor infrastructural development, particularly road network (physical capital), economic instability (price volatility of agricultural produce), poor availability of financial resources (financial capital), post-harvest losses and rural-urban drift of the youth (human capital).

The major climatic challenges which work against the poverty reduction efforts in the study area comprises; erratic and unpredictable rainfall pattern, single farming season, declining fertility levels of farm lands, and insect-pest infestation.

The socio-cultural factors posing threat to the poverty reduction efforts among farmers in the study area include; tribal and ethnic conflicts and gender discrimination against women.

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CHAPTER EIGHT

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

8.1   Introduction

On thematic basis, this chapter presents a summary of the study as well as the conclusion drawn and recommendations for policy direction. The study investigated the major determinants of poverty and constraints to poverty reduction among smallholder farmers in five selected districts in the Northern Region of Ghana.

8.2   Summary

The study examined constraints to poverty reduction among smallholder farmers in five selected districts of the Northern Region of Ghana. In terms of extreme poverty, the Northern Region of Ghana accounts for slightly over a fifth of the extreme poverty cases in Ghana, far more than any other region in the country. With a poverty incidence of 50.4 percent, the Northern Region accounts for one-fifth (20.8%) of the poor people in Ghana, making it the highest contributor to the level of poverty in Ghana (GSS, 2013). Since the 1990s overall, the Northern Region has seen the smallest progress in poverty reduction. In spite of several intervention programmes to alleviate poverty in the study area, the poverty menace in the region continues to deteriorate. Broadly, this study sought to examine the constraints to poverty reduction among smallholder farmers in the selected district of the northern region. The specific objectives of the study were as follows:

1.   To examine the socio-economic causes of poverty among smallholder farmers in the study area.

2.   To assess the various strategies used by Government and Civil Society

Organisations (CSOs) towards poverty alleviation among smallholder farmers in the study area.

3.   To assess the measures used by smallholder farmers themselves towards improved livelihood and poverty reduction.

4.   To examine the challenges of poverty reduction among smallholder farmers in the study area.

A mixed method approach was employed alongside cross-sectional design and exploratory procedure to gain a wider view of poverty in the study area. Probability methods were used to select 420 smallholder farmers from 30 farming communities in 5 districts of the Region. Fifteen (15) district agricultural officers, 10 opinion leaders and local experts, and 4 poverty reduction civil society organisations were purposively selected and interviewed. The methods of data collection were; interviews, in-depth interviews and observation. The instruments employed to collect the required data were; key informant interview guides and interview guides. The study used logistic regression to establish the major factors affecting poverty in the study area. The regression results of the factors affecting poverty in the study were categorised into two, namely, the aggregate results (all study districts) and the district-by-district results. Descriptive statistics and content analysis were employed to present the findings.

The first objective addressed the socio-economic factors influencing poverty among smallholder farmers in the selected districts of the northern region. Due to the complexity and multi-dimensional nature of poverty, it is difficult to attribute its occurrence and prevalence to one single factor. In the face of several variables, this

study found that the most influential factors affecting poverty in the study area were; gender of household head, number of household labour force, number of dependants, years of farm experience of head of household, accessibility to farm land, and availability of assistance to farmers. With the exception of the number of dependants which was statistically significant at under 10 percent, the rest of the aforementioned influential factors were statistically significant at under 1 percent.

The findings show that number of household labour, years of farm experience of head of household, availability of assistance to farmers and accessibility to farm lands were all negatively correlated with poverty. On the contrary, gender of head of household and number of dependants were positively related to poverty. Thus, households headed by males earned higher incomes than female headed households. Similarly, households associated with large number of dependants (children and the aged) earned less income on per capita basis than those dominated by active labour force.

The disaggregated view of the findings (district-by-district analysis) on factors affecting poverty in the study area showed that these factors were not consistent across all the selected districts. years of farm experience of the head of household was the most influential factor in all the study districts.

The second objective assessed the measures used by government and civil society organisations to reduce poverty among smallholder farmers in the study area. One critical objective for CSO support in Ghana and beyond is to improve the socio-economic wellbeing of poor and vulnerable people in society, particularly in rural

communities where about half of the population lives (FAO, 2012; IMF, 2012). In rural communities in Ghana, agriculture is the main stay with majority (77%) of residents practising subsistence agriculture (FAO, 2012). In the light of the argument above, meaningful poverty alleviation strategies of government and CSOs ought to be appropriately tailored and directed at rural farmers.

With respect to the strategies implemented by government and civil society organisations to eradicate poverty in the study area, the study found that most popular poverty reduction strategies included; capacity building (education), primary health care services, agricultural support services and food security, microfinance services, humanitarian and relief services, and community self-help projects. In the case of CSOs, any form of financial or input assistance to the poor must be preceded by some training services (capacity building) to equip them to effectively apply the financial/input assistance judiciously. It was established that CSOs usually organise basic training in the area of costing and financial literacy for first time applicants. The study also established that the relief packages extended to poor people by government and civil society organisations (CSOs) to ameliorate the suffering poor are similar but differ in their mode of delivery.

The study further found that the poverty reduction strategies applied in Ghanaian rural communities (including Northern Region) are inappropriate. Most CSOs apply the top-down approach. They pursue self-help programmes without the so-called self. They typically adopt an external-expert-problem-solver approach to rural development. They tend to initiate projects that they think will be most fundable by external donor agencies as discussed in chapter five. Most projects and programmes

implemented by CSOs are driven by donor priorities rather than community needs (top-down). Different rural communities in the same region may have different development needs and priorities but most CSOs merely categorise them as rural communities with the same (similar) socio-economic problems and therefore require the same solutions. CSOs also presume that projects that appeal to the people of one rural community may equally appeal to people of surrounding communities. These findings are supported by Fowler (2000) that such assumptions downplay the diverse developmental challenges that exist across diverse rural communities, and thus, flies in the face of rural development experience.

The third objective examined the strategies used by the smallholder farmers themselves to escape poverty. In terms of the strategies used by smallholder farmers themselves towards improved livelihood and poverty alleviation, the study revealed that they (farmers) adopt one or a combination of three major strategies; namely, agricultural intensification, diversification into non-farm businesses and migration. In view of the reality that the study was targeted at smallholder farmers, all 420 farmers that were interviewed ranked farming as their first strategic source of income and livelihood. The study found that overwhelming number of farmers in the study area depend on rain-fed agriculture thereby exposed to the vagaries of weather and associated risk. In order to minimise their risks, however, most of the farmers interviewed practiced mixed cropping (cultivation of different crops on the same farm land). As a result of the risk associated with agriculture, farmers often diversify into non-farm income sources (portfolio diversification). Portfolio diversification involves risk management by combining nonfarm portfolios of varying risk profiles. It allows for the application of nonfarm incomes to support

improved agricultural practices and the vice versa. Non-farm business operations identified by this study included petty trading, manufacturing (agro processing and weaving), charcoal burning (fuel wood), bee keeping, and hunting.

This study further found that migrant remittances and wage labour also constitute an important income source for many rural farmers. In practice, the rural farmer avails himself/herself for wage labour. Often times, they migrate to southern Ghana to work on cocoa, or cashew plantations on wage bases, particularly during the off-farm season in the north. The earnings from migrant remittances support the rural farmers to meet the financial demands of their farm operations, such as purchase of inputs for the commencement of the farming season.

The fourth objective addressed the challenges of poverty reduction among smallholder farmers in the study area. In terms of the challenges militating against poverty reduction in the study area the study established that the difficulties the farmers face were delineated into; political, economic, climatic and socio-cultural factors.

Politically, the study found that the colonial administration did not accord the north much attention compared to the south of the country. The north served as source of supply of labour force for many economic activities in the south. Political corruption and misappropriation of public funds were yet another hindrance to rural development, particularly of the north.

Economically, inadequate financial capital was identified as a major obstacle to economic progress in the study area. Due to a vicious circle of poverty, rural households were unable to meet basic needs less to talk of capital accumulation for economic opportunities. The plight of the many smallholder farmers is exacerbated by market volatility which renders their incomes highly unstable and unpredictable.

The study established further that price fluctuations of agricultural outputs render the farmers ineffective. In periods of bumper harvest, prices fluctuate downwards, thereby reducing the financial returns of the farmer. A bad situation made worse was the observed rural-urban drift resulting from the unattractive rural economic environment. Many of the youth in rural areas migrate to urban centres in search of non-existing jobs. This development contributes to reduce agricultural productivity since the older people in the rural areas are left unsupported on the farms.

Climatically, the Northern Region is one of few regions which are relatively dry with a single rainy season, spanning between May and October. The erratic nature of the rainfall pattern in the Region is a major source of worry. Given Ghana's heavy reliance on rain-fed agriculture, drought causes the highest level of cumulative losses with the greatest impact on livelihoods, particularly in the Northern Region. The dominant crops cultivated in the Region include sorghum, millet, maize, and groundnut. These crops are highly susceptible to drought conditions thereby affecting productivity. Also, flash flooding resulting from excessive rainfall occurs with relative frequency across the region. Crops mostly affected by the flood conditions include cassava, rice, yams, and groundnuts. In

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every research community, the major complaint was the erratic and unpredictable rainfall pattern.

Chieftaincy, ethnic and political conflicts have exacerbated the poverty menace in the Region over the last two decades. The Region remains the 'hottest spot' in the country in terms of conflicts. The unfavourable climate in the Region was yet another hindrance to socio-economic progress. Erratic rainfall pattern in the area coupled with poor fertility of the land were critical issues of concern.

8.3   Conclusions

Poverty remains a great challenge to the country and the Northern Region in particular despite the many policy initiatives by successive governments and civil society organisations. Poverty among smallholder farmers poses a great deal of social and economic challenges to not only the development of the area but also to that of the farmers as individuals, their families' and that of Ghana as a whole.

In respect of the socio-economic factors affecting poverty among smallholder farmers, the most influential factors were gender of household head, number of household labour force, number of dependants, years of farm experience of head of household, accessibility to farm land, and availability of assistance to farmers. While higher dependency ratio lead to poverty the reverse was the case for higher farm experience, labourforce, landholding and assistance. However, these factors were not consistent across all the selected districts.

In terms of the strategies employed to reduce poverty, the selected CSOs applied the following; capacity building, health and nutrition, microcredit, agricultural support (food security), water and sanitation, women's rights and good governance, peace building, and humanitarian/relief services. Though, the selected CSOs use similar strategies to alleviate poverty, they differ in terms of sources of funding and financial capacity. This study further established that the CSOs approaches to poverty reduction in the Region were deemed inappropriate in most cases as a result of the top-down approach to poverty reduction.

Regarding the strategies employed by the smallholder farmers themselves to improve their wellbeing and reduce poverty, the study established that farmers on their own efforts at improving their socio-economic wellbeing resort to different sources of livelihood (livelihood strategies). Farmers in the study area employed farming, petty trading, agro-processing, migrant remittance and wage labour, bee keeping, charcoal production, hunting, soothsaying as their livelihood strategies. However, the mainstay of the farmers in the study area was farming.

In respect of the challenges confronting the smallholder farmers in the study area the study established that political, economic, climatic and socio-cultural factors were key. Politically, long standing history of unparalleled relationship between the north and south of the country, mal-administration by state and non-state institutions in the poverty alleviation chain, and politicisation of poverty reduction programmes were critical constraints. The key economic challenges militating against the poverty reduction efforts among farmers in the study area included; poor infrastructural development, particularly road network (physical capital), economic

instability (price volatility of agricultural produce), poor availability of financial resources (financial capital), post-harvest losses and rural-urban drift of the youth (human capital). The major climatic challenges which work against the poverty reduction efforts in the study area comprise; erratic and unpredictable rainfall pattern, single farming season, declining fertility levels of farm lands, and insect-pest infestation. The socio-cultural factors threatening poverty reduction efforts among farmers in the study area include; tribal and ethnic conflicts, gender discrimination against women and negative belief system.

Overall, the constraints to poverty reduction in the selected districts remain a bane not only to the smallholder farmers but society a large. Therefore, appropriate strategies to combat the menace becomes a major concern to all stakeholders (including government and civil society organisations).

8.4   Recommendations

In view of the adverse consequences of poverty to the smallholder farmers and society in general, there is the compelling need for measures to be put in place to address the menace among farmers in the study area, and save them from the consequences of the many attendant challenges they encounter. Recommendations to this effect are considerably based on the findings of this study, and more especially, on the suggestions made by participants of the study. Based on the key findings and conclusions, it is recommended that:

The smallholder farmers should consider capacity building as critical ingredient in poverty reduction. Even though this study showed that the level of formal

education was not a significant factor affecting poverty, the level of farm experience was significant. Higher educational attainments lower the chances of an individual becoming poor. Therefore, government and district assemblies should work towards developing and implementing quality and relevant educational policies that would improve on universal access to quality and affordable education particularly to rural areas. Promoting education is critical in poverty reduction since education provides a springboard for better opportunities that improve on the welfare of individuals and cushion them from poverty. Policy initiatives that would promote capacity building of the poor and vulnerable include; restructuring and re-establishment of technical and vocational education, monitoring and evaluation of the curriculum to ensure that it meets the prevailing local job market demands, establishment of an inclusive education system that engages poor farmer and other maginalised groups.

Also, the poor farmers have to participate actively in activities designed to promote their own economic and social development. Utilisation of resources from and involvement of local communities and other sectors through a participatory approach is essential. This process facilitates valuable social inclusion and development, resulting in interactions and dialogue between participating actors. Through this strategy, the poor actively participate in and control their own development, rather than relying on external support providers (e.g. CSOs) who may be available only for limited time periods. Poor communities thus are provided with an opportunity to engage in and continue poverty alleviation activities, progressing out of poverty in a sustainable way after CSOs' projects formally come to an end. To achieve successful project outcomes, it is essential for CSOs to gain

trust and access to poor communities. As such, CSOs need to know poor communities' conditions and expectations, develop an understanding of their culture and local context, and call for their involvement from the beginning to the end of projects.

The government and district assemblies in particular should invest in policies that improve on the infrastructure of rural areas with a view to bridging the gap between the urban and the rural areas in terms of poverty incidence. Therefore, deliberate action to improve rural infrastructure becomes inevitable. particular, more feeder roads should be developed to improve on transportation of agricultural produce from farm centres to market places. Through the 'one village, one dam' policy of the current government, clean and safe water could be provided in the rural areas coupled with better and improved water conservation and storage systems. These dams will provide enough water for livestock use, domestic use, and industrial use as well as for irrigation for all year-round engagements to improve on the rural agricultural output.

Also, government should enhance its commitment to positive discriminatory policy in favour of the north to eradicate extreme poverty and hunger in the region and the country at large. Savannah Accelerated Development Authority (SADA) which is now known as the Northern Development Authority (NDA) should be considered more seriously. The required technical and financial resources for the execution of the projects of SADA/NDA ought to be made available to programme implementers to apply to the realization of intended objectives. The resources of the authority ought to be devoid of misappropriation and possible embezzlements.

Moreover, District Agricultural Extension Officers have to intensify the timely dissemination of relevant agricultural practices to the farmers to enable them take advantage of modern agricultural practices. The continuous reliance on outmoded farming practices continue to impact negatively on agricultural productivity. The government should as well make the agricultural sector attractive through productive policy initiatives such as; subsidised farm inputs, fair prices of agricultural outputs, strengthening agricultural unions through which farmers can air their grievances, proper research and development in agriculture to improve technology and enhance productivity in the sector.

Finally, government, district assemblies and civil society organisations need to prioritise women in their quest to eliminate poverty. Household headed by women are poorer as revealed in the study. Women are denied access to land and other forms of assets. Considering the role of rural women in direct agricultural production and the processing and marketing of farm produce, establishment of cottage industries powered by uninterrupted power supply will boast their economic wellbeing. Additionally, all forms of discrimination against rural women have to be nipped in the bud.

8.5   Contribution of the Study

Even though there are studies on poverty, they are basically on measurement of poverty, determinants of poverty, income inequalities and women empowerment which are dis-jointly investigated. This study contributes to the existing body of literature on poverty by establishing the relationships between poverty, factors influencing poverty and the challenges militating against its eradication. This thesis

established synergies and leverage points between these three significant interrelated discourses that are often treated separately. These relationships between these three inter connected variables are not adequately catered for in the existing body of literature.

Methodologically, this research is one of few studies that have applied the Mixed Method to uncover the causes of poverty and the factors militating against its eradication. The study therefore broadens the methodological aspect of poverty and related issues.

In terms of literature, this study adds to existing body of literature thereby broadening the frontiers of knowledge on the subject matter.

8.6   Areas for Further Research

Areas for further research on subject of poverty related matters are informed by the limitations of this study. In terms of scope, this study is limited only to the investigation of poverty reduction among a fraction of smallholder farmers in selected districts of the Northern Region of Ghana. Therefore, similar research, if conducted in other parts of the country would help to understand the similarities and differences pertaining to different environments and contexts.

More so, the focus on the agricultural sector (smallholder farmers) poses yet another limitation in terms of scope. Therefore, a study on a wider range of poverty reduction (other than smallholder farmers) could provide a broader view of the poverty situation in the country.

Methodologically, the study suffers from limited application of quantitative and qualitative approaches to research. The application of the mixed method approach does not permit the exhaustive utilisation of either the quantitative or the qualitative approach. Also, inherent deficiencies in the analytical procedures used in the study could have adversely affected the results of the study. However, in spite of the limitations of this study, the outcome remains valid and reliable.

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REFERENCES

Achia T., Wangombe A., Khadioli N. (2010). A logistic regression model to identify key determinants of poverty using demographic and health survey data, *European Journal of Social Sciences, 13(1): 38-45*

Adams, Richard H. (1999). "Nonfarm Income, Inequality and Land in Rural Egypt." Policy Research Working Paper 2178. World Bank, Policy Research Department, Washington, D.C.

Adams, W.M. and Mortimore, M.J., (1997). 'Agricultural intensification and flexibility in the Nigerian Sahel', Department of Geography, University of Cambridge.

Adato, M. (2011). Combining Quantitative and Qualitative Methods for Program Monitoring and Evaluation: Why are Mixed-Method Design Best? *PREM Notes.* Washington D.C.: World Bank.

Adato, M., Lund, F. & Mhlongo, P. (2007). Methodological Innovations in Research on Dynamics of Poverty: A Longitudinal Study in KwaZulu-Natal, South Africa. *World Development,* 35 (2)**,** pp. 247-263.

Addison, T., Hulme, D. & Kanbur, R. (2009). Poverty Dynamics: Measurement and Understanding from an Interdisciplinary Perspective. *In:* Addison, T., Hulme, D. & Kanbur, R. (eds.) *Poverty Dynamics: Interdisciplinary Perspective.* Oxford: Oxford University Press.

Adedeji Adebayo (2002). Structural Adjustment Policies in Africa.

Adjei Osei-Wusu, P., Agyemang, S. & Afriyie, K., (2012). Non-Governmental Organizations and Rural Poverty Reduction in Northern Ghana: Perspectives of Beneficiaries on Strategies, Impact and Challenges. Journal of Poverty Alleviation and International Development, 3(2), pp. 47-74.

AEI-Brookinigs. (2015). Opportunity, Responsibility, and Security: A Consensus Plan for Reducing Poverty and Restoring the American Dream. Washington, D.C.: American Enterprise Institute for Public Policy Research and the Brookings Institution

Akanganngang Joseph Asitik (2015), Entrepreneurship: A means to poverty reduction in rural northern Ghana?

Alderman, H., Behrman, J. R., Kohler, H. P., Maluccio, J. A. & Watkins, S. C. (2000). Attrition in Longitudinal Household Survey Data: Some Tests for Three
Developing Country Samples. *IFPRI Discussion paper,* 96.

Alhassan Eliasu (2012). Gender Access Gap: Factors Affecting Gender Disparity in enrolment and Attendance in Basic Schools in the Northern Region of Ghana.

Al-hassan, S. (2015). Food security in the Upper East Region of Ghana: A situational analysis.

UDS International Journal of Development, 2(1), 69-85

Ali D. & Lippit V. (2009). Food Subsides, Growth and Poverty; A Critique on Neoliberal Institutional Structure

Aline Coudouel, Jesko S. Hentschel, and Quentin T. Wodon (2011), Poverty Measurement and Analysis.

Alkire, S. (2008). Multidimensional poverty Measures. Oxford poverty & Human DevelopmentInitiative.Retrievedfrom:http:/hdr.undp.org/en/media/Alkire MultidimensionalPoverty.ppt

Ali, A.A.G. and E. Thorbecke, (2003). The State of Rural Poverty, Income Distribution and Rural Development in Sub-Saharan Africa. In: Nissanke, M. and E. Aryeetey (Eds), Comparative Development Experiences of Sub-Saharan Africa and East Asia: An Institutional Approach. African Economic Research Consortium, Nairobi.

Alkire, S. & Foster J., (2008). Counting and Multidimensional Poverty Measurement. Oxford Poverty and Human development Initiative (OPHI) Working article Number 7. Retrievedfromhttp://mora.rente.nhh..no/projects/EqualityExchange/portals/0/articles/Alkire_Foster_CountingMultidimensional_Poverty.pdf

Anyang Nyong'o, P.(ed) (1992). 30 years of independence in Africa: the lost decades? Academic Science Publishers, Nairobi

Appleton, Simon. (1999). "Changes in Poverty in Uganda, 1992–1997." Working Paper No. 99-22. University of Oxford, Center for the Study of African Economies, Oxford, England.

Appleton, S. & Booth, D. (2001). Combining Participatory and Survey-based Approaches to Poverty Monitoring and Analysis. *Background Paper for the Workshop in Entebbe, Uganda.*

Arndt, C., Benfica, R., Tarp, F., Thurlow, J., &Uaiene, R. (2010). Biofuels, poverty, and growth: a computable general equilibrium analysis of Mozambique. Environment and development Economics, 15(01), 81-105

Arndt, C., Jones, S., & Tarp, F. (2010). Aid, growth, and development: have we come full circle? Journal of Globalisation and Development, 1(2).

Asen, R. (2002). Visions of Poverty: Welfare Policy and Political Imagination. East Lansing: Michigan State University Press.

Ashley, C. and Carney, D. (1999). Sustainable Livelihoods: Lessons from early experience. London: Department for International Development.

Asim Ijaz Khwaja (2001). Measuring Empowerment at the Community Level: An Economist's Perspective

Audet, M., Boccanfuso, D., Makdissi, P., (2006). The Geographic Determinants of Poverty in Albania. Groupe de Recherche en Économie et Développement International Cahier derecherche / Working Paper 06-12.

Aryeetey, E., and Abbey (2004). Bridging the north south divide in Ghana
    Atkinson, A.B. (1987): "On the measurement of poverty". Econometrics, Vol.55, pp.749–764.

Babbie, E. (2006). The Basics of Social Research. CA Canada, Canada Wodsworth Press.

Bahari, S. F. (2012). Qualitative versus quantitative research strategies: contrasting epistemological and ontological assumptions. Journal Teknologi, 52(1), 17-28.

Banks, N. & Hulme, D., (2012). The Role of NGOs and Civil Society in Development and Poverty Reduction. 2nd Edition ed. Manchester: Brooks World Poverty Institute

Barrett, C., Reardon, T., Webb, P., (2001). Non-farm Income Diversion and Household Livelihood Strategies in Rural Africa: Concepts, Dynamics, and Policy Implications. *Food Policy* 26 (4): pp. 315-331.

Barrett, C., (2008). Smallholders' market participation: concepts and evidence from eastern and southern Africa. *Food Policy* 33: 299-317.

Barret, Christopher B. (2005). Rural Poverty Dynamics; development policy implications. Agricultural Economics, 32(sl), 45-60. doi; 10.1111/j.0169-5150.2004.000013. x.

Barret, C. B. (2005b). Mixing Qualitative and Quantitative Methods in Analysing Poverty Dynamics. *In:* ODHIAMBO, W., OMIT, J. M. & MUTHAKA, D. I. (eds.) *Quantitative and Qualitative in Poverty Analysis.* Nairobi: Kenya Institute for Public Policy Research and Analysis (KIPPRA).

Baulch, B. (2011). Overview: Poverty Dynamics and Persistence in Asia and Africa. In: BAULCH, B. (ed.) Why Poverty Persists: Poverty Dynamics and Persistence in Asia and Africa. Glos: Edward Elgar Publishing Limited.

Baulch, B., and J. Hoddinott (2000). Economic Mobility and Poverty Dynamics in Developning Countries. London: Frank Cass.

Bene, C. (2003). When fishery rhymes with poverty: A first step beyond the old paradigm on poverty in small-scale fisheries. *World Development*, 31(6), 949-975.

Benton, T. & I. Craib (2001). Philosophy of Social Science: The Philosophical Foundations of Social Thought. Palgrave, Basingstoke

Besley, T., Burgess R. (2003), "Halving Global Poverty", Journal of Economic Perspectives, 17(3): 3-22.

Besley, T. and Cord, L.J. (2007). (eds.): Delivering on the Promise of Pro-Poor Growth, New York: Palgrave.

Biggs S., Ellis F., (2001). Development Policy Review, 19(4): 437-448.

Bigsten, Arne (1981), 'Regional Inequality in Kenya' in Tony Killick. Papers on the Kenyan Economy: Performance, Problems and Policies. Nairobi: Heinemann Educational Books Ltd.

Bird Kate (2019), Addressing Spatial Poverty Traps. Overseas Development Institute, London

Blackmon, P. (2008): Rethinking poverty through the eyes of the International Monetary Fund and the World Bank, International Studies Review 10, pp. 179–202.

Blakely, E.J. (1994). Planning Local Economic Development: Theory and Practice. California: Sage.

Blakely, E. J., & Bradshaw, T. K. (2002). Planning Local Economic Development. Thousand Oaks: Sage.

Blank, R. M. (2003). Selecting Among Anti-Poverty Policies: Can an Economics Be Both Critical and Caring? Review of Social Economy, 61(4), 447-471

Blank, R. (2010), "Selecting among anti-poverty measures, can an economist be both critical and caring?", Review of Social Economy, 61, 447-469.

Blank, R. M. (1997). It Takes a Nation: A New Agenda for Fighting Poverty. Princeton NJ: Princeton University Press.

Boughton, D., D. Mather, C. Barrett, R. Benfica, D. Abdula, D. Tschirley and B. Cunguara (2007). Market participation by rural households in a low-income country: an asset-based approach applied to Mozambique. Faith and Economics 50(2007): 64-101.

Bowley, A. L. (1915), the Measurement of Social Phenomenon. London: P.S. King and Son.

Bradshaw, T. K. (2006). Theories of Poverty and Anti-Poverty Programs in Community Development. RPRC Working Paper No. 06-05

Bradshaw, T. K. (2000). Complex Community Development Projects: Collaboration,
  Comprehensive Programs and Community Coalitions in Complex Society. Community Development Journal, 35(2), 133-145.

Bracking, S. 2003. The Political Economy of Chronic Poverty. Chronic Poverty Research Centre Working Paper 23. CPRC, Manchester

Brady D, Finnigan R, Hübgen S. (2017). Rethinking the Risks of Poverty: A Framework for Analyzing and Comparing Prevalences and Penalties. American Journal of Sociology. 123: 740-786

Bradshaw, T. K., King, J. R., & Wahlstrom, S. (1999). Catching on to Clusters. Planning,
  65(6), 18-21

Brannen, J. (2005). Mixing methods: The entry of qualitative and quantitative approaches into the research process. The International Journal of Social Research Methodology, Special Issue, 8(3), 173-185.

Bryceson D. (1999a). African Rural Labour Income Diversification and Livelihood Approaches: A Long-term Development Perspective, Review of African Political
  Economy, 80: 171-189

Bryceson D. (1999b). Sub-Saharan Africa Betwix and Between: Rural Livelihood Practices
  and Policies. ASC Working Paper 43, Leiden

Bryceson, D.F., (1996). 'De-agrarianization and rural employment in sub-Saharan Africa: a
  sectoral perspective', World Development, 24(1): 97-111.

Bryman, A. (2012). Social research methods, (4th ed.). New York: Oxford Press

Bryman, W. & Bell, E. (2002). Qualitative Research Methods. Oxford: Wiley-Blackwell.

Bryman, A. & E. Bell (2007). Business Research Methods. Oxford University Press, Oxford.

Cardoso, Fernando (1979). Dependency and development in Latin America Berkeley:
  University of California Press

Carmen, Diana Deere and Cheryl R. Doss (2006). Gender and the Distribution of Wealth

in Developing Countries.

Carter, Michael R. (1997). Environment, Technology, and the Social Articulation of Risk
in West African Agriculture

Carvalho, S. & White, H. (1997). Combining the Quantitative and Qualitative Approaches
to Poverty Measurement and Analysis: The Practice and the Potential. *World Bank*
Technical Paper, 366. Washington D.C.: The World Bank.

Cassle, T., Jensen, S., (2009). Do we understand the linkages between economic growth,
poverty targets and poverty reduction? Review of African Political Economy
36(122),539–553.

Chakravarty, S.R. and Bourguignon, F. (2003): The measurement of multidimensional
poverty, *Journal of Economic Inequality* 1(2003), 5–49.

Chambers, R. & Conway, G. R. (1992). Sustainable Rural Livelihoods: Practical Concepts
for the 21th Century. *IDS Discussion Paper, 296.* Brighton: Institute of
Development Studies, University of Sussex

Chambers R. (2002). *Participatory Workshops: a sourcebook of 21 sets of ideas and   activities.* London: Earthscan

Christopher B.B., Holden S., Clay D.C (200) Can food-for-works programmes reduce
vulnerability? WIDER Discussion Papers//World Institute for Development
Economics (UNU-WIDER)

Clark, D. 2006. The Capability Approach: Its Development, Critiques and Recent
Advances. Global Poverty Research Group Working Paper, GPRG-WPS-
032. Available at http://www.gprg.org/pubs/workingpapers/pdf/gprg-wps-
032.pdf Accessed online [13/09/17].

Cleary, S. (1989). Renewing the Earth, Development for a Sustainable Future, CAFOD,
London, UK.

Coetzee, K.J., Graaf J., Heindricks F., Wood G. (2007). Development: Theory, Policy and
Practice. Cape Town: Oxford University Press.

Coleman, J. 1988. Social Capital in the Creation of Human Capital in the American
Journal of Sociology Vol 94; Supplement S95 - S 120.

Cooke, E., Hague, S. & McKay, A., (2016). The Ghana Poverty and Inequality Report. Using the 6th Ghana Living Standards Survey 2016.

Cord, Louise, and Patrick Verissimo. (2002). "The Coverage of Rural Issues in PRSPs: A Review of Preliminary Experience." World Bank, Washington, D.C. Processed.

Coudouel, A., Hentschel, J. S. and Wodon, Q. T. (2002). Poverty measurement and analysis. A Sourcebook for Poverty Reduction Strategies, 1, 27-74.

Coulombe, H. and Wodon, Q. (2007). Poverty, Livelihoods, and Access to Basic Services in Ghana: An Overview. World Bank. Washington, DC. Processed

Creswell, J. W. (2009). *Research design*: *Qualitative, quantitative, and mixed methods*
        approaches. Los Angeles: Sage.

Cruz MS, Ahmed A. 2018. On the Impact of Demographic Change on Economic Growth and Poverty. World Development 105: 95-106

Cunguara, B.,& Darnhofer, I., (2011a). Assessing the impact of improved agricultural technologies on household incomes in rural Mozambique. Food Policy, 36(3), 378-390.

Cunguara, B., Langyuntuo, A., & Darnhofer, I., (2011a). The Role of Nonfarm Income in Coping with the Effects of Drought in Southern Mozambique. Agricultural Economics,

Dahl GB, Kostol AR, Mogstad M. (2014). Family Welfare Cultures. The Quarterly Journal of Economics 129: 1711-1752

Danzinder, G.D. Sanderfur, & D.H. Weinberg (eds), Confronting Poverty: Prescriptions for
        Change. Cambridge: Harvard University Press

Davis, P. & Baulch, B. (2009). Parallel Realities: Exploring Poverty Dynamics using
        Mixed Methods in Rural Bangladesh. *Paper presented at the CPRC/ BASIS Conference on 'Escaping Poverty Traps: Connecting the Chronically Poor*
to
        Economic Growth'. February, 2009. Washington D.C.

        Davies S (1997). „Livelihood adaptation", Paper for workshop Making Livelihoods work –women, men and children in Rajasthan", mimeo, Brighton: IDS. 149

Dèlice Williams (2016), What are the causes of poverty?

Dercon, S. and Krishnan, P., (1996). 'Income portfolios in rural Ethiopia and Tanzania:
  choices and constraints', *Journal of Development Studies*, 32(6): 850-875.

Dercon, S. and P. Krishna (1996). "Income portfolios in rural Ethiopia and Tanzania:
  choices and constraints." Journal of Development Studies 32(6): 850-875.

De Janvry, Alain, Elisabeth Sadoulet. 2002. Access to Land, Rural Poverty, and
  Public Action.   Oxford University Press.

De Janvry, Alain, (1994). "Structural Adjustment under Transactions Costs", in Franz
  Heidhues and Beatrice Kerr, Food and Agricultural Policies under Structural
  Adjustment, Frankfurt: Peter Lang.

De Weerdt Joachim (2010).Moving out of Poverty in Tanzania: Evidence from
  Kagera, The   Journal   of   Development   Studies, 46:2, 331
  349, DOI: 10.1080/00220380902974393

Denzin, N. K., & Lincoln, Y. S. (1998) (Eds). Collecting and Interpreting
  Qualitative Materials. Thousand Oaks, CA: Sage.

Deshpande, R. (1983). "Paradigms Lost": on theory and method in research in
  marketing. The Journal of Marketing, 47(4), 101-110.

DFID (2001). Sustainable Livelihoods Guidance Sheet.

Dollar, D., & Kraay, A. (2002). Growth is good for the Poor. *Journal of economic
  growth*, *7*(3), 195-225.

Dollar, D., & Kraay, A. (2002). Spreading the wealth. *Foreign Affairs-New York-
*, *81*(1),
  120-133.

Dominique H. (1999): New partnership for poverty alleviation in Africa. Learning from
  local dynamics

Donaldson, J., (2008). Growth is good for whom, when, how? Economic growth and
  poverty reduction in exceptional cases. World Development 36(11), 2127-
  2143.

Dongier, P., Julie, V.D., Elinor, O., Andrea, R., Wendy, W., Anthony, B., Sabina, A.,

Talib, E., and Polski M. (2003). 'Community Driven Development' Chapter 9 in PRSP

      sourcebook, volume 1, The World Bank.

Dorward, A., Poole, N. D., Morrison, J., Kydd, J., & Urey, I. (2003). Markets, institutions

      and technology: missing links in livelihoods analysis. *Development Policy Review*,

      21,319-332.

Doss, C., (2006). Analysing technology adoption using micro studies: limitations,

      challenges, and opportunities for improvement. Agricultural Economics 34, 207-

      219. Eichenbaum, M., & Fisher, J. D. (2003). Testing the Calvo model of sticky

      prices. *Available at SSRN 423508.*

Ellis F., and Biggs S., (2001). Development Policy Review, 19(4): 437-448.

Ellis, F. (2000). *Rural Livelihoods and Diversity in Developing Countries,* Oxford, Oxford

      University Press.

Ellis, F, (1997). Household Strategies and Rural Livelihood Diversification. Paper

      submitted to the Journal of Development Studies.

Ellis, F., (1996). 'Policy implications of rural livelihood diversification', mimeo, Overseas

      Development Group, University of East Anglia, Norwich.

Ennin, C. C., Nyarko, P. K., Agyeman, A., Mettle, F. O., & Nortey, E. N. N.
      (2011). Trend analysis of determinants of poverty in Ghana: Logit approach.
      Research Journal of Mathematics and Statistics, 3(1), 20-27.

Escobal, J. and Torero, M. (2005) 'Measuring the Impact of Asset
      Complementarities: The Case of Rural Peru.' Cuadernos de Económía
      (Latin American Journal of Economics) 42(125): 137-164.

Fafchamps, M., & Gabre-Madhin, E. (2006). Agricultural markets in Benin and
      Malawi: Operation and performance of traders. African Journal of
      Agriculture and Resource Economics, 1(1), 67–94

Fan, S., Yu, B. and Saurkar, A. (2008). Public spending in developing countries: trends,

      determination and impact. In *Public expenditures, growth, and poverty: lessons*

      from developing countries, S. Fan, ed.pp. 20-55. Baltimore, MD: Johns
      Hopkins University Press.

Feagin, J. (2000). Racist America: Roots. Current Realities. and Future Reparations. Routledge, New York.

Ferguson, C., (2011). Enhancing the Role of NGO's and Civil Society in Poverty
    Alleviation: Challenges and Opportunities, Geneva: s.n.

Fisher, C. B. (2003). Goodness-of-fit ethic for informed consent to research involving
    adults with mental retardation and developmental disabilities. Mental retardation
    and Development Disabilities Research Reviews, 9(1), 27-31.

Florida, A. (2002). The Rise of the Creative Class. New York: Basic books

Food and Agricultural Organisation (2005). An Approach to Rural Development:
    Participatory and Negotiated Territorial Development (PNTD). Paris: Rural
    Development Division of Food and Agriculture Organization of the United Nations.
    Available   at   http://www.fao.org/sd/dim_pe2/docs/pe2_050402d1_en.pdf (Accessed
    10 June, 2017).

Food and Agricultural Organization of the United Nations (FAO) (2012). Gender
    Inequalities in Rural Employment in Ghana: An Overview. Rome: Gender, Equity
    and Rural Employment Division.

Food Agricultural Organisation (2003), *Strategies for increasing the sustainable
    contribution of small-scale fisheries to food security and poverty alleviation.*
    Committee on Fisheries 2003, Rome.

Food Agricultural Organisation (2001), Farming Systems and Poverty.

Foster, J. E. (1998). Absolute versus Relative Poverty. American Economic Review, 88(2),
    335-341.

Foster; J. Joel Greer; Erik Thorbecke (2010). "The Foster–Greer–Thorbecke (FGT)
    poverty measures: 25 years later". *The Journal of Economic Inequality*. **8**:
    491–524. doi:10.1007/s10888-010-9136-1

FAO (1997) Improving Agricultural Extension. A Reference Manual. Rome, Italy:
    Food and Agriculture Organization of the United Nations.

Fowler, A. (2000). NGOs as a Moment of History: Beyond Aid to Social Entrepreneurship
    or Civic Innovation?, Third World Quarterly 21(4): 637–54.

Francis, E. (2006). Poverty: causes, responses and consequences in rural South Africa. Chronic Poverty Research Centre Working Paper, No.60.

Frank, Andre Gunder (1971). Capitalism and underdevelopment in Latin America: historical studies of Chile and Brazil, Harmondsworth: Penguin

Fred Goldstein (2012), Capitalism at a Dead End Job Destruction, Overproduction and
    Crisis in the High-Tech   Era

Fukuda-Parr, S. (2006). The human poverty index: A multidimensional measure. In D. Ehrenpreis (Ed), Poverty in Focus. What is Poverty? Concepts and Measures, (pp. 3-4). Brazil: UNDP International Poverty Centre.

Gans, H. (1971), "The Positive Functions of Poverty", American Journal of Sociology, 78, No. 2.

Gans, H. (1995). The War Against the Poor: The Underclass and Anti-Poverty Policy. Basic Books, NY.

Gary, I. (1996). Confrontation, co-operation or co-optation: NGOs and the Ghanaian state during structural adjustment. *Review of African Political econo*my 68,149-68

Geda, Alemayehu; de Jong, Niek; Kimenyi, Mwangi S.; and Mwabu, Germano (2005).
    "Determinants of Poverty in Kenya: A Household Level Analysis" (2005). Economics Working Papers. 200544.

    Geda A., Jong N. , Mwangi K., Mwabu G. (2001) ''Determinants of Poverty in Kenya: A Household Level Analysis'', KIPPRA Discussion Paper, No.9.

Gelman, A., Meng, X. L., & Stern, H. (1996). Posterior predictive assessment of model
    Fitness via realized discrepancies. Statistica sinica, 6(4), 733-760.

Gennetian LA, Shafir E. (2015). The Persistence of Poverty in the Context of Financial Stability: A Behavioral Perspective. Journal of Policy Analysis and Management. 34: 904-936

Geraldine, Aku Addo (2017), NGOs and Poverty Reduction: a Case Study of Danish and
    Ghanaian NGOs in Ghana (PhD thesis).

Gershon Osei (2015). Self-help without the self: Critique of non-governmental organizational approaches to rural development in Ghana

Gibelman, M. and S.R. Gelman (2001) 'Very Public Scandals: Non-governmental Organizations in Trouble',*Voluntas* 12(1): 49–66.

Giddens A (1979). Central Problems in Social Theory: Action, Structure and Contradiction in Social Analysis, London: MacMillan.1,22: 38.

Ghana Statistical Service, (2015). Ghana Poverty Mapping, s.l.: Ghana Statistical Service.

Ghana Statistical Service (2014b). 2010 Population and Housing CensusDistrict Analytical
    Report East Gonja District (EGD) Report. Accra:

Ghana Statistical Service (2014a). Ghana Living Standards Survey 6 – Main Report. Accra:
    Ghana Statistical Service.

Ghana Statistical Service (2014). Ghana Living Standards Survey 6: Poverty profile in
    Ghana. Accra:

Ghana Statistical Service (2013). *Non-Monetary Poverty in Ghana,* s.l.: Ghana Statistical
    Service.

Ghana Statistical Service (2013). *Ghana Living Standards Survey 6 with Labour Force*
    Module (glss6/LFS) 2012/2013. Three-cycle labour force report (fourth to sixth cycle report). Accra: GSS.

Ghana Statistical Services (GSS) (2012). Ghana Population Census. Accra, Ghana
    Statistical Service.

Ghana Statistical Service (2010). 2010 Population & Housing Census report. Accra:

Ghana Statistical Service (2008). Ghana Living Standards Survey: Report of the Fifth
    Round (GLSS 5). Accra:

Ghana Statistical Service (1998). Ghana Living Standards Survey: Report of the Fourth
    Round (GLSS 4). Accra:

Ghana Statistical Service (2007). Economic Survey: 2001-2005. Accra, Ghana:

Ghana Statistical Service (1995). Ghana Living Standards Survey Report on the Third
    Round (GLSS 3), Accra: GSS.

Golafshani, N. (2003), Understanding reliability and validity in qualitative research. The Qualitative Report, 8(4), 597-607.

Goldstein, D. M. (2001). Microenterprise training programs, neoliberal common sense, and the discourses of self-esteem. in J. Goode, & J. Maskovsky (eds), The new poverty studies (pp. 236-272). New York: New York University Press

Gore, C. (2003). Globalisation, the International Poverty Trap and Chronic Poverty in the Least Developed Countries. CPRC Working Paper 30. Available online at www.undp.org/povertycentre/publications/vulnerability/GloalisationLDCsC PRC.pdf. [Accessed online 11/02/17]

Government of Ghana (2005b). Growth and Poverty Reduction Strategy II, 2006-2009.
Accra.

Government of Ghana (2005a). Ghana Poverty Reduction Strategy, Pattern and Trends of Poverty in Ghana 1991-2006. Accra: Ghana Statistical Service.

GoG/NDPC (2014). Medium-Term National Development Policy Framework: Ghana
Shared Growth Development Agenda (GSGDA), 2014-2017- Vol., Accra: NDPC

GoG/NDPC (2010b) Medium-Term National Development Policy Framework: Ghana
Shared Growth Development Agenda (GSGDA), 2010-2013 – Vol., Accra: NDPC:

Guba, E., & Lincoln, Y. (1994). Competing paradigms in qualitative research. In N.K. Denzin, and Lincoln, Y. (Eds.), Handbook of Qualitative Research, (pp. 163194). Newbury Park, CA: Sage

Gutierrez, L. and A.R. Alvarez (2008) 'Educating Students for Multicultural Community
Practice', Journal of Community Practice 7(1): 39–56.

Gwartney, J., & McCaleb, T. S. (1985). Have Antipoverty Programs Increased Poverty.
Cato Journal, 5(5), 1-16.

Haggblade, S. (2007). Alternative perceptions of the rural non-farm economy. Transforming the rural nonfarm economy: opportunities and threats in the developing world, 262-319.

Haggblade, S., & Hazell, P. B. (2010). Successes in African agriculture: Lessons for the
future. International Food Policy Res Inst.

Haggblade, S., & Hazell, P. B. (2001). Farm-nonfarm linkages in rural Sub-Saharan Africa. World Development 17(8), 1173-1201.

Haggblade, S., & Tembo, G. (2003). Conservation farming in Zambia. International Food
Policy Res Isnt.

Haggblade, S., Tembo, G. & Donovan, C. (2004). Household level financial incentives to
adoption of conservation agricultural technologies in Africa (Vol. 54466). Food
Security Research Project

Hagenaars, A.J.M. (1986), 'The Perception of Poverty', Contributions to Economic Analysis, Oxford: North-Holland

Hagenaars, Aldi J.M. and van Praag, Bernard M.S (2003).: "A Synthesis of Poverty Line Definitions". Leyden University. Center for Research in Public Economics

Halvorse, R., & Palmquist, R. (1980). "The Interpretation of Dummy Variables in Semi
logarithmic Equations." The American Economic Review, 70(3), 474-475.

Handley, G., Higgins, K., Sharma, B., Bird, K., & Cammack, D. (2009). Poverty and
poverty reduction in sub-Saharan Africa: An Overview of the Issues. London:
Overseas Development Institute.

Hannum E, Xie Y. (2016). Education. In the Oxford Handbook of the Social Science of Poverty, ed. D Brady, LM Burton, pp. 462-485. Oxford University Press

Hazlewood, Arthur (1981), 'Income Distribution and Poverty: An Unfashionable View' in Tony Killick. Papers on the Kenyan Economy: Performance, Problems and Policies. Nairobi: Heinemann Educational Books Ltd.

Healy, M., & Perry, C. (2000). Comprehensive criteria to judge validity and reliability of qualitative research within the realism paradigm. Qualitative Market research: An International Journal, 3(3), 118-126.

Hearn, J. (2007). African NGOs: The New Compradors? *Development and Change* 38 (6): 1095–1110.

Helmsing, A.H.J (2001). Local Economic Development - New Generations of Actors,
Policies and Instruments. A summary Report Prepared for the UNCDF Symposium

on Decentralisation of Local Governance in Africa Institute of Social Studies, The

Hague.

Hentschel, J., and P. Lanjouw. 1996. *Constructing an Indicator of Consumption for the*

Analysis of Poverty. World Bank Living Standard Measurement Study 124. Washington, D.C. www.cdsea.org

Hoepfl, M. C. (1997). Choosing qualitative research: A primer for technology education researchers. Journal of Technology Education, 9(1), 47-63.

House, William and Tony Killick, (1981). 'Inequality and Poverty in Rural Economy and the Influence of Some Aspects of Policy' in Tony Killick. Papers on the Kenyan Economy: Performance, Problems and Policies. Nairobi: Heinemann Educational Books Ltd.

Hulme, D. (2007). Integrating Quantitative and Qualitative Research for Country Case

Studies of Development. *Paper prepared for the Global Development Network*

meeting on Comparative Analysis: Methodological Workshop in Beijing.

Hulme, D. and A. Shepherd (2003). "Conceptualizing Chronic Poverty" World Development 31(3): 403-423.

Hussain A. Tribe K. (1981). Marxism and the Agrarian Question: German Social Democracy and the Peasantry 1890-1907. Hong Kong: MacMillain Press Ltd.

Hussein K. & J. Nelson (1999), Sustainable Livelihoods and Livelihood Diversification,

IDS working paper 69.

International Fund for Agricultural Development (2011). New realities, new challenges:

new opportunities for tomorrow's generation. Rural poverty report. Rome: IFAD.

International Fund for Agricultural Development (2009a). *Guidance notes for institutional*

analysis in rural development programmes. Rome.

International Fund for Agricultural Development (2009b). *Community-driven development*

tools. Rome.

International Fund for Agricultural Development (1988), Report of the Special Programming Mission to Ghana, Report No. 0105-Gh.

International Labour Organisation (2006). Strategies for Local Economic Development.
www.ilo.org

International Monetary Fund (IMF) (2012) Ghana: Poverty Reduction Strategy Paper.
Washington, DC: International Monetary Fund.

International Monetary Fund (2006). *Ghana: Poverty Reduction Strategy Paper*. (IMF
Country Report No. 06/225). Washington, D.C: IMF.

International Monetary Fund (2009). *Ghana: Poverty Reduction Strategy Paper-2006*
Annual Progress Report. IMF Country Report No. 09/237. Washington, D.
C:
IMF.

International Monetary Fund (2014). Fact Sheet, Poverty reduction strategy papers.
https://www.imf.org/external/np/exr/facts/pdf/prsp.pdf(Accessed   14th
May2014).

International Monetary Fund (2015). Poverty Reduction Strategy Papers. Washing, DC.:
IMF. Available at: http://www.imf.org/external/np/prsp/prsp.aspx (Accessed 20th July 2015).

Irz, X., Lin, L., Thirtle, C., & Wiggins, S. (2001). Agricultural Productivity growth and
poverty alleviation. Development policy review, 19(4), 449-466

Jalan, J. & Ravillion, M. (1998a). Determinants of Transient and Chronic Poverty:
Evidence from Rural China. Policy Research Working Paper, 1936. Washington
D.C.: The World Bank.

Jalan, J. and Ravallion, M. (1997) 'Spatial Poverty Traps?' Policy Research
Working Paper 1798. Washington, DC: World Bank.

Jalan, J. and Ravallion, M. (2002) 'Geographic Poverty Traps? A Micro Model of
Consumption Growth in Rural China.' Journal of Applied Econometrics 17(4): 329-346.

Jayati`Ghosh (1998) Assessing Poverty Alleviation Strategies for their Impact on Poor
Women: Study with Special Reference to India, Discussion Paper No. 97, October
1998, United Nations Research Institute for Social Development

Jayne, T. S., Mather, D., & Mghenyi, E. (2010). Principal challenges confronting smallholder agriculture in sub-Saharan Africa. World Development, 38(10), 1384-1398.

Jebuni, C., McKay, A. and Shepherd, A. (2007) 'Economic Growth in Northern Ghana', A paper prepared for the international workshop 'Understanding and addressing spatial poverty traps: an international conference', 29 March 2007, Spier Estate, Stellenbosch, South Africa

Jencks, C. (1996). Can we replace welfare with work? In m. R. Darby (ed), Reducing
Poverty in America (pp. 69-81). Thousand Oaks: Sage.

Jennings, J. (1999). Persistent Poverty in the United States: Review of Theories and Explanations. in L. Kushnick, & J. Jennings (eds), A New Introduction to Poverty: The Role of Race, Power, and Politics . New York: New York University Press.

Jentoft, S., & Midre G. (2011). The meaning of Poverty: conceptual Issues in small-Scale
Fisheries Research. In S.Jentoft & A. Eide, poverty mosaics: Realities and Prospects in small-scale fisheries.

Johnson B. R. & Onwuegbuzie, A. J. (2004) Mixed methods research: a research paradigm whose time has come. *Educational Researcher*, **33**(7): 14-26.

Kabeer, N. (2012). *Women's economic empowerment and inclusive growth: Labour markets and enterprise development* (Discussion paper, Vol. 29). London, England: Centre for Development Policy and Research.

Kabubo-Mariara, J. & Kabara M. (2011). Climate Change and Food Security in Kenya,
Environment for Development, Discussion Paper Series, EfD DP 15-05

Kabeer, N. (2003). Gender Mainstreaming in Poverty Eradication and the Millennium Development Goals 2003 Commonwealth Secretariat/International Development Research Centre (Browse online http://www.idrc.ca

Kabuye, Rosette (2015). Approaches to Fighting poverty among older persons in Uganda: A
Study of Wakiso and Luwero Districts. Doctor of Philosophy (PhD) thesis, University of Kent.

Kaida L. 2015. Ethnic Variations in Immigrant Poverty Exit and Female Employment: The Missing Link Demography 52: 485-511.

Kariuki, B. M. (2006). "*Determinants of poverty in Kenya: A case study of Transmara*

District in Rift Valley Province. Unpublished MA thesis, School of Economics,
University of Nairobi.

Karoly, L. (2001). Investing in the Future: Reducing Poverty through Human
Capital Investments in Understanding Poverty. [Eds] Danziger, Sand H,
Haveman. Russell Sage Foundation, NY

Katz MB. 2013. The Undeserving Poor, 2nd Edition. New York: Oxford University
Press

Khwaja, A. I. (2001). Can good projects succeed in bad communities? Collective
action in the Himalayas. Collective Action in the Himalayas (March 2001).
John F.Kennedy School of Government Faculty Research Working Papers
Series RWP01-043.

Killick Tony (1981). The IMF and Economic Management in Kenya, ODI Working
Papers.

Konwar Paranan, Mazumder Ritwik (2015), An Empirical Study on the Impact of
Socio-economic and Demographic Variables on Rural Poverty among the
Mishing Tribe in Assam of North East India. IOSR Journal of Humanities
and Social Science (IOSR-JHSS)

Krishna, A. (2007). Subjective Assessments, Participatory Methods and Poverty
Dynamics:
the Stage-of-Progress Method. *CPRC Working Paper, 93.* Manchester:
Chronic
Poverty Research Centre, University of Manchester.

Kristjanson, P., Mango, N., Krishna, A., Radeny, M. & Johnson, N. (2009).
Understanding
Poverty Dynamics in Kenya. *Journal of International Development*
[Online].
[Accessed www.interscience.wiley.com].

Kruger, R. and Casey, M. (2009). Focus Groups: A Practical Guide for Applied
Research. London: Sage

Korten D. (1990). Getting to the 21st Century: Voluntary Action and the Global
Agenda: A
Critique of Current Development Policies and Ideologies that Provide
Alternative
Approaches for Building a Sustainable and Just Society for the New
Millennium.

Korten D.C. (1990). Strategies of Development-Oriented NGOs. Robin: Four
Generations.

Kretzman, J. P., & McKnight, J. L. (1993). Building Communities from the Inside Out.

  Chicago: ACTA Publications.

Ku I, Lee W, Lee S, Han K. (2018). The Role of Family Behaviors in Determining
  Income Distribution: The Case of South Korea. Demography. 55: 877-899.

Lecomte, B. J., & Krishna, A. (1997). Six-S: Building upon traditional social organizations

  in Francophone West Africa. In A. Krishna, N. Uphoff,& M. J. Esman (Eds.),

  Reasons for Hope: Instructive experiences in rural development (pp. 75-90). West

  Hartford, CT: Kumarian

Laderchi, C. R., Saith, R., & Stewart, F. (2006). Does the definition of poverty matter?

  Comparing four approaches. In D. Ehrenpreis (Ed.), Poverty in Focus. What is

  poverty?

  Concepts and Measures, (pp 10-11). Brasilia: UNDP International Poverty Centre

Lawson, D., Mckay, A. & Moore, K. (2003). Panel Datasets in Developing and
  Transitional Countries. Manchester: Chronic Poverty Research Centre, University

  of Manchester.

Lawson, D., Mckay, A. & Okidi, J. (2006). Poverty Persistence and Transitions in Uganda:

  A Combined Qualitative and Quantitative Analysis. *Journal of Development Studies,* 42 (7)**,** 1225-1251.

Lawson, D., Hulme, D. & Muwonge, J. (2007). Methodological Issues Associated
  with Combining Quantitative and Qualitative Approaches to Understanding
  Poverty Dynamics: Evidence from Uganda. GPRG Working Paper, 77.
  ESRC Global Poverty Research Group.

Lilik Sugiharti and Martha Ranggi Primanthi (2017)**,** the Determinants of Poverty: Case of

  Indonesia.

Leff, J., Wig, N. N., Bedi, H., Menon, D. K., Kuipers, L., Korten, A., ... & Jablensky, A.
  (1990).

Relatives' expressed emotion and the course of schizophrenia in Chandigarh. A two-
  year follow-up of a first-contact sample. The British Journal of Psychiatry, 156(3),

351-356.

Lenin, V. I. (1964). The development of Capitalism in Russia (Vol. 3). Moscow: Progress

Publishers.

Levitan, S.A., Mangum, G. L., Mangum, S.L., &Sum, A.M. (2003). Programs in Aid of the

Poor. Baltimore: Johns Hopkins University Press.

Lewis, D. & Kanji, N., (2009). Non-Governmental Organizations and Development. London and New York: Routledge

Liedholm, C., McPherson, M. and Chuta, E., (1994). 'Small enterprise employment growth

in rural Africa', American Journal of Agricultural Economics, 76(Dec.): 1177-1182.

Lok-Dessallien, R. (2000). Review of Poverty Concepts Indicators, Poverty Reduction Series. New York: UNDP.

Lok-Dessallien, R. (1999). Review of Poverty Concepts and Indicators. New York: UNDP.

Makhura, T. M. (2001). Overcoming transaction costs barriers to market participation of

smallholder farmers in the Northern Province of South Africa. Unpublished PhD

thesis, Pretoria, University of Pretoria.

Manboah-Rockson, J. K. (2016). Politics & the Struggle for Democracy in Ghana: An

Introduction to Political Science. South Africa: Partridge Publishing Africa.

Manor, J., (2004). Civil Society and Poverty Reduction, s.l.: Sida.

Mastromarco C., Peragine V., Russo F., Serlenga L., (2010). Poverty, Inequality and

Growth in Albania: 2002-2005 Evidence, February 2010.

Mather, D., (2009). Measuring the Impact of Public and Private Assets in Rural Mozambique,
2002-2005. MINAG Working Paper n. 67E. Moputo, Mozambique.

Matunhu J. (2011). A Critique of Modernisation and Dependency Theories in Africa:

Critical Assessment: African Journal of history and Culture, Vol 3(5), Pp 65-72

Maxwell, D., Levin, C., Armar-Klemesu, M., Ruel, M., Morris, S., Ahiadeke, C. (2000). Urban Livelihoods and Food and Nutrition Security in Greater Accra, Ghana. International Food Policy Research Institute (IFPRI), in collaboration with Noguchi Memorial Institute for Medical Research and the World Health Organization, WHO.

Marx, Karl (1967), Wage Labor and Capital. Marxist Internet Archive.

Maynard, R. 1997. Kids having Kids: Economic Costs and Social Consequences of Teen
        Pregnancy. The Urban Institute Press, Washington DC

Mayoux, L. (2001) Microfinance and the Empowerment of Women, A Review of the Key Issues. London and New York, Zed Press.

McIntyre, L. (2002). The practical skeptic: Core concepts in sociology. Mountain View,CA: Mayfield Publishing Co.

Mckay, A. & Lawson, D. 2003. Assessing the Extent and Nature of Chronic Poverty in
        Low Income Countries: Issues and Evidence. World Development, 31 425-439.

McMillan, Margaret; Rodrik, Dani; Welch, Karen Horn, (2002). 'When Economic Reform Goes Wrong: Cashews in Mozambique', July 2002.

Merriam S. B. (2009). Qualitative Research: a Guide to Design and Implementation. San
        Francisco: Wiley.

Midgley, G. F., Hannah, L., Millar, D., Rutherford, M. C., & Powrie, L. W. (2002). Assessing the vulnerability of species richness to anthropogenic climate change in a
        biodiversity hotspot. Global Ecology and Biogeography, 11(6), 445-451. Chicago

Miller, M.L., Mastuera, M., Chao, M., & Sadowski, K. (2004) Pathways Out of Poverty:
        Early Lessons of the Family Independence Initiative. Oakland: Family
        Independence Initiative. Miller, D. (2012). 'Our Sciences' Indigenous Knowledge
        Systems of Northern Ghana.

Millar, R. (2002). Towards a science curriculum for public understanding. Teaching science in secondary schools, 113-128.

Minot, N., Baulch, B. and Epprecht, M. (2003) 'Poverty and Inequality in Vietnam: Spatial

Patterns and Geographic Determinants.' Washington, DC and Brighton: IFPRI and IDS.

Mknelly Barbara, Christopher Dunford (1998). Impact of Credit with Education on Mothers and Their Young Children's Nutrition: Lower Pra Rural Bank credit With Education Programme in Ghana

Morduch, J. (2005). Concepts of poverty. Handbook on poverty statistics: Concepts, Methods and Policy Use. New York: United Nations, Department of Economic and
Social Affairs.

Mowafi, M. (2004). The Meaning and Measurement of Poverty: A Look into the Global
Debate. Development Gateway Foundation.

Mozambique Ministry of Planning and Development (2010). Poverty and well-being in
Mozambique: the third national assessment (2008-9). Maputo.

Mugenda, A & Mugenda, O. (2003). Research methods; quantitative and qualitative approaches. Africa Center for Technology (ACTS). Nairobi: Muranga.

Murray, C. (1984). Losing Ground. New York: Basic.

Mwabu, G., Masai, W., Gesami, R., Kirimi, J., Ndeng'e, G., Kiriti, T., Munene, F., Chemngich, M., & Mariara, J. (2000). "*Poverty in Kenya: Profile and Determinants"*.Nairobi: University of Nairobi and Ministry of Finance and Planning.

Mwabu, G., Alemayehu, G., Nick, de J., & Mwangi, K., S. et al. (2001). "Determinants of
Poverty in Kenya: A Household Level Analysis". Kenya Institute of Policy Analysis and
Research Discussion Paper No. 9. Nairobi: KIPPRA

Myftaraj, E. (2011). Empirical estimations of Poverty in Albania. Dissertation, Faculty of Economy, Tirana University, Albania.

Myrdal, G. (1957). Economic Theory and Underdeveloped Regions. London: Gerald
Duckworth and Co.

Narayan, D., Chambers, R., Shah, M. K., & Petesch, P. (2000), *Voices of the poor: Crying out for change*. New York, NY: Oxford University Press for the World Bank.

National Development Planning Commission (2005). Growth and Poverty Reduction

Strategy (GPRS II) (2006 – 2009), Accra.

Naudé, W., Santos-Paulino, A. U., & McGillivray, M. (2009). Measuring vulnerability: an
    Overview and introduction. Oxford Development Studies, 37(3), 183-191.

Neefjes, K. (2000) Environments and Livelihoods: Strategies for Sustainability.
    Oxford: Oxfam.

Nel, E. (2001): Local Economic Development: A Review and Assessment of its Current
    Status   in South Africa. Urban Studies, 38(7), 1003-1024.

Neuman, S.B., & Celano, D. (2006). The knowledge gap: Implications of levelling the
    playing field for low-income and middle-income children. Reading Research
    Quarterly, 41(2), 176-201.

Nyamugasira, W. & Rowden, R. (2002) "New Strategies, Old Loan Conditions: Do the
    new IMF and World Bank loans support countries' Poverty Reduction Strategies?
    The case of
    Uganda".Availableat:http://www.brettonwoodsproject.org/topic/adjustment/a28uga
    ndaprsp.pdf.

Oded Stark and David Levhari *(1982). On migration and risk in Least Developed
    Countries, Economic Development and Cultural Change*, 1982, vol. 31, issue 1,
    191-96

Odusola, AF (2001). "Conceptual issues in poverty and poverty measurement" Paper
    presented at NCEMA Workshop on poverty alleviation policies and strategies,
    15th-26th, October.

Ogwumike FO (2001). "Profile and dimension of Poverty in Nigeria", Paper presented at
    NCEMA workshop on poverty reduction, Development policy Centre, Ibadan, 3rd-
    21st August.

Onyango, P.O. (2011), Poverty Alleviation in Small-Scale Fisheries. Governance
    Challenges in Lake Victoria Fishing Communities, Tanzania. PhD Dissertation.

Osakwe P.N (2015), Transformative Regionalism, Trade and the Challenge of Poverty
Reduction in Africa

Oseni, G., & Winters, P. (2009). Rural nonfarm activities and agricultural crop production
in Nigeria. Agricultural Economics, 40(2), 189-201.

Otieno O. G. (2015), Determinants of Poverty in Kenya. PhD thesis.

Oxfam (1998) Achieving Maximum Impact: Oxfam's Strategy for Overcoming Poverty,
Oxford: Oxfam.

Oyugi, Lineth Nyaboke (2000). The Determinants of Poverty in Kenya. *Journal of Development Economics. Vol. 24. N0 1*

Page, B. I., & Simmons, J. R. (2000). What Government Can Do: Dealing with Poverty
and Inequality. Chicago: University of Chicago Press.

Paul A. Sabatier (1986). Top-Down and Bottom-Up Approaches to Implementation
Research: A Critical Analysis and Suggested Synthesis.

Pender, J and Hazell, P (2000) Promoting sustainable development in less-favored areas: overview, , *of 2020 Vision Initiative, Policy Brief Series, Focus 4.* Washington, DC: International Food Policy Research Institute. pp. 3–4.

Pieterse, E. (2006). A Framework to Link LED to Anti-Poverty Strategies. Retrieved,
May, 18, 2015 from http:/www.dplg.gov.za.

Pollack, D. (2011) 'Salaries of CEOs of International NGOs: Ensuring Fair Compensation While Avoiding Populist Rage', *International Social Work* 54(4): 599–604.

Ponterotto, J. G. (2005). Qualitative research in counselling psychology: A primer on research paradigms and philosophy of science. Journal of Counselling Psychology, 52(2), 126 – 136

Porter, G. (2003) 'NGOs and Poverty Reduction in a Globalizing World: Perspectives from
Ghana', *Progress in Development Studies* 3(2): 131–45.

Portes, Alejandro (1997), 'Social Capital: Its Origins, and Application in Modern Society,' *Annual Review of Sociology* Vol. 98 No. 6 pp;1320-50

Poulton C., & A. Dorward (2006b). Overcoming Market Constraints on Pro-Poor Agricultural Growth in Sub-saharan Africa. Development Policy Review.

Quigley, W. P. (2003). Ending Poverty as We Know It. Philadelphia: Temple University
        Press.

Rainwater, L. (1970). Neutralizing the Din inherited: Some Psychological Aspects of
        Understanding the Poor. In V.L Allen (ed), Psychological Factors in Poverty (pp. 9-
        28). Chicago: Markham

Rank, M. R., Yoon, H., Hirschl, T. A. (2003), "American poverty as a structural
        failing: evidence and arguments", Journal of Sociology and Social Welfare,
        30(4), 3-29.

Rank, M.R. (2004). One Nation, Underprivileged. New York: Oxford University Press

Rankin B. & Quane, J. (2000). Neighbourhood poverty and social isolation of
        inner-city African America families. Social Forces, 79 (1), 139-164.

Rao, Vijayendra & Ana Maria Ibanez (2005). 'The Social Impact of Social Funds in
        Jamaica: A Mixed Methods Analysis of Participation, Targeting and Collective
        Action in Community Driven Development' DECRG-The World Bank.

Ravallion M, Chen S, Sangraula P (2007) "New Evidence on the Urbanization of
        Global Poverty," Policy Research Working Paper 4199, World Bank.

Ravallion Martin, & Gaurav Datt (2002). Why has economic growth been more
        pro-poor in some states of India than others? World Bank, 1818 H Street
        NW, Washington, DC 20433, USA, Journal of Development Economics 68
        (2002) 381 – 400

Ravallion, Martin (2000). "On the Urbanization of Poverty." World Bank. Washington,
        D.C. Processed.

Ravallion, Martin and Chen, Shaohua (2003) 'Measuring Pro-Poor Growth,' *Economics
        Letters*, 78(1), 93-99.

Ravallion M. (2009). The Developing World's Bulging (but vulnerable) "Middle Class"

Ravallion M. (1996). Growth Divergence Due to Spatial Externalities. Economic letters,
        1996.

Ravillion, M. (2003). Can Qualitative Methods Held Quantitative Poverty Measurement?

In: KANBUR, R. (ed.) *Q-Squared: Combining Qualitative and Quantitative Methods in Poverty Appraisal.* Delhi: Permanent Black.

Ravallion, M. and Wodon, Q. (1999) 'Poor Areas, or Only Poor People?' Journal of Regional Science 39(4): 689-711.

Reardon, T., (1997). Using evidence of household income diversification to inform study
of rural non-farm labour market in Africa. World development 25, (5)735-747

Reardon, T., Berdegue, J., Barrett, Christopher B., Stamoulis, K., Haggblade, Steven, &
Hazell, Peter (2006). Household Income Diversification into Rural Nonfarm Activities. In Steven Haggblade, Peter Hazell, & T. Reardon (Eds.) Transforming
the Rural Nonfarm Economy. Baltimore: Johns Hopkins University Press.

Reardon, T., K.Stamoulis, K. Cruz, M.E. Balisacan, A. Berdegue' and B. Banks (1998).
Rural Nonfarm Income in Developing Countries. In FAO, the State of Food and
Agricultural, 1998 Rome.

Republic of Ghana, Ghana Poverty Reduction Strategy 2003-2005, Agenda for Growth and Prosperity.

Republic of Ghana, Ghana Poverty Reduction Strategy 2002-2004, Agenda for Growth and Prosperity.

Republic of Ghana, Ministry of Education Annual Report of 2016

Richards, P. (1985). Indigenous Agricultural Revolution. Hutchinson, London.

Romer, Paul M. (1990). Endogenous Technological Change, NBER Working Paper Series,
Working Paper No. 3210

Rostow, W.W. (1953). The Process of Economic Growth, Claredon, Oxford University
Press.

Rowntree S (1901). Poverty, A Study of Town Life. Macmillan and Co.
Rural Sociological Society Task Force on Persistent Poverty (1990). Persistent
Poverty in Rural America. Boulder: Westview Press.

Rural Development Resource (2004). Rural poverty at glance.

Ruttan, V., (2002). Productivity Growth in World Agriculture: Sources and Constraints.
  The Journal of Economic Perspectives, 16(4), 161-184.

Ryan, W. (1976). Blaming the Victim. New York: Vintage.

Sabatier Paul A. (1986). Top -Down and Bottom-Up Approaches to Implementation
  Research: a Critical Analysis and Suggested Synthesis

Sakondhavat A. (2013) Understanding Poverty Dynamics Using a Mixed-Method Study:
  Evidence from Rural Villages in the Northeast and central Regions of Thailand.

Savadogo, K., Reardon, T., Pietola, K., (1998). Adoption of improved land-use
  technologies to increase food security in Burkina Faso: Relating animal traction,
  productivity, and nonfarm income, Agricultural Systems 58 (3), 441-464.

Satya R. Chakravarty (2003). A Generalised Human Development Index

Schiller, B. R. (1989). The Economics of Poverty and Discrimination. Englewood
  Cliffs, NJ: Prentice Hall.

Satterwaite, David.& Mitlin Diana. (2014). Reducing Urban Poverty in the Global
  South.

Saunders, M., Lewis, P. & Thornhill, A. (2007). Research Methods for Business
  Students. Harlow: Pearson.
Saunders, M., Lewis, P. & Thornhill, A. (2012). Research Methods for Business
  Students. Harlow: Pearson.

Saunders, M., Lewis, P., and Thornhill, A. (2009). Research methods for business
  students (5th edition). Prentice Hall, England.

Schiller, B. R. (1989). The Economics of Poverty and Discrimination. Englewood
  Cliffs, NJ: Prentice Hall.

Scoones, Ian. (1998). *Sustainable Rural Livelihoods: A framework for analysis.* IDS,
  Working Paper 72, IDS, Sussex Institute of Development Studies, Brighton, UK.

Sekaran, U, & Bougie, R. (2013). Research Methods for Business: A Skill-Building
  Approach. Chichester: Wiley.

Sen A. (2007). Children and Human Rights. Indian Journal of Human Development.
  2007;1 (2).

Sen, A. (1999). Development as Freedom. Oxford: Oxford University Press

Sen, A. (1981). Poverty and Famines: An essay on Entitlement and deprivation. Oxford,
    Clarendon Press.

Sekhampu, T. J. (2013). Determinants of Poverty in a South African Township, Journal of
    Social Sciences, 34(2): 145-153

Shaffer, P. (2002). Participatory Analyses of Poverty Dynamics: Reflections on the
    Myanmar PPA. *In:* BROCK, K. & MCGEE, R. (eds.) *Knowing Poverty: Critical*
    Reflections on Participatory Research and Policy. London: Earth scan
    Publications Ltd.

Shaw, W. (1996). The Geography of United States Poverty. New York: Garland
    Publishing.

Skarstein, R., (2005). Economic liberalization and smallholder productivity in Tanzania:
    from promised success to real failure, 1985–1998. Journal of Agrarian Change 5(3),
    334-362.

Smith, T. D., & DeJoy, D. M. (2012). Occupational Injury in America: An analysis of risk
    factors using data from the General Social Survey (GSS).Journal of safety research,
    43(1), 67-74.

Snape, D. & L. Spencer (2007). The foundations of qualitative research'. In: J.
    Ritchie, & J. Lewis (Eds.), Qualitative Research Practice: A Guide for
    Social Science Students and Researchers. (pp. 1-23). London: SAGE.

Sobh, R., & Perry, C. (2006). Research design and data analysis in realism research.
    European Journal of Marketing, 40(11/12), 1194-1209.

Stark, O. and D. Levhari (1982) `On Migration and Risk in Less Developed Countries',
    Economic Development and Cultural Change, 31:190-196.

Stathopoulou, S., Psaltopoulos, D., & Skuras, D. (2004). Rural entrepreneurship in Europe:
    a research framework and agenda. International Journal of Entrepreneurial
    Behaviour and Research, 10(6), 404-425.

Stern, D. I., (2002). The Environmental Kuznets Curve. Journal of Environmental
    Economics and Environmental Management, 41: 162-178.

Stern D. I. (1997). The capital theory approach to sustainability: a critical appraisal, *Journal of Economic Issues* 31, 145-173.

Stewart, F., Lall S., & Wangwe S. M. (1992). Alternative Development Strategies in Sub-
saharan Africa. Macmillan. London (1992), pp 243-264

Stewart, F., & Fitzgerald, V. (2000). *War and Underdevelopment: Country Experiences*.
Oxford University Press.

Sohel, S. M., Uddin, M. A. & Kulsum, U., (2007). An Evaluation of the Operational Performance of NGOs in Bangladesh with Special Emphasis on Poverty Alleviation: A Study on Association of Social Advancement (ASA). The Chittagong University Journal of Business Administration, Volume 22, pp. 261-281.

Solesbury, W. (2003) Sustainable Livelihoods: A Case Study of the Evolution of DFID
Policy. London: Overseas Development Institute.

Sowa, N. (2002) Assessment of Poverty Reducing Policies and Programs in Ghana *MicroImpacts of Macroeconomic Adjustment Policies. (MIMAP) Project, January 28-31,2002,Rabat-Morocco* http://web.idrc.ca/uploads/userS/10287523140Ghana.doc

Sparr, P. & Moser, C., (2007). International NGOs and Poverty Reduction Strategies: The
Contribution of an Asset-based Approach, Massachusetts: The Brookings Institution.

Strauss, A., & Corbin, J. (1990). Basics of qualitative research: Grounded Theory Procedures and Techniques. Newbury Park, CA: Sage

Streeten, Paul with Javed Shahid Burki, Mahbub ul Haq, Norman Hicks and Frances

Stewart (1981), First Things First: Meeting Basic Human Needs in Developing Countries,
New York and Oxford: Oxford University Press.

Sugiharti Lilik, & Ranggi Marth P (2017), The Determinants of Poverty: Case of Indonesia. Global Journal of Business and Social Science Review

Suharko (2007). "The Role of NGOs in Poverty Reduction: The Case of Indonesia and
India; Proceeding of the International Symposium Interdisciplinary Development
Studies of Poverty Reduction Policies, GSID, Nagoya University Japan.

Sulemana Mohammed (2016). Measuring Multidimensional Poverty in Ghana's East
Gonja District. Journal of Poverty Alleviation and International Development, 7(2)

Thirtle, C., J. Piesse, & Lin L. (2003) "The Impact of research-Led productivity Growth
on Poverty in Africa, Asia and Latin America" World development 31(12): 1959-75

Thorbecke, E. (2003). Multi-dimensional Poverty: Conceptual and Measurement Issues.
Paper prepared for The Many Dimensions of Poverty International Conference,
UNDP International Poverty Centre, Brasilia, August 29-31, 2005

Tobin, J. (1994). Poverty in Relation to Macroeconomic Trends, Cycles, Policies. In Sub-
saharan Africa

Townsend, P (1974). *The Concept of Poverty, Working Papers on Methods of Investigation and Lifestyles of the Poor in Different Countries*, Heinemann, London.

Townsend, P. (1979). Poverty in the United Kingdom: A Survey of household resources
and standards of Living, Harmondsworth, Eng.: Penguin Books; 1979.

Townsend, P. (2006). What is poverty? A historical perspective. In D. Ehrenpreis (Ed.), Poverty in Focus. What is Poverty? Concepts and Measures, (pp. 5-6). Brasil: UNDP International Poverty Centre.

Tribe, J. (2009). Philosophical issues in tourism. In J. Tribe (Ed.), Philosophical issues in tourism (pp. 3–25). Bristol: Channel View.

United Nations (2007). *The Millennium Development Goals Report*. New York.

UN (2010). Rethinking Poverty, Report on the World Social Situation. New York, UN.

UNCTAD (2014). Growing Micro and Small Enterprises in LDCs the "missing middle" in LDCs: why micro and small enterprises are not growing

UNDP (2015). Human Development Report, 2015, New York, U.S.A.

UNDP (2012). Human Development Report, 2012, New York, U.S.A

UNDP (2011). Human Development Report, 2011, New York, U.S.A

UNDP (2010). Human Development Report, 2010, New York, U.S.A

UNDP (2000). Human Development Report, 2000, New York, U.S.A

UNDP (2006). Human Development Report 2006: Beyond Scarcity-Power, Poverty and

    the Global Water Crisis. Basingstoke: Palgrave Macmillan.

UNDP (2005). Human Development Report, 2000, New York, U.S.A

UNDP (2003), 'Overcoming Human Poverty', UNDP Poverty Report 2003, New York,

    2003.

Ulleberg, I., (2009). The role and impact of NGOs in capacity development: From
    Replacing the State to Reinvigorating Education. *International Institute for
    Educational Planning,* pp. 1- 48.

Unni, J., (1996), 'Diversification of economic activities and non-agricultural
    employment in rural Gujarat', Economic and Political Weekly, August 17:
    2243-2250.

United Nation Economic Commission for Africa (2012). MDG Report 2012.
    Assessing Progress in Africa toward the Millennium Development Goals:
    Emerging perspectives from Africa on the post-2015 development agenda:

    Available
    at:http://www.uneca.org/sites/default/files/PublicationFiles/mdgreport2012_
    eng.pdf (Accessed 12th July, 2017).

United Nation Economic Commission for Africa (2005). Economic Report on
    Africa 2005. Meeting the Challenges of Unemployment and Poverty in
    Africa.

United States Agency for International Development (USAID) (2010) *2009 NGO
Sustainability Index for Sub-Saharan Africa*. Washington, DC: USAID.

Van Praag, B.M.S., Th. Goedhart, and Arie Kapteyn (1980). The Poverty Line A
Pilot Survey in Europe, The Review of Economics and Statistics, 1980; 62; 461-
465.

Voelwoen Danaan V. (2018), Analysing Poverty in Nigeria through Theoretical
    Lenses. Journal of Sustainable Development; Vol. 11, No. 1; 201

Walker, L. O., Freeland-Graves, J. H., Milani, T., Hanss-Nuss, H., George, G.,
    Sterling, B. S. & Stuifbergen, A. (2004). Weight and behavioural and
    psychosocial factors among ethnically diverse, low-income women after
    childbirth: I. Methods and context. *Women & health*, *40*(2), 1-17.

Weber, B., & Jensen, L. (2004). Poverty and Place: A Critical Review of Rural Poverty Literature. Oregon State University: Rural Poverty Research Centre, Working Paper 04- 03.

Weber, M. (2001). Protestant Ethic and the Spirit of Capitalism. New York: Routelege

William, Solesbury (2003). Sustainable Livelihoods: A Case Study of the Evolution of DFID Policy. Working Paper 217, Overseas Development Institute

Williams Delice (2016). What are the Causes of Poverty?

Wilson, W. J. (1987). The Truly Disadvantaged: The Inner City, the Underclass and Public   Policy. Chicago: University of Chicago Press

Wood, Tara N. (2013), Agricultural Development in the Northern Savannah of Ghana. *Doctoral Documents from Doctor of PlantHealth Program*. 1. http://digitalcommons.unl.edu/planthealthdoc/1

World Bank (2012). *The Republic of Mozambique, poverty in Mozambique, New Evidence from Recent Household Survey, Policy Research Working Paper 6217.*

World Bank (2011). *The Republic of Ghana. Tackling Poverty in Northern Ghana.* Report
No. 53991-GH. Washington DC.: World Bank Africa Region.

World Bank (2008). *World Development Report 2008: Attacking Poverty.* Washington, D.C: The World Bank.

World Bank (2005). *World Development Report 2005.* Washington, D.C: The World Bank.

World Bank (2001a). *Strengthening Statistical Systems for Poverty Reduction Strategies*. Washington, DC: World Bank.

World Bank. (2001b). *Well-being Measurement and Analysis Technical Notes.* Washington, DC: World Bank 359.

World Bank (2001c). *World Development Report 2000-2001: Attacking Poverty.* New York: Oxford University Press.

World Bank (2000). *World Development Report 2000/2001: Attacking Poverty.* Washington, D.C: The World Bank.

World Bank (2007). World Development Report: Development and the Next Generation. The International Bank for Reconstruction and Development / The World Bank, 1818 H Street NW.

World Bank Group (Ed.). (2012). World Development Indicators 2012. Washington DC.: World Bank Publications.

World Bank (2015b). State of the Poor. Available at:http://www.worldbank.org/content/dam/Worldbank/document/State_of_ the_ poor_paper_April17.pdf (Accessed: 4th May, 2016).

World Bank (2016). Monitoring global poverty: Report of the commission on global poverty. Washington DC: World Bank

Xhafaj, Evgjeni & Nurja Ines (2014). Determination of Key Factors That Influence Poverty Through Econometric Models. European Scientific Journal, 2014 edition vol. 10 No.24

Yamane, Taro (1967). Statistics, An Introductory Analysis, 2nd Ed., New York: Harper and Row.

Yin, R.K. (1989). Case Study Research – Design and Methods. Thousand Oaks, CA: Sage.

Zaaier, M. and Sara, L.M. (1993). Local Economic Development as an instrument for Urban Poverty Alleviation: A Case from Lima, Peru. Third World Planning Review. 15, 127 142 in.

Zigler, E., & Styfeo, S.J. (1996). Reshaping early childhood intervention to be a more effective weapon against poverty. In M.R. Derby (ed), Reducing

APPENDICES

Appendix A: Questionnaire

SECTION A: SEMI-STRUCTURED INTERVIE SCHEDULE/

QUESTIONNAIRE FOR FARM HOUSEHOLDS

I am a student of the University for Development Studies (UDS), Wa Campus, conducting a study entitled '*examining poverty reduction among smallholder farmers in Northern Region of Ghana*. The study is part of the requirement for the award of a Doctor of Philosophy Degree. Please be assured that any response you give will be treated with utmost confidentiality and use only for the purpose for which it was solicited. Your candid opinion or response will therefore be appreciated. Participation is voluntary and you may withdraw at any point in time if you so desire. Do I have your permission to commence? Thank you for cooperation anticipated.

Name of Research Assistant:

…………………………………………………………….

Research

Community:……………………………………………………………………..

Date………………………. Time……………………………….

A. **SOCIO-DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS**

1. Sex   M [1]   F[2]

2. Age (in years)   20-29 [ ]   30-39 [ ]   40-49 [ ] 49-50 [ ]   50-59 [ ] 60+ [ ]

3. Marital status. Single [1] Married [2] Separated [3], Divorced[4], Widowed [5] Others specify [11]………………………..

4. Are you head of family ? Yes[1] No [2]

5. Level of education.   Primary [1] Middle school [2], JSS [3],

SSS.O/L [4]

A/L[5],   Diploma [6]   1st Degree [7]   Post Graduate [8], None

[9]

Non-formal [10],   Others Specify[11]………

6. Religious denomination

Moslem [1], Christian [2], Traditionalist [3], Others,

specify[11]……………………

7. Number of wives (if male) …………………………………

8. Number of children …………………………

9. Total number of dependants …………………………….

10. Total number of workforce (above 15years)……………………..

SOCIO-ECONOMIC FACTORS AFFECTING POVERTY

11. Who do you consider wealthy?

……………………………………………………………………………..

12. Who do you consider poor?

………………………………………………………………………….

13. What type of farming do you do? crop farming[1] animal farming [2] mixed

farming[3], others(specify)[4]………..

14. How many different crops do you grow? One [1], two[2], three[3], four[4],

five[5], six and more[6]

15. Name the crops you grow

………………………………………………………………………………

………

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16. Which of them is dominant? maize [1], rice[2], sorghum[3], yam[4],

    groundnuts[5], others, specify[11]………………………..

17. In recent times, which of the crops gives you the highest yield? maize[1],

    rice[2], sorghum[3], yam[4], groundnuts[5],

    others(specify)[11]……………………………..

18. Do you rear some animals? Yes[1], no[2]

19. If yes, how many different species of animals do you rear? One[1],

    two[2],three[3], four[4], five[5], six and more[6]

20. Name the different species of animal you rear

    ……………………………………………………………………………

    …….

21. Which of them is dominant? cattle[1], sheep[2], goats[3], guinea fowls

    [4],chicken[5],

    Others(specify)[11]……………………………………………………..

22. Do you engage in any other income generating activity apart from your

    current occupation?

      Yes [1]   No[2]

23. If yes, state the

    activity……………………………………………………………….

24. If no,

    why?...

25. Which economic activity gives you higher income?

    ……………………………………………………………………………

    ….

26. Can you estimate your yearly harvest (in bags/number of animals)?

    ………………………………………………………………………………..

27. How long have you been in the business you are engaged in (in years)

    …………………………………………………………………………………

28. Have you received any form of assistance? Yes [1] No[2]

29. In the event of failure of the main economic activity, how do you cope? List

    the supporting sources of livelihood in order of priority

S/No.	Alternative sources of livelihood	Rank

30. Do you own enough land for farming? Yes [1], no[2]

31. If yes, how many acres of land in total?

    …………………………………………

32. Does such land belong to you alone or the entire family? alone[1], entire

    family[2], on lease [3], others (specify)……………………………………..

33. Do you own a house? Yes[1], no[1]

34. If yes, what is the nature of the house? thatched roofed [1], aluminium

    roofed[3], block house (gravel) [4], block house (sand crate)[5],

    other(specify)[11]…………………………………………

35. How many work-force (e.g farm labourers) does this household have?

    One[1], two[2], three[3], four[4], five[5], six [6] 7 and more[11]

36. Are the farming activities executed by household labour or hired labour?

    Household labour[1], hired labour[2], both household and hired labour[3]

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37. What category of farm inputs is used by this household? Simple farm implements (eg. Hoe, cutlass)[1], modern farm tools(e,g tractors, fertilisers, weedicides, etc)[2], others (specify) [11]

POVERTY REDUCTION STRATEGIES BY GOVERNMENT AND CBOs

38. Have you received any form of assistance? Yes [1] No[2]

39. If yes, what was the nature of the assistance? financial [1], technical[2], inputs[3] Others (specify)[11]……………………………..

40. If assistance was received, indicate the source? Local Assembly[1] NGO [2] Politician [3] friends/neighbours [4], Ministry of agriculture [5] [others(specify)[11]…………………………..

41. Did the assistance you received impact positively on your output? Yes[1], no[2] indifferent [3]

42. If yes, what was the extent of the impact? High[1] , moderate[2], low[3]

43. What are some of the shortcomings of the assistance? Inadequacy [1] Bureaucratic procedures [2] No shortcoming [3], Others(specify)[11] …………………………..

44. If you never received assistance, indicate the reason; difficulty in accessing [1] lack of information [2] Not interested [3] others (specify)……………………..

45. Did the absence of assistance affect your yield/income negatively? Yes [1], No [2]

46. What was the degree of the effect of the absence of the assistance? High[1] Moderate [2] Low [3]

47. Would you still be better off without the assistance? yes[1] no[2]

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48. Tick the following support services ever received in connection with your

farm operations and indicate the source.

S/No	Support services	Source
1.	Education/training	
2.	Finance/microfinance	
3.	Input assistance	
4.	Relief services	
5.	Others (specify)	

LIVELIHOOD STRATEGIES OF FARMERS AND THEIR

SUSTAINABILITY

49. What is your main livelihood strategy? farming[1], engage in trading[2],

engage in animal rearing[3], beekeeping[4], others (specify)[11]

50. How sustainable is /are your source(s) of income? Very sustainable [1],

sustainable [2], unsustainable [3], highly unsustainable [4],

51. Can you estimate your daily/weekly expenditure?

....

....

52. Can you list the main daily/weekly expenditure items in the table below

S/No.	Expenditure items	Amount per month
1		
2		
3		
4		

53. How much do you expend on all of these expenditure items per day/week?

…………………………………………………………………………

54. Can your main economic activity support all these needs? Yes [1]   No [2]

55. If no, how do you raise extra funds to supplement?

....

56. Can you list any other source(s) of income for your household?

S/No.	Other sources of income	Performance

57. Which is the commonest source of income for your household during off-farm season?

....

...............……………………………………………………………………..

58. When disasters occur how do you cope? Dependence on ones savings[1], reliance on NGO support[2], reliance on local authority[3], reliance on relatives [4], others(specify)[11] ……………………………………..

59. How sustainable are your farming systems? Highly sustainable [1], sustainable [2], unsustainable [3], highly unsustainable [4]

60. If farming systems are NOT sustainable, what are the possible causes? Natural disasters [1], artificial disasters [2], non-use of appropriate/indigenous technology [3], others (specify) …………………………………………..

61. Are farming practices environmental friendly? Yes [1], no [2]

CHALLENGES FACING SMALLHOLDER FARMERS

62. Are you satisfied with the yield/output from your farm in the last three years? Yes [1] No [2]

63. If no, why?

…………………………………………………………………………………

64. Can you list the challenges that hamper your farm operations?

S/No.	Nature of Challenge

65. May you rank the challenges listed in question 64 above, in terms of severity on farm operations?

Nature of challenge	Rank

66. What remedies will you propose for each of the challenges listed above?

………………………………………………………………………

67. Which of these challenges has been worked on or is being currently worked on?

………………………………………………………………………

68. Who/which organisation is providing the remedy?

………………………………………………………………………

SECTION B: QUESTIONNAIRE FOR OFFICIALS OF DISTRICT AGRICULTURAL DEPARTMENTS /MINISTRY OF FOOD AND AGRICULTURE (MoFA),

1. Name of district:

………………………………………………………………..

2. Name of respondent's organisation:

………………………………………………

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…………………..………………………………………………………………………….

3. Respondent's position/designation:

4. Who do you consider poor?

   ………………………………………………………………………………

   …………

5. Do you think many of the smallholder farmers in this community are poor?

   Yes[1], No[2],

6. About what percentage of the farmers do you think are poor?

   ……………………………………………………………………………..

7. What are the causes of poverty among the farmers in this community?

   …………………………………………………………………………

8. What challenges affect the farmers in this district?

   …………………………………………………………………………

9. What strategies/remedies are employed in this community to address the

   challenges facing the farmers?

   …………………………………………………………………………

   ………..

10. In terms of importance to household incomes, rank the coping strategies use

    by the smallholder farmers in this community as identified above.

Livelihood strategies used by smallholder farmers	Rank
	1st
	2nd
	3rd
	4th
	5th
	6th

11. Besides the coping strategies in use by smallholder farmers in this community, do you know of some other measures in use elsewhere? Yes [1], no[2]

12. If yes, please identify them.

S/No.	Livelihood strategies
1	
2	
3	
4	
5	

13. Besides the efforts by the smallholder farmers themselves to cope with economic conditions (improved livelihood), do you know of any other form of assistance from elsewhere directed at the smallholder farmers in this community? Yes [1], no[2]

14. If yes, please identify the source(s) and nature of such intervention programmes

S/No.	Source of intervention programme	Nature of assistance
1	Central Government	
2	Local Authority	
3	Non-Governmental Organisation (NGO)	
4	Individual philanthropist	
5	Others(specify)	

15. What additional information on poverty reduction in the district/region do you wish to share?

……………………………………………………………………………………

………

SECTION C: INTERVIEW GUIDE FOR DISTRICT ASSEMBLY

OFFICIALS AND SELECTED CBOs ENGAGED IN POVERTY

ALLEVIATION

1. Name of the district/organisation

…………………………………………………

2. Name of respondent

………………………………………………………………………

3. What are the poverty alleviation policies put in place in the district to ameliorate

the suffering of the poor people?

4. Is there any policy which emphasises on agriculture (smallholder farmers)?

 4. To what extent are the stated policies effective in addressing poverty,

particularly among farmers?

5. What challenges do you face in enforcing the stated policies?

 6. What are the priority areas of the stated policies in your district?

7. Which other organizations do you partner to ensure that poverty alleviation

objectives are realised?

8. What challenges do smallholder farmers in this district face?

9. What measures are the farmers themselves employing to improve their

wellbeing?

10. How different are the strategies of the district assemblies (government) from the

community-based organisations (CBOs).

11. What can government, local authority or community-based organisations do to assist smallholder farmers?

SECTION C: INTERVIEW GUIDE FOR OPINION LEADERS AND LOCAL EXPERTS

1. Name of respondent: ....

2. District: ....

3. Community: ....

4. How do farmers in this community/district feel about the occupation?

5. What are the major livelihood strategies used by farmers to improve their livelihood?

6. What challenges do the farmers face?

7. What are the possible remedies used by the farmers themselves to overcome challenges?

8. How are farmers assisted to increase yield and productivity?

9. What are the sources of such assistance to the farmers?

10. How effective are the assistance to farmers?

11. What could be the causes of poverty among smallholder farmers in this community/district?

12. What specific policy interventions are in place to deal with issues of poverty and deprivation?

Appendix B: Tables

Table 1: Types of animals reared by farmers

	frequency	Percentage	Valid percentage	Cumulative percentage
Fowl	**140**	**38.9**	**38.9**	**38.9**
Goat	**86**	**24.1**	**24.1**	**63.0**
Sheep	**83**	**23.2**	**23.2**	**86.2**
Guinea fowl	**38**	**10.5**	**10.5**	**96.3**
Cattle	**12**	**3.3**	**3.3**	**100**
Total animal farmers	**359**			

Table 2: Level of Education of Household Head

Educational status	Frequency	Percent	Cumulative Percent
Illiterates	357	85.2	85.2
Non-formal	48	11.5	96.7
Educated	14	3.3	100
Total	420	100	

Table 3: Types of crops grown by farmers

	frequency	Percentage	Valid percentage	Cumulative percentage
Cereals	**294**	**75.4**	**75.4**	**75.4**
Legumes	**54**	**13.8**	**13.8**	**89.2**
Tubers	**16**	**4.1**	**4.1**	**93.3**
Others	**26**	**6.7**	**6.7**	**100**
Total crop farmers	**390**			

Table 4: Financial/Technical Assistance to Farmers

Status	Frequency	Percentage	Cumulative percentage
Never Received Assistance	136	32.5	32.5
Ever Received C.B.O Microfinance Assistance	199	47.4	79.9
Ever Received Bank Loan	19	4.2	84.1
Ever Received Technical Assistance	67	15.9	100
Total Farmers	420		

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