

UNIVERSITY FOR DEVELOPMENT STUDIES

**EFFECTS OF GRAMEEN BANK SYSTEM ON SHEANUT PROCESSORS'
POVERTY REDUCTION IN NORTHERN REGION, GHANA**

BY

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DECLARATION

Student

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

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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

About a quarter of Ghanaians are poor. While extreme poverty is largely a rural phenomenon, women are particularly worse off. To reduce poverty, Grameen Ghana has been granting micro-loans to women who are into shea-butter processing. This research work examined effects of Grameen Ghana microfinance on women shea-butter processors in Northern Ghana. It examined responses from 160 women using questionnaires based on established livelihood assessment concepts such as the Food Consumption Score, the Nottingham Health Profile and Average Years of Schooling, to compare effects on beneficiaries against non-beneficiaries as a control group. The results indicate that Grameen Ghana's microfinance support only enables their beneficiaries to cope with poverty but does not sustainably reduce it. Even though initially the FCS showed that Grameen Ghana beneficiaries were generally out of danger of food insecurity and malnutrition whereas non-clients were not; the NHP showed that beneficiary respondents were subjectively more than twice as healthy as the subjective health status of their non-beneficiary counterparts. The women eventually slip back into financial struggles, with the burden of loan. This work also concluded, based on AYS, that the effects of microloans from Grameen Ghana is minimal when exposed to an environment of diverse economic opportunities beyond farming. The Grameen Ghana intervention would have to better organize women beneficiaries to start structured savings and their shea-butter linked to more profitable markets and off-taker buyers. These are necessary so that the savings will enhance financial stability, while improved profits will absorb interest burdens of microloans accessed from Grameen Ghana.



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DEDICATION

This research work is dedicated to my wife, Fadila Tahiru Mawia, our kids Tipagya K. Mawia, Anamzooya A. Mawia, Wun-ko A. Mawia and their unborn sibling(s).



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CHAPTER ONE

1.0 INTRODUCTION

1.1 BACKGROUND TO THE STUDY

The provision of affordable credit and saving services in small quantum has long been a component of development strategy. Consequently, many development strategies towards alleviating poverty have evolved. Unlike other types of financial institutions which are primarily targeting profit-making and maintaining a focus on the elite, microfinance practitioners target the poor and disadvantaged groups in society with a view to capital accumulation and eventually reducing poverty.

Ledgerwood (2013) sees the provision of credit and trading capital to the poor as a significant development tool. This is because, unequal distribution of the means of production, inadequate access to input markets, and the overall operation of the cycle of poverty makes the poor unable to participate competitively in the economies of their societies. Microfinance is a means of supporting them to have the minimal funding required to be able to do this. By this, poverty is reduced and the livelihood of the poor is improved.

Microfinance has been proven to be an effective and powerful tool in poverty reduction (Jonathan et al, 2001). It is the financial intervention of helping the poor and vulnerable that has now evolved into a development tool. This is a systemized credit supply to poor households, allowing them to access financial services such as micro-loans, savings, money transfer and insurance. Microfinance, according to Shahidur et al (2013) are financial innovations that are generally considered to have originated with the Grameen Bank in Bangladesh where it has successfully enabled extremely impoverished people to



engage in self-employment projects that allow them to generate income, build wealth and have financial independence.

In Bangladesh, the Grameen Bank (village bank) was started in 1983 by a professor of Economics, Prof. Mohammed Yunus, at the Chittagong University as a strategy to reverse the age-old banking system “by making the bank go to the people, rather than the people going to the bank”. His main aim was to reduce poverty among the poor, women and the landless. Reduction in poverty remains a key goal of the international community’s sustainable development strategy. This is because, to date, according to the United Nations (2013), one in eight people still go to bed hungry in a world where 1.2 billion people are living in extreme poverty.

The Grameen Bank has provided approaches for financial intermediation to the poor in response to the inadequacies of conventional banks. This is confirmed in the works of Oloruntoba and Butch (1999) who found that efforts to involve commercial banks in agricultural loans have mostly yielded poor results. Microloans and savings have been tools used in providing the poor and vulnerable with means to rise above poverty and according to Dean and Jonathan (2010), it enables the poor to partake in the economics of their communities. Alfred and Leo (2010) have also observed that the popularity of microfinance among both development practitioners and poor clients grew from its focus on the poor and vulnerable, by adopting a group-joint-liability loaning approach to replace collateralised loans.

The Grameen Bank of Bangladesh remains the most successful example of microfinance practice globally. The success of Grameen or ‘The Village Bank’, according to McDonnell



(1999), is as a result of their organisation of the intervention on the foundations of a deep understanding of those who are truly in extreme poverty. Grameen Bank is based on the premise that poor people have skills which remain unutilised or under-utilised, and for this reason, they created access to credit on reasonable terms and enabled the poor to build on their existing skill to earn a better income in each cycle of loan.

Unlike regular banks, Grameen Bank brought credit to the poor, women and the landless. Grameen believes that aid or other forms of charity do not present an answer to poverty. It only creates dependency and takes away individual's initiative to break free from poverty. Based on these principles, Abu (2001) states, that Grameen Bank created a methodology and an institution around the financial needs of the poor.

According to Shahidur (1996), Grameen Bank has been a source of ideas and models for many institutions in the field of micro-loans. The operations of the bank are predicated on the following core principles: (1) it grew from its exclusive focus on the very poor. (2) Identifying the eligible household is very complex, and according to Goldberg (2005), this involved the use of means tests to prevent leakage to non-poor. Others include the (3) adapting of specialized credit delivery systems by taking credit to the door-steps of the very poor, (4) utilising simple procedures of training and testing to build up credits portfolios in five-member groups of homogenous economic status. Shahidur (1996) states that these 5-member groups federate into centers, forming another level of monitoring, peer pressures and they all have collective responsibilities for each other in loan repayment without the need for physical collateral. (5) Loan disbursement is staggered by disbursing to the first two poorest, then the next two in 6-8 weeks period of good loan performance. The group



chairman then receives his/hers after the same period of good repayment by the first four members of his group.

Repayment rate is high because of close supervision at group and center meetings by the Field Assistants (Bank Workers) who, beyond the meetings, ensure regular visits particularly to non-paying members and those absent from the meetings. PERSGA (2006), notes that, Grameen Bank operates on the conviction that credit without strict discipline is virtually charity. Repayments are also encouraged by the enticement of subsequent loans which are usually higher than current loans. Compulsory savings are also critical in ensuring that people do not default their loan repayments.

Microfinance activities are highly needed in Africa, where a high population of the people live below the poverty line. The continent is home to a huge number of registered microfinance companies (Microfinance Information Exchange Inc., 2012) and possibly much higher number of unregistered microfinance companies. In 1996 Sustainable Banking with the Poor undertook a data analysis and the results suggested that microfinance Non-Governmental Organisations generally serve the poorer households. There is the need to further expand microfinance as opined by UNDP (2001) because the economic performance of Sub-Saharan Africa (SSA) and other regions over the past three decades has been closely associated with their savings and investments.

According to the Ghana News Agency, by November 2012, 216 microfinance companies in Ghana had been issued with provisional licenses to operate. This excludes the number of unregistered microfinance companies and NGOs in microfinance which may well number over 200 (Modern Ghana Website, 2012, retrieved in March 2013). The increase in the number of microfinance outfits is generally expected to help in the growth of the



Ghanaian economy since it translates into increased capital accumulation and injection into the private sector through increased access to business credit, and therefore, possible increase in productivity.

Morduch and Haley (2001) reported that there is extensive evidence that microfinance has a positive impact on the first Millennium Development Goal on poverty. Addae-Korankye (2012) also concludes in his research on microfinance and poverty in Ghana that microfinance can positively impact on poverty levels in the Ghanaian economy.

Formed in January 2003, Grameen Ghana is a financial non-governmental organisation operating in the Northern Region of Ghana. Grameen Bank, Ghana is currently supporting sheanut processors in some areas in Northern Ghana with microloans. Unlike conventional banks, it focuses on the provision of microloan and savings services to the poor. The NGO is one of the many organisations replicating the Grameen Bank model of microfinance with its focus on funding rural enterprises and farm-related activities, including sheanut processing. The organization has three main products apart from general loans: Educational Credit, and Agricultural Loans. Grameen Ghana has a sheanut project under the Agricultural Loans that involves not just sheanut processing microloans, but also capacity-building and business support services.

Grameen Ghana currently has a total of 11,806 active clients. 441 of these are directly involved in agriculture production. The value of their portfolio is over GHC 1,000,000.00 and about 35% of this goes into agricultural lending. Grameen Ghana has a Portfolio at Risk (PAR) of 1.64%.



1.2 PROBLEM STATEMENT

Poverty is one of the gravest challenges to development and human progress. The consequences of poverty across the African continent in general, and Ghana in particular, has been dire. The poor are often deprived from access to basic nutrition and proper health facilities. Poverty leads to the lack of, or lower educational attainments, low economic activities, less income in such a repetitive cycle that keeps and tends to deepen the woes of the poor. It is the factor that keeps people disconnected from the resources that should have been improving their conditions of living.

Access to credit is one of the approaches to reducing poverty. Credit is the balancing effect of the economy. It takes from the money surplus side and supplies to the money deficit side of the economy. Credit is important since it is the way to supply needed funds for businesses to start or as a support for business expansion. Businesses need credit to survive the threats of short-medium term liquidity challenges. Since credit is mostly for the economically active, it tends to be inaccessible to the poor and disadvantaged. This is why micro-credit schemes are available to capacitate the poor with small-sized loans that could be easier to be paid back and also fits the financial circumstances of the poor. It is so critical for poor people to part-take in the economics of their communities as a first step towards financial capacitation.

According to McDonnell (1999), governments have generally failed to address the micro-credit needs of indigenous businesses, so too had the private sector, referring to money lenders and the like. While governments failure is largely due to long bureaucracies and



misconceptions that breeds corruption, money lenders extortionists interest rates have distanced the poor from any possible benefits. Beyond the money lenders' and governments' general failure to successfully administer credit to the poor, commercial banks also attempted without success. These attempts were largely to support poor farmers and farming communities often among rural settlers. However, according to Oloruntoba and Butch (1999), efforts to involve commercial banks in agricultural credit schemes have been tried, mostly with poor results. Commercial banks as a rule are not interested in providing credit to small scale farmers because of high transaction costs making it more expensive than large scale commercial lending.

This formed a basis of credit mis-match in view of the fact that extreme poverty in Ghana (below GHS792) is largely a rural phenomenon (NDPC Ghana, 2014). This is where micro-credit comes in. Micro-credit is therefore key to rural sheanut processors who are often poor and struggling to engage in economically viable ventures. It is for this reason that Grameen Ghana is working to fill the void by providing micro-credits to the poor to build their capacity to participate in the economies of their communities as a means to capital accumulation and eventual reduction in their poverty levels.

To reduce poverty, Grameen Ghana has been granting micro-loans to sheanut processors in Northern Region. These processors are mostly poor women who reside mainly in rural areas. This research is designed to find the effects of Grameen Ghana microloans on these sheanut processors; so as to establish if the intervention has truly aided poverty alleviation among them or not.



The choice of Grameen Ghana is in view of the profound good results of the Grameen system worldwide and a need to affirm if this world acclaimed approach is being replicated successfully with good outcomes, or local conditions that may occasion re-shaping of certain aspects of the approach to become more useful across different communities with diverse environmental, economic and cultural characteristics.

It is against this background that the study intends to find answers to the following research questions:

1. What is the contribution of Grameen Ghana to poverty reduction among sheanut processors in Zabzugu District?
2. Does Grameen Ghana benefit differ among beneficiaries?
3. Is the intervention strategy accessible to the target group?
4. What policy amendments can enhance poverty reduction in Northern Region, Ghana?

1.3 OBJECTIVES OF THE STUDY

1.3.1 Major Objective

The objective of this study is to assess the effects of Grameen Ghana's micro-finance activities on poverty reduction among rural sheanut processors in Zabzugu, Northern Region.



1.3.2 Specific Objectives

The specific objectives are to:

1. Determine the contribution of Grameen Ghana's microcredit scheme to poverty reduction among sheanut processors in Zabzugu, Northern Region, over the past five years.
2. Describe how Grameen Ghana microloans affect beneficiaries differentially.
3. Determine accessibility of Grameen Ghana loans to sheanut processors over the past five years.
4. Make policy recommendations to enhance poverty reduction efforts in the Northern Region, and Ghana at large.

HYPOTHESES FOR THE STUDY

In order to achieve the objectives of the study, the following hypotheses will be tested:

H₀₁: There is no significant relationship between accessing Grameen Ghana microloan and poverty reduction among sheanut processors.

H₀₂: Grameen Ghana have the same effect on all beneficiaries.

H₀₃: Grameen Ghana microloans are inaccessible to sheanut processors.



1.4.1 Justification for the study

Poverty reduction is central to development enhancement. Assessing the bodies implementing poverty reduction approaches is therefore necessary to inform us of progress and shortfalls of the institutions for poverty reduction and the approach adopted. This study is therefore necessary now to provide development practitioners with key highlights of the effects of the Grameen approach to poverty reduction since it will expose the loopholes in the approach and highlight the relevant fit-for-context practices for adaption. Grameen Ghana is a financial intermediary that seeks improvement in the living standards of its beneficiaries through credit support. This study will help the organisation undertake a self-assessment of its effects on processors. This will be very helpful to improve results on its main objectives, especially poverty reduction.

This study is also critical now since microfinance industry and research in general is increasingly focusing on self-sustainable projects, rather than donor-supported projects. Sustainability ensures the self-reliant nature of projects that engender the patronage of key stakeholders to actively participate in the development process. As an NGO actively seeking development of rural communities, Grameen Ghana focuses on how to sustainably grow their support to the rural poor without having to rely on donor funding. A detailed study of their methodology and outcomes can therefore form good basis for development-oriented institutions to emulate or modify the positive aspects, and avoid the negative ones in a way to suit their various situations while ensuring they are either sustainable or working towards sustainability.

However, the need for sustainability must not preclude the constant monitoring of how this continuous existence affects the lives of the poor people we hope to change. A balance must



be struck on this to be able to stay in operation while meeting key demands of the poor. This study will be essential for policy makers including the Bank of Ghana, to appreciate this balance so as to relax the operating environment when it comes to accommodating such pro-poor organisations. This will help to achieve a good balance between sustainability and attaining intended effects on the poor.

1.4.2 Scope of the Study

1.4.2a Academic

This study will be restricted to Grameen Ghana, and particularly the loans given to sheanut processors. In this study, focus will be restricted only to the Zabzugu operations to allow for in-depth findings on the specifics of effects. The study will be based on data gathered through questionnaires and Key informant interview.

1 5.2 Operational definition of terms

Microfinance: The offering of small amounts of loans, savings platforms, business guidance, and insurance services to mostly poor households to improve their capacity to part-take in the economics of their societies and in the process, promote their well-being.

Micro savings: Small scale, often daily or weekly miniature savings usually accompanying loan repayment or as a build up to meet a loan criteria.

Micro-loans: The exclusive grant of small amounts of loans to people at the lower end of the market often for short periods.

Sheanut processors: This includes the chain of events and people between picking, storing, and processing of sheanut. Mostly these processors are women in the communities under this study.



Effects: The results or outcome of the use or existence of a phenomenon, in this case Grameen Ghana microfinance, on its target population, in this case sheanut processors.

NGO: Non-Governmental Organisation that operate to undertake development interventions, often relying on external donor funding.

Poverty alleviation: The gradual removal or reduction of the incidence of poverty or its effect or both.

Interest: An amount or percentage charged per time for a loan granted, mostly to be paid alongside the repayment of the main loan amount.

Loan portfolio: A collection of loan strands disbursed often assessed as relative to the amount exposed to risk of the total liquid asset base of a microfinance organisation.



CHAPTER TWO

LITERATURE REVIEW

In view of the vast literature available on microfinance, and to simplify assimilation through relevance, this chapter has been categorized: first we look at the background of microfinance in general and then the background role of the Grameen Bank of Bangladesh. We then look at literature review with specific reference to Africa, then that of Ghana and finally with specific reference to Grameen Ghana and Northern Region. We then summarise key learning points from the literature reviewed and how this study intends to feed into the literary discourse in this field of study.

2.1 Microfinance: Meaning and Background History

The Grameen Bank defines micro-credit as the extension of small loans to entrepreneurs too poor to qualify for commercial lending (McDonnell, 1999). Accordingly, micro-credit programs extend small loans to poor people for income generating self-employment projects. The Grameen Bank micro-credit model has been successful in providing financially viable lending structures in a number of countries in ways that economically empower impoverished women by giving them access to credit. This success has led to replications of the Grameen Bank's model throughout the world (Shahidur et al, 2013). Consequently, there is widespread literature on microfinance with the majority concerned with the Grameen Bank and its approach.



Lending and savings in small scale have been with various societies for very many years before what is today known as microfinance. Un-institutionalized moneylenders characterized provision of financial services to the lower end of society for a long time in history. It is worth noting that, the phenomenon of microfinance itself is an age-old practice. It has taken different approaches and forms in the past. For instance, Brandt, Epifanova, and Klepikova claim that documentation of loans being made out to the poor have been cited in Europe since the 18th century (Brandt et al., 2012). They highlight several examples. For one, Jonathan Swift created a fund to provide “poor industrious tradesmen” money “in small sums of five, and ten pounds, to be repaid weekly, at two or four shillings, without interest” (Brandt et al., 2012, p. 1).

Indeed, micro-credit is not a new trend. Wolcott (2009) describes another Irish Reproductive Loan Fund Institution that began in 1822 to assist the poor by providing them with small loans under 10 Euros in modern terms. In addition, 19th century German credit cooperatives highlight another example of historical microfinance. Most of the beneficiaries were already in cooperatives or were now encouraged to form one, sometimes as pre-requisites to accessing loans.

These cooperatives acted as the modern micro-credit self-help group in which the whole cooperative was provided a loan, and they were communally responsible for its repayment (Brandt, et al., 2012, pp. 1-2). This formulated a kind of peer pressure on beneficiaries to enhance credit repayment. Lastly, Wolcott (2009, pp. 1-2) also discusses an early example of microfinance in which very small loans were made to people in need without the



requirement of collateral in colonial India. It required committed repayment periods of equal intervals.

Governments have long known that increasing access to rural and low-income finance was important. Intentional efforts or interventions have been made in the past to bring financial services to rural poor. For example, India instituted a rural bank expansion program in 1977 and Mexico did something similar in 1992. Most of these interventions either collapsed abruptly or had minimal impact.

According to McDonnell (1999), government failed to address the micro-credit needs of indigenous businesses, so too had the private sector, referring to money lenders and the like. Beyond governments' general failure to successfully administer credit to the poor, commercial banks were now being used, either as a conduit or as a project by the banks themselves. These attempts were largely to support poor farmers and farming communities often among rural settlers. However, according to Oloruntoba and Butch (1999), efforts to involve commercial banks in agricultural credit schemes have been tried, mostly with poor results. Commercial banks as a rule are not interested in providing credit to small scale farmers because of high transaction costs making it more expensive than large scale commercial lending.

The past 20 years of microfinance expansion in Bangladesh according to Shahidur, Gayatri and Syed (2013), can be divided into three phases: The first phase (roughly before 1994) had limited expansion with a focus more on rural nonfarm activities via mobilizing group



savings and lending. The second phase (roughly 1995-2004) witnessed a rapid expansion of microfinance with PKSf emerging as the wholesale funding agency, and a large number of small NGOs entering the market with access to institutional funds for their own lending (as opposed to relying on the savings of borrowers). The third phase (i.e., post 2004) witnessed fierce competition among the microfinance institutions. During this phase, a variety of microfinance and other non-credit products (such as skill-based training and marketing assistance) were developed to meet the specific needs of the clients, including programs for the ultra-poor.

Micro-finance institutions (MFIs) seeks to give the poor a way to help raise them out of poverty by simply providing them with capital they may otherwise have not been able to procure. Have microfinance institutions affected the lives of the poor positively? In addition, many institutions claim to be a powerful tool for empowering women. This goal has also been brought into question: There is a disparity between actual performance and planned performance (Calgagovski et al., 1991).

2.2 Microfinance: Findings of Various Past Studies

A paper on the 'Effects of Financial Access on Savings by Low-Income People' by Fernando Aportelo, Bank of Mexico in December 1999 assessed the impact of increasing financial access on savings of low-income people. Effects on households' saving rates and on different informal savings instruments are considered. The paper uses an exogenous expansion of a Mexican savings institute, targeted to low-income people, as a natural experiment and the 1992 and 1994 National Surveys of Income and Expenditures. Result



of the study shows that the expansion increased the average saving rate of affected households by more than 3 to almost 5 percentage points. The effect was even higher for the poorest households in the sample: their saving rate increased by more than 7 percentage points in some cases.

Furthermore, the expansion, in general, had no effect on high income households. In the case of informal savings instruments, evidence of crowding out of instruments caused by the expansion is limited. Results do not rule out the possibility that a considerable fraction of the increase in households' savings could have come from new savings.

Such factors cannot also be undermined since savings have long been an important element in poverty alleviation. Notwithstanding, the effect of between 3 to 5 percentage points rise is sufficient to guarantee a positive effect of microfinance intervention.

Robin Burgess and Rohini Pande (LSE, Yale University) in their work, "Do Rural Banks Matter?" Evidence from the Indian Social Banking Experiment" in August 2003, pointed out that lack of access to finance is often cited as a key reason why poor people remain poor. There seem to be a connection between lack of access to financial services and incidents of poverty which this paper sought to clarify. The paper used data on the Indian rural branch expansion program to provide empirical evidence on this issue. Between 1977 and 1990, the Indian Central Bank mandated that a commercial bank can open a branch in a location with one or more bank branches only if it opens four in locations with no bank branches.



Researchers showed that between 1977 and 1990 this rule caused banks to open relatively more rural branches in Indian states with lower initial financial development. The reverse is true outside this period. They exploited this fact to identify the impact of opening a rural bank on poverty and output. Estimates suggest that the Indian rural branch expansion program significantly lowered rural poverty, an increased non-agricultural outputs in places that had earlier on over-concentrated on just agriculture. These findings increased the belief that financial interventions of the type of microfinance are necessary to reduce poverty.

In October 2006, 'The Economic Lives of the Poor' was published by V. Banerjee and Esther Duflo (Abdul Latif Jameel Poverty Action Lab) with similar findings. This paper used survey data from 13 countries to document the economic lives of the poor (those living on less than \$2 dollar per day per capita at purchasing power parity) or the extremely poor (those living on less than \$1 dollar per day).

Researchers described the patterns of consumption and income generation as well as their access to markets and publicly provided infrastructure as key elements to change the fortunes of the very poor. The paper identified microfinance as a cementing closure to extreme exposure to such hardcore poverty. The paper concludes with a discussion of some apparent anomalous choices between infrastructural and financial decisions.



Much literature has also been on development of financial support for poor households not only in terms of loans, but also guided savings, financial literacy training, among others. Yawn (1998), has fundamentally sought to seek answers in the alternate views of the providers and beneficiaries of microfinance with respect to extent of benefit.

Also, in their work, "Financial Intermediation and Growth", Thorsten Beck, Norman V. Loayza and Ross Eric Levine, an attempt is made to condense World Bank data to bring out growth patterns alongside actively regulated financial inter-mediation districts. Correlation was quite high, suggesting that growth in economy is due to activities of microfinance NGOs among others, and that regulatory framework in microfinance does not necessarily impede growth but rather serves as a catalyst. Many debates have gone on regarding such regulations in microfinance: whether it is truly a catalyst or otherwise.

Microcredit is one aspect of microfinance that deals with lending of small, mostly non-collateralized loans directly to individuals and enterprises with low income and often lacking access to traditional financial lending services. It is the extending of small amounts of money to small business units as a means of improving their business liquidity for higher profits or for expansion of the business either geographically or in the form of an increase in range of products and services, also known as diversification of business portfolio, to enhance business sustainability. This is also referred to as micro-loans. According to Pedroso (2008), the intensity of microfinance effects will be determined by factors such as the development of the country's transportation infrastructure and services, eventually affecting multiple aspects of house-hold's livelihoods.



Microcredit seeks to promote business growth and improve well-being by expanding access to credit. In their work "Expanding Microenterprise Credit Access" Using Randomized Supply Decisions, Dean Karlan and Jonathan Zinman (2009) used a field experiment and follow-up survey to measure impacts of a credit expansion for micro entrepreneurs in Manila.

The effects were diffused and heterogeneous. Although there was some evidence that profits increased, the mechanism seems to be that businesses shrink by shedding unproductive workers.

Overall, borrowing households substitute away from labor (in both family and outside businesses), and into education (Karlan and Zinman, 2009). It is also in the findings that substitution away from formal insurance, along with increases in access to informal risk sharing mechanisms. The treatment effects are stronger for groups that are not typically targeted by micro lenders: male and higher-income entrepreneurs. In all, results suggest that microcredit works broadly through risk management and investment at the household level, rather than directly through the targeted businesses.

In their research work, "Evidence on the social and economic impact of Grameen Bank and BRAC on the poor in Bangladesh" Patrick and An (2002) observe that some researchers use income and consumption as dependent variables for the measurement of the impact of micro-credit programmes. Using this technique most authors conclude that micro-credit institutions can have a positive impact on combating poverty.

Khandker takes the lead in this positive evaluation. Together with Chowdbury, they examined the impact of Grameen Bank and BRAC. They find for both institutions that a greater number of loans mean a lower incidence of poverty for all programme participants. In the Grameen Bank villages, for instance, 76% of participants who have taken no loans or only one loan are below the poverty line, compared to only 57% of those who have taken five or more loans (Khandker and Chowdbury, 1996).

In a research of 1998 Khandker (in Zaman, 1999) comes to the same conclusions. He estimates that for every 100 taka lent to a female member of BRAC, household consumption increases by 18 taka. For men, this figure is 11 taka. These results indicate that poverty decreases as the borrowed amount (possibly in different installments) increases. Further, the study shows that the poverty rate of BRAC-members falls by around 15% for moderate poor and by 25% for ultra-poor, when they have a loan for up to three years.

However, Khandker points out that this rate of poverty reduction appears to decline with duration of membership. For instance, for households who have been members for more than five years, moderate poverty fell by 9% and ultra-poverty by 18%. These figures are considerably lower than for households who had been members three years or less. Moreover, since the 'less than three years' category has a lower average cumulative loan size (3 348 taka) compared to the 'five years- plus' category (6 567 taka), these results suggest that the poverty reduction impact of credit declines with cumulative loan size for BRAC. The same outcome is observed for Grameen Bank in the work of Khandker and



Chowdbury (1996, p. 15). Thus, the reduction of the level of poverty is variable and declines with the passage of time.

They also note the research on microcredit programme of Proshika, another major micro-finance institution (MFI) in Bangladesh, in which Rahman (2000) confirms these findings. The length of association with the MFI did not have a significant impact on income. The positive impact, it was found, decelerates with increases in the amount of loans, but not with the number of loans or the length of membership.

A number of researchers from the Abdul Latif Jameel Poverty Action Lab (J-PAL) at MIT and the Indian Centre for Micro Finance (i.e. Abhijit Banerjee, Esther Duflo, Rachel Glennerster, Cynthia Kinnan) worked with Spandana to randomize the roll-out of its microcredit operations in Hyderabad, India's fifth-largest city. This was published in October 2009 in "The miracle of Microfinance" and based on randomized evaluation evidence. Spandana chose 104 areas of the city to expand into eventually, rejecting some districts as having too many construction workers, who come and go and might take Spandana's money with them. In 2006–07 Spandana started lending in a randomly chosen 52 of the 104.

Researchers followed up by surveying more than 6,000 households between August 2007 and April 2008, restricting their visits to families that seemed more likely to borrow: ones that had lived in the area at least three years and had at least one working-age woman. The surveyors made sure not to visit an area until Spandana had been there at least a year. They



surveyed in “treatment” areas (ones where Spandana worked) and control ones (where it did not yet).

Most research on micro-credit programmes and their impact only look at the impact on the target group and their families. But, other families in the villages covered by the micro-credit programme and other surrounding villages might be affected as well. This wider effect of micro-credit programmes has not received much attention by researchers. It has to be noted that studying this is complicated by the fact that micro-credit has become a standard ingredient of the vast majority of development projects initiated by non-governmental agencies.

In a context where it is estimated that around 78% of the nearly 60 000 villages in the country are ‘covered’ by the NGO-community, the probability that more than one micro-credit programme is operating in a village becomes extremely high.

Still, research has been done into the indirect effects and impact of the micro-credit programmes of Grameen Bank and BRAC. Rahman (2000) for instance, points out that the impact of micro-finance institutions on the non-programme households may be routed through various channels. He believes that the social inputs in the form of knowledge, awareness and better practices of health, sanitation and family planning are spread to the non-members. Such spill- over effect is expected to be positive. But, a more direct effect of micro-credit will be felt in the credit market since the supply of total credit available will increase, leading to a decline in the rate of interest.



Patrick and An (2002) continues that in spite of the many documented positives of microcredit, a number of challenges militate against it. One of such is outright rejection in order to defend existing patriarchal values.

Although religious opposition is the most severe, criticism is also heard from the political and economic forum. Wahid and Hsu (2000, p. 166-167), for instance, found that leaders of the 'Union Parishad' and the rural elite blamed Grameen Bank for increasing rural wages, though they will not undertake any action as long as Grameen Bank members stick to small-scale non-substantial activities. Nevertheless, the question remains what to do if the situation changes, as education and urban customs spread in the country and micro-credit institutions implement their programmes successfully.

Another is lack of governmental support. The political class pays lip service to the objective of combating poverty. In spite of a few quarrels, however, politicians seem to approve the activities of Grameen Bank and BRAC - In some instances there are co-operation arrangements between government institutions and the micro-credit institutions. The government and BRAC worked together on a programme for destitute women, the Income Generation for Vulnerable Group Development (IGVGD), for instance. The government has also used Grameen Bank and BRAC as models for various projects. (Khandker and Khalily, 1996, p. 21, p. 93)

Yet another challenge and a more formidable one is delinquency. Joanna Ledgerwood (Microfinance Handbook, World Bank Publication, 1999) notes that delinquency in



microcredit combines both delay in repayment and the absence of repayment. It is the failure of microcredit Organisation's customer either to repay or to repay in time. Delinquency is the number one threat to any microfinance organization. This is because of its widespread effects covering expenses, cash flow, profitability, sustainability and credibility among others.

Additional effort to re-claim delinquent loans is additional cost to the MFI through more frequent visits, legal fees, extended analysis among others. This increases the cost per cedi of loaned funds; meanwhile there is usually no accompanying increase in earnings from recovery activities. As established by Dahn (1992), Micro-businesses, who are often the customers of MFIs have a high failure rate and are considered high risk investments. Thus, slower and even lower funds turnover from delinquency means cash flow shortfalls that can harm the MFI: low liquidity means increased inability to meet expenses as they fall due, loans to other borrowers is reduced or curtailed and default or delayed repayments to own fund suppliers that has damning effects on credit-worthiness and severe reputational damages.

Like any other business, MFIs depend on revenues to offset their costs and make profits.

The revenue of an MFI is calculated as below:

Revenue expected (per period) = Period of effective yield x Amount outstanding for the period. Thus, if the period of effective yield dwindles due to delinquency, revenue dwindles (Joanna, 1999). However, cost will go up in an attempt to recover the delinquent loans. The



MFI to a large extent, then losses interest in profitability and begin to focus solely on survival, thereby going in for more expensive funds just to keep afloat. This can only worsen the plight. These, combined with loss of planned interest revenues and in some cases, even lending capital, means bankruptcy or business collapse.

Delinquency, therefore, is truly a beast that can consume the loan portfolio of any MFI.

There are various studies that seek to arrest this. Methodologies have been identified to assist in this regard. In a microfinance guide material 'Nuts and Bolts of Microfinance – Risk Management Examples and Tools' (2010), Peer lending or group lending methodology is one key methodology identified to mitigate the risk of delinquency. It reduces risk of lending by engendering a joint responsibility for each group member's loan.

What this means is that a member who defaults will cause all other members to contribute to settle that outstanding payment. This is a key strategy that Grameen Bank of Bangladesh uses (Sarker, 2001). Its advantage lies in the social pressure it mounts on each member of the group to fulfill the mandate of repayment in time. Therefore, it is effective since it serves as a push for members to pay and as collateral in case of default at the same time.

Not all researchers agree that this methodology works out right. In concluding on the research question 'Does the Microfinance Lending Model Actually Work?', Gomez and Santor (2008) observes that though many theoretical models of group lending drawn from the microfinance literature predict that peer pressure and monitoring will lead to more effective borrower-side selection and greater borrower effort, these effects are hard to



measure. One should expect that if operative, group borrowers would outperform individual borrowers in terms of repayment success.

Unlike previous empirical work in the microfinance literature that has examined differences among group borrowers only, their research find evidence consistent with these theoretical claims; namely, group lending outperforms conventional individual lending techniques in terms of repayment success. They apportion this group lending effect, almost equally, to the twin effects of ex ante selection into the group lending program and greater ex post borrower effort once inside. However, since these channels have been estimated rather than measured, one must nevertheless be cautious about whether group lending works as predicted in theory and as touted by practitioners. It should also be acknowledged that the effectiveness of peer group lending is moderated by observed sources of variance such as the size of the loan, the quality of the loan manager, levels of trust within a group, and the enforcement of social norms within the group and in the surrounding neighborhood.

Group performing loan repayment may also influence each other negatively and could cause a more colossal damage than non-group-based lending would have. The feeling that because group member 1 did not pay I will not also pay is quite real. The orientation of the group, the mix of members and the timing of businesses of individual members must all be taken into cognizance, and not wholesale adaption of any individuals packed together to form a group.

Studies also reveal that character assessment needs to be developed to check the character of the would-be borrowers. This is necessary to screen proper needs from framed needs



and decipher workable businesses before lending. This has to do with both experience and the need to cross-check every background detail of prospective borrowers.

Forced Savings may also be adapted. Establishing this is however difficult. Forced savings conditionality as a pre-lending agreement helps reduce the risk of delinquent loans by providing a binding to ensure repayment or offer last minute funds to clear potentially delinquent loans. It also substantiates equity contribution of business owners and can therefore be used to assess character of MFI customers. Because forced savings is regular, it is an important tool to determine when the business is slowing down.

It therefore serves as an early warning signal to quickly re-strategise to reclaim loaned funds before things get out of hand. For example, if the customer can pay 20 Ghana Cedis each day and still operate, it indicates liquidity and availability of owner investment in the business. It also offers a certain degree of comfort, depending on the percentage of loaned amount saved back, to the microfinance institution.

Small Loan size spread among many clients is less risky compared to bigger loans to a few customers. Generally, the smaller the loans given per head, the more spread is the exposure of the microfinance company. Concentration risk will be minimized if smaller loan amounts are given to each customer. In this regard, no single customer can pose a key risk to the business. For example, if 70% of your entire portfolio is loaned to one customer and it goes bad, it means the company is 70% or more (because of interest) is on the verge of collapse. This can collapse the entire business.

A varied loan term is another method. It helps timely repayment, easy loan monitoring and regulates funds MFI put at risk per any given time. This practice is an excellent method of



recycling the same funds and thereby ensuring maximal fund utilization. Ensuring funds adequacy to transact (liquidity) is a huge problem microfinance companies face. This method is necessary to reduce pressure on loanable funds.

For example, a microfinance company with 100,000 Ghana Cedis can serve 100 people with 2,000 Cedis each if at a time 5 customers have moneys while the other five are just finishing payment. This practice is therefore necessary to ensure client build a solid trust in the MFI and serves as a key strategy even for the continual survival of the business.

Female empowerment has also increasingly become a policy goal, both as an end to itself and as a means to achieving other development goals. "Female Empowerment: Impact of a Commitment Savings Product in the Philippines as" was a research published in March 2008 in the University of Chicago by Nava, Dean and Wesley. They delved into the essence of microfinance savings in empowering women. Microfinance savings in particular has often been argued, but not without controversy, to be a tool for empowering women.

Here, using a randomized controlled trial, they examined whether access to and marketing of an individually-held commitment savings product leads to an increase in female decision-making power within the household. It was found to be of positive impacts, particularly for women who have below median decision-making power in the baseline, and this leads to a shift towards female-oriented durables goods purchased in the household.

Also, Hulme and Mosley (1996, p. 166-173) agree but rather on a minor control of women over loan use and even state that credit does not encourage emancipation at all. They also



realised in this study, that, better status of female members can only be observed when it is compared with the status of other women but not in comparison with that of men.

In "Tying Odysseus to the Mast: Evidence from a Commitment Savings Product in the Philippines", Nava Ashraf et al (July 2005) designed a commitment savings product for a Philippine bank and implemented it using a randomized control methodology. The savings product was intended for individuals who want to commit now to restrict access to their savings, and who were sophisticated enough to engage in such a mechanism.

Conducting a baseline survey on 1,777 existing or former clients of a bank, interesting results came out. One month later, they offered the commitment product to a randomly chosen subset of 710 clients; 202 (28.4 percent) accepted the offer and opened the account. In the baseline survey, hypothetical time discounting questions are asked.

Women who exhibited a lower discount rate for future relative to current tradeoffs, and hence potentially have a preference for commitment, were indeed significantly more likely to open the commitment savings account. After twelve months, average savings balances increased by 81 percentage points for those clients assigned to the treatment group relative to those assigned to the control group. Findings concluded that the savings response represents a lasting change in savings, and not merely a short-term response to a new product.



"Is Microfinance an Effective Strategy to Reach the Millennium Development Goals?" was the Title of a Focus Note by Elizabeth Littlefield, Jonathan Murdoch, and Syed Hashemi published in January 2003 by mikrofinanzwiki.de. They make the following observations: A number of microfinance institutions have shown that, with strong management and efficient operations, the massive scale required to reach the billion people targeted by the MDGs is possible. With its streamlined and formulaic procedures, ASA in Bangladesh is rolling out new branches for every 1,800 clients. (They added nearly 78,000 new members each month in 2002.) As of January 2003, ASA had over 2.1 million clients. BRAC, with over 3.6 million members, recently set up in Afghanistan and after only 6 months in operation already has almost 5,000 clients. Acleda and EMT both have more clients than any other financial institution in Cambodia, with over 80,000 clients served by each. These figures are not only evidence of the spread of microfinance, but also the degree of importance to which development strategies can now be centered around it for effectiveness. All over the world, microfinance is enjoying a boom never before realized.

For instance, in Latin America, Banco do Nordeste, operating in one of the poorest regions of Brazil with very little donor support, became the second largest microfinance operation in Latin America. In just a few years, they have reached 110,000 clients. Compartamos, a non-bank financial institution in Mexico, has nearly doubled the number of its clients in the past year to become the largest Latin American program with over 150,000 clients.

Thus, both individual program results and database averages justify the optimism that innovative products and methodologies can enable microfinance institutions to lower their



costs and reach the very poor profitably. Once sustainable, institutions can become a permanent feature of the financial landscape, growing rapidly to reach significant scale without reliance on donor funding.

‘Micro-Credit and Income: A Literature Review and Meta-analysis’ by Maia Yang and T. D. Stanley (2012) suggested an analytical confirmation of the developing consensus that there are little or no positive effects from microfinance. Meta-analysis, however, revealed publication bias for positive income effects ($p < .05$) but no overall income effect once publication selection is accommodated. This notwithstanding, without correcting for publication selection bias, existing research contains no evidence that micro-credit programs have any meaningful effect on the incomes of their participants, whether one looks at the individual study or across all studies that meet the criteria set by recent systematic reviews (Duvendack et al., 2011; Stewart et al., 2012).

Effects of savings on the wealth of the poor more broadly, was attended to in 2010 by ‘A Systematic Review of Evidence from Sub-Saharan Africa’ in a publication dubbed ‘What is the Impact of Microfinance on Poor People?’ in 2010 by Stewart, Van and others. In the technical report section, they observed ten good quality studies that explored the impact of micro- credit and or micro-savings on broader aspects of wealth, including savings and expenditure. The available evidence suggests that both micro-credit and micro-savings have positive impacts on the levels of poor people’s savings. This is true for the three high quality studies and the one medium quality study reviewed under this review.



Similarly, evidence shows that micro-credit and micro-savings increase both expenditure and the accumulation of assets. It is worth noting however, that the two high quality studies which consider these outcomes are perhaps less positive than the five medium quality studies. It is worth noting that with regard to expenditure and the accumulation of assets, two studies found that households accumulated more assets initially, but this did not continue over time (Stewart et al., 2012).

Evidence further suggests that, largely, positive effects of micro-credit and micro-savings on other indicators of wealth, although not all studies found any impact, either positive or negative. The results of the three high quality studies which considered these outcomes are no different from the medium quality studies (i.e. largely positive, but inconclusive).

The available evidence suggests that micro-credit has mixed impacts on the incomes of poor people. Micro- savings alone appears to have no impact. Both micro- credit and micro-savings have positive impacts on the levels of poor people's savings, whilst they also both increase clients' expenditure and their accumulation of assets. Findings of this nature are disrupted by welfare payments:

The Bangladeshi government, for instance, transferred over \$300 million in benefits during fiscal year 1999 (World Bank, 2002).

The available evidence suggests that both micro-credit and micro-savings have a generally positive impact on the health of poor people, and on their food security and nutrition, although the effect on the latter is not observed across the board. In contrast, the evidence on the impact of micro-credit and micro-savings on education is varied, with limited evidence for positive effects and considerable evidence that micro-credit may be doing



harm, negatively impacting on the education of clients' children. Having said this, micro-credit does not appear to increase child labour.

Men have been found to re-invest a larger share of the profits generated into the business (Grasmuck and Espinal, 2000). There is some evidence that micro-credit is empowering women, but this is not consistent across the reviewed studies. Usually, we would expect returns to capital to be higher in female-owned firms. Researchers have provided evidence against this view, finding mean returns to capital to be zero among female-owned micro-enterprises in Sri Lanka (Suresh et al., 2008)

In contrast, returns to capital for male-owned enterprises are in excess of 11 percent per month. These large returns show that, on average, male-owned enterprises are more likely to generate the return on investment necessary to repay micro-loans. Both micro-credit and micro-savings have a positive impact on clients' housing (Suresh et al., 2008).

However, there is little evidence that micro-credit has any impact on job creation, and no studies measured social cohesion (Stewart et al., 2012). Reflecting on these findings in relation to the quality of the evidence of effectiveness, and contrasting the direction of effects identified from the four high quality and eleven medium quality studies within this review, we found no notable difference in the evidence about the impacts of micro-credit and micro-savings on the levels of poor people's savings, on general measures of wealth, on health, education, empowerment, housing or job creation. In relation to the impact of micro-credit and micro-savings on the incomes of the poor and their accumulation of assets, the evidence from the high quality studies is less positive than the evidence from



medium quality studies, i.e. if you considered only the highest quality evidence, you would conclude that these interventions reduce the incomes of the poor and reduce their accumulation of assets.

Indeed, in one study, households in villages that have access to a group-based credit program, and meet the eligibility criteria can choose whether to join a credit group and decide how much to borrow. If credit program placement across the villages of Bangladesh is attentive to the village effects as Pitt and Khandker (1998) demonstrate, then selection bias will result. Estimating village fixed effects sweeps out the village errors correlated with program placement.

In contrast, the evidence about their impact on food security and nutrition is more positive, i.e. if you considered only the highest quality evidence, you would conclude that these interventions have positive impact on food security and nutrition, whilst consideration of the broader medium quality evidence suggests mixed impacts. It is worth noting that the findings across all 15 reviewed studies were varied for all three of these outcomes.

In relation to the income of poor people, the available evidence suggests that micro-credit has mixed impacts and that micro-savings on its own appears to have no impact.

Both micro-credit and micro-savings have positive impacts on the levels of poor people's savings, whilst there are clear positive impacts of Grameen Bank intervention upon the economic and sociopolitical condition of the rural poor (Sarker, 2001). The available



evidence suggests that both micro-credit and micro-savings have a generally positive impact on the health.

In a Bangladeshi evidential study by Shahidur et al (2013), other factors showed much relevance in evaluating effects of microfinance. Better initial access to infrastructure and education in the MFI's district such as better access to markets and roads, as well as higher literacy among men, lead to higher savings interest rates. This improves savings among microfinance beneficiaries and therefore achieves higher success rate in improving conditions of the poor. This finding demonstrates the relevance of operating environment in effects and impact studies.

Another major finding of the study is the applicants have difficulty in accessing credit from the MFI. Majority of respondents (55%) indicated that their difficulty is as a result of untimely delivery of credit followed by lack of collateral (47%) on the part of applicants. The MFIs responds also confirmed these difficulties but gave different reasons. To the MFIs lack of sufficient funds (30%) for on-lending, high primary and secondary reserve requirement (which turns to reduce on-lending funds) were the major causes (20%). However, both beneficiary respondents and MFI officials agreed that bureaucracy in the process of loan acquisition was a challenge.

On whether microcredit can help reduce poverty, the result clearly showed that there was a positive correlation between credit acquisition and poverty reduction. Programme beneficiaries added to their assets on yearly basis for the three-year period. There is therefore positive correlation between credit and assets acquisition. For the three years that the study covers farm land and houses which are major measure of wealth in the community are significantly owned by microcredit beneficiaries as compared to non-beneficiaries. On



the contrary, for non-beneficiaries, cooking utensils are the most significant items they are able to acquire. Even though they owned houses, most of their houses are made up of mud houses.

It was found that group lending is a major strategy the MFIs use to ensure higher repayment rate and therefore reduce default. The use of group-lending was motivated by economies of scale, as the costs associated with monitoring loans and enforcing repayment are significantly lower when credit is distributed to groups rather than individuals. Many times, the loan of one participant in group-lending depends upon the successful repayment of another member, thus transferring repayment responsibility off from microcredit institutions to loan recipients. This answer the question what strategies the microfinance institutions use to recover loans from Micro credit beneficiaries.

It was also learnt that the group lending leads to solidarity amongst groups by building strong cohesion amongst the group members and has given many of the beneficiaries some social status their communities.

In spite of the much-taunted market-based microfinance as an elixir, focus of other researchers have been on the financial sanctity and means of ensuring that a regulated market can produce prudence and continuity. For instance, in their work “Financial Regulation and its Significance for Microfinance in Latin America and The Caribbean”, Bareback and Churchill (1997) states that prudential regulations are put in place for the reasons of promoting the financial system, managing money supply, protecting potential depositor losses and to encourage financial sector competition and efficiency.



Non-prudential regulations are also established to achieve transparency, tax ordinances and to help manage the money supply of the economy. Regulatory framework is also essential to educate and introduce banking system into rural communities. Other researchers such as Chavez and Gonzalez-Vegas (1995) have also made similar findings that; regulated markets do perform better than free market financial markets. What is not clear is which place or financial environment must what level of regulation should be applied. This is an area of research potential for the future.

2.3 Prevailing Regulatory Framework

Microfinance is the financial intervention of supplying micro-loans, engendering small scale savings, money transfer services and rendering financial and entrepreneurial mentoring to mostly start-up and young businesses. It requires regulation to safeguard the poor and people of middle-income income status.

This is because, ranging from financial to informational constraints, these sets of people have various hindrances to operating in regular banks. For this reason, microfinance offering of a relatively less demanding collateral security for its customers in lending, accepting miniature savings and tending to offer one-on-one consultancy services to their clients becomes a readily attractive alternative for the poor. This attractive package may as well be a lure to cheat. That is the more reason why researchers such as Churchill (1977) advocate that it is necessary for financial sector prudence.



Various national and regional economic blocs have different financial regulatory regimes. Attempts have been made to come out with global regulations. For instance, a quasi-supervisory group, the Basel Committee on Banking Supervision (BCBS) has members coming from Argentina, Australia, Belgium, Brazil, Canada, China, France, Germany, Hong Kong SAR, India, Indonesia, Italy, Japan, Korea, Luxembourg, Mexico, the Netherlands, Russia, Saudi Arabia, Singapore, South Africa, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States. The Committee's Secretariat is located at the Bank for International Settlements (BIS) in Basel, Switzerland.

A consultative publication of 'Core Principles for Effective Banking Supervision' issued in December 2011 by the Bank for International Settlements examines the details of the committee. The paper states that Basel Committee on Banking Supervision is a committee of banking supervisory authorities that was established by the central bank governors of the group of ten countries named above, in 1974 for financial institutional regulatory issues.

The publication stressed on the first core principle of the committee which is the promotion of safety and soundness of financial institutions and the banking system as the primary objective for banking supervision. It provides a forum for regular cooperation on financial supervisory matters. Its objective is to enhance understanding of key supervisory issues and improve the quality of banking and financial supervision worldwide. The Committee also frames guidelines and standards in different areas - some of the better known among them are the international standards on capital adequacy, the Core Principles for Effective Banking Supervision and the Concordat on cross-border financial institution supervision. However, the BIS and the Basel Committee remain two distinct entities.

The Basel Committee formulates broad supervisory standards and guidelines and recommends statements of best practice in financial and banking supervision (see bank regulation or "Basel III Accord", for example) in the expectation that member authorities and other nations' authorities will take steps to implement them through their own national systems, whether in statutory form or otherwise (BIS, 2011). The purpose of BCBS is to encourage convergence toward common approaches and standards. The Committee is not a classical multilateral organization, in part because it has no founding treaty. BCBS does not issue binding regulation; rather, it functions as an informal forum in which policy solutions and standards are developed.

The study revealed that microfinance companies can benefit the following if they agree to go by the Basel internal control management principles (BIS, 2011):

1. Efficiency and effectiveness of activities are necessary not just for the company's growth, but also to set performance objectives and timelines. This is important to microfinance companies for an appraisal of their own performance over set time intervals.
2. Setting internal control management principles will give the company greater reliability, completeness of processes and timeliness of financial and management information. This will go a long way to set information objectives and accessibility criterion to improve upon corporate governance for the microfinance company.
3. Existing Basel regulations are the synchronizations of various legal frameworks and will assist microfinance companies in compliance with applicable laws and regulations this is called the compliance objectives.

5. Performance objectives is for internal controls pertaining to the effectiveness and efficiency of the microfinance companies in using their assets and other resources and protecting these companies from loss. The internal control process seeks to ensure that personnel throughout the organization are working to achieve its goals with efficiency and integrity, without unintended or excessive cost or placing other interests (such as an employee's, vendor's or customer's interest) before those of the bank.

6. Information objectives address the preparation of timely, reliable, relevant reports needed for decision-making within the microfinance organisation. They also address the need for reliable annual accounts, other financial statements and other financial-related disclosures and reports to shareholders, supervisors, and other external parties. The information received by management, the board of directors, shareholders and supervisors should be of sufficient quality and integrity that recipients can rely on the information in making decisions. The term reliable, as it relates to financial statements, refers to the preparation of statements that are

Other issues of benefit to microfinance companies include internal controls over safeguarding of assets and other resources against unauthorized acquisition, use or disposition, or loss.

7. Compliance objectives ensure that all banking business complies with applicable laws and regulations, supervisory requirements, and the organisation's policies and



procedures. This objective must be met in order to protect the Clem Microfinance franchise and reputation.

Microfinance today is more than micro-lending. The introduction of savings, transfer, insurance and other products have especially now integrated into their activities much social and poverty reduction themes. Recently they tend to be developmental, and through growth, powerful financial intervention institutions exist today.

According to Joanna (1999), as known today, "Microfinance arose in the 1980s as a response to doubts and research findings about state delivery of subsidized credit to poor farmers." Quite a number of these failed, in the face of minimal or no effects on poverty. Most of such programs also accumulated large loan losses and required frequent recapitalization to continue operating. Criticism after criticism followed recommendation upon recommendation of near-market and market-based solutions to providing financial services to the poor and needy.

Microfinance therefore changed from largely government-driven to private-driven. By 2008, microfinance institutions (MFIs) such as the Grameen Bank and Bangladesh Rural Action Committee (BRAC) reached more than 10 million households in Bangladesh, nearly half the rural population, and the annual disbursement of microfinance programs was close to US\$1.8 billion with an outstanding balance of US\$1.5 billion (Shahidur et al, 2013).



2.4 Background to Assessment Modules

Food, health and education are central to the assessment of the poor and vulnerable. nnson and Li (2003) considered education and health as key factors in assessing poverty in China. In a South African study, Theron et al (2006) focused on food and nutritional level as basis assessing poverty among rural settlers.

These are not isolated, the poor generally suffers from the need to feed well, lacks sound health (partly due to malnutrition), lacks access to proper healthcare, often struggle in educating themselves and can hardly afford to educate their children.

2.4.1 Average Years of Schooling

This is basically the average number of years spent in formal education. According to 'Education at a Glance' (a publication by OECD in 2007), Average Years of Schooling is calculated as the arithmetic mean of the years of schooling required to attain a given educational level. According to this publication, the limitation of this assessment module is its deficiency in international comparability since standards of education differ from one country to the other. It also fails to account for variability since it is expressed in averages; for instance, the education of 1 year and 13 years will average 7, same as the average of 6 and 8 even though the former has 12 years' difference compared to just 2 years in the latter.

Peter and Leeuwen (2005) in an alternative interpretation of Average Years of Education, argued that the level of average years of education should be used as a proxy for the growth rate of the per capita human capital stock. This has fundamental impact on the



interpretation of the coefficient and may explain some of the contradictory empirical results.

The majority of the empirical literature uses average years of education as a proxy of the human capital stock.

In the most influential empirical studies (Benhabib and Spiegel, 1994; Krueger and Lindahl, 2001; Cohen and Soto, 2001; de La Fuente and Doménech, 2002), the stock of per capita human capital is proxied by average years of education. Benhabib and Spiegel (1994) test both the Lucas (1988) and Romer (1990) endogenous growth models on a sample of 29 countries observed for 1965 and 1985.

They found that when the growth of the per capita income is regressed on both the growth of physical capital stock and the growth of the average years of education, the latter coefficient remains insignificant. In an alternative specification, however, the level of average years of education yields positive coefficients.

The authors interpret this result as a confirmation of the Romerian growth theory: higher level of human capital stock leads to faster technological development and ultimately higher growth rates. Krueger and Lindahl (2001) arrive at a similar conclusion: when the growth of physical capital is included, only the level of the average years of education seems to yield significant and positive coefficients. Yet, generally it is assumed that the



human capital coefficients should be significantly higher than found by empirical studies (Judson, 1996, 2002; Psacharopoulos, 1994, 2004).

But based on Lucas (1988), Peter and Leeuwen (2005) argue that since there are few reliable estimates of the human capital stock, and even these are limited in time and space, most empirical work on economic growth has to rely on some kind of human capital proxy, such as literacy rates, primary school enrolment, age-heaping, or average years of education. This latter is by far the most popular choice, partly because of the availability of large datasets by Kyriacou (1991), Nehru *et al.* (1995), Barro and Lee (1993, 2001), Cohen and Soto (2001), and de la Fuente and Doménech (2002).

The literature offers two kinds of explanations for these results. Possibly the most obvious candidate is the low quality of data. Indeed, average years of education seems to have been estimated with considerable error (Soto 2002; Portela *et al.*, 2004), which is further worsened by taking the first differences (Krueger and Lindahl, 2001; de La Fuente and Doménech, 2002). Soto also suggests that the multicollinearity between the log of capital stock and average years of education can be responsible for the unsatisfactory results. The alternative explanation is theoretical: Pritchett (2001) argues that insignificant human capital coefficients may make sense: the low-quality education in developing countries does not necessarily generate human capital, or, on the contrary, there is a permanent excess supply of human capital which reduces the returns from education. In both cases, however, education will be weakly correlated with economic growth.



Peter and Leeuwen (2005) offer a third explanation, namely, that the average years of education coefficients are incorrectly interpreted. While empirical studies use the average years of education as a proxy for the level of human capital stock, they postulate that in fact, it should rather be used as a proxy for the growth rate of human capital stock. As such, empirical results suggesting a link between average years of education and growth of per capita income are in complete accordance with the theory of Lucas, but by no means are confirmations of the theory of Romer.

In the Lucas model (1988) there are two sectors. The first sector produces aggregate income (Y_t) using physical capital (K_t) and human capital (H_t), with the possibility of increasing returns to scale due to the positive external effect of human capital. The latter depends on the average human capital endowment of the economy (h_t).

If more resources are employed in the second sector ($1-ut$ increases), the growth in the first sector should decrease *ceteris paribus*. For an empirical application of (4.), the primary concern is to find a suitable proxy for the share of human capital employed in the second sector. It is reasonable to assume that $(1-ut)$ is roughly equal to the share of time allocated to education and learning.

The explanation is that the average years of education reflects the average years of education followed by the representative agent for each year t . Dividing this by the life expectancy yields the share of the representative agent's life that is devoted to human capital formation by means of education. They also argued that this share reflects the share



of the population that is still being educated in a certain year. Under the assumption that life expectancy is constant, average years of education is an obvious proxy of $(1-ut)$:

That is, the coefficient of the growth rate of the average years of education depends directly on et and changes over time.

This is exactly what the majority of the literature finds but dismisses as an unexpected, odd result. In fact, however, these findings are in accordance with the Lucas model and as assumed in the literature (Mankiw *et al.*, 1992; Bosworth *et al.*, 1995). A negative coefficient of the growth rate of average years of education indicates that any redistribution of the inputs from the first sector toward the second sector leads to an immediate (and possibly temporary) reduction in the growth of per capita income. Because in their specification, they captured the effect of increasing level of education on this coefficient, in absolute terms it should be quite near to the real factor share of human capital.

Another important finding of Peter and Leeuwen (2005) is that the relationship between education (as a proxy of the input in the second sector) and human capital formation is not linear. The critique on this assumption of the Lucas model seems to be confirmed. The results suggest that while the educational attainment of the population is relatively low, education has an increasing return to human capital formation, after a threshold value is reached, at around 8 years of education, the second sector will experience decreasing returns to scale. This corresponds well with the results by Krueger and Lindahl (1991),



who find increasing returns to about 7.5 years of education and decreasing returns afterwards.

In this paper, they suggested that following the theory of Lucas (1988) the average years of education should rather be used as a proxy for the share of resources devoted to human capital formation. As such, it is the level and not the growth of the average years of education that should positively affect economic growth. This has two further empirical consequences. First, the growth rate of the average years of schooling serves as a proxy for the immediate effect of redistributing inputs from the first sector toward the second sector. As such, finding a negative effect of the growth of education on economic growth is not erroneous, but rather confirms the Lucas theory. Second, the average years of education coefficient contains not only the factor share of human capital, but also the technical parameter of the human capital formation (λt) as well as the parameter θ that establishes link between the proxy (education) and the share of resources devoted to human capital formation ($1-ut$).

2.4.2 Food Consumption Score

Household food frequency is the frequency of consumption of food groups by household members in the previous 7 days. About 805 million people throughout the world and particularly in developing countries do not have enough food to meet their basic nutritional needs (FAO,2014).Even though food supplies have increased substantially the following factors prevent basic food needs from being fulfilled:, continuing inadequacy of household and national incomes to purchase food, instability of supply and demand, as well as natural



and man-made disasters, prevent the poor from achieving food security and earning a livelihood free of hunger (Fofana, 2006). The greatest world major problem today is how to eliminate hunger and overcome poverty. This challenge is the greatest in the developing countries where people starve for lack of adequate food and nourishment and where starvation and poverty go hand in hand.

Hunger kills more people each year than AIDS, malaria and tuberculosis combined (FAO, 2014). Food insecurity remains a global threat and human tragedy. It is by any measure a miserable picture, which does not reflect well on the efforts that have gone into the hunger alleviation programs on which enormous sums of public funds have been lavished (Abdulaziz, 2002).

Household Food Consumption Score (HFCS) is a frequency-weighted HDDS. The Household Food Consumption Score is calculated using the frequency of consumption of eight different food groups consumed by a household during the 7 days before a survey or a study according to the following procedure by IFPRI (2008) - which uses 8 food groups in calculating HFCS: Main staples, pulses, vegetables, fruits, meat and fish, milk, sugar, oil. Household Food Consumption Score is measured using standard 7-day food data by classifying food items into food groups; summing the consumption frequencies of food items within the same group (any consumption frequency greater than 7 is recoded as 7; multiplying the value obtained for each food group by its weight for example 2, 3, 1, 1, 4, 4, 0.5 and 0.5 are weights for main staples (cereals, roots and tubers), pulses, vegetables, fruit, meat/fish/eggs, milk, sugar and fat/oil respectively; summing the weighted food



group scores and finally recoding the variable HFCS from a continuous variable into a categorical variable for the food consumption groups using appropriate thresholds: 0-21 as food poor, 21.5-35 as borderline and >35 as acceptable, (IFPRI, 2008). The main advantage of using household dietary diversity and household food frequency as proxy indicators of household food insecurity is objectivity and measurability (Aiga & Dhur, 2006).

A household food consumption pattern may encompass household dietary diversity and household food frequency. According to GOK (2008c), dietary diversity is the number of individual foods or food groups consumed over a fixed period of time and it is also reflective of adequate nutrient intake. Dietary diversity encompasses nutrient adequacy and calculation of number of different food groups rather than calculating different individual foods - because food groups offer diversity in micro and macronutrients, (ibid). There are 12 food groups adopted from FAO and WHO by National Food Security and Nutrition Strategy (NFSNS) in calculating household dietary diversity score (HDDS): cereals, roots and tubers, vegetables, fruits, meat-poultry-and-offal, eggs, fish 21 and sea food, pulses-legumes-and-nuts, milk and milk products, oil/fats, sugar and honey, miscellaneous (ibid).

Several consequences of global household food insecurity have manifested themselves. Demand for food aid is a serious consequence of the food insecurity. Each year, 10% of Burundi's population requires food aid, (FAO, 2008). Another consequence is poor health status exemplified in Benin, whereby almost a quarter of children below 5 years are underweight, (ibid). There are also increased malnutrition rates globally whereby in 2004, the global malnutrition was 15%, (WHO, 2004). World household food insecurity has also



increased poverty among the global population and there was also serious global hunger index of 15.1% in 2010 (Grebmer, et al., 2010).

Estimates of the overall number of undernourished people in Africa have actually been rising by the day as; one in four people are hungry. Over the past few decades it rose from 111 million in the period 1969-71, to 171 million in 1990-92, to 204 million in 1999-2001 (Benson, 2004). In sub-Saharan Africa, poverty is increasing and food security situation is deteriorating (Hazell and Haddad, 2001). Children are the most visible victims of hunger and under nutrition, which is the cause of 3.1 million child deaths annually (Black, Cesar, Walker 2013). Majority of the death related to food security are reported to occur in sub-saharan Africa and, the total number of hungry people increase each year. In terms of proportionality, this was estimated at 34 percent in Africa and 23 percent in South Asia in 1998 (FAO, 1998). In sub-Saharan Africa, the modest progress achieved in recent years up to 2007 was reversed, with hunger rising 2 percent per year since then (Lappe, Clapp, Anderson, Board, Messer, Pogge & Wise, 2013).

Though food insecurity is generally being reduced worldwide, the problem is actually growing worse in Africa. This is due to increasing population growth and poor progress in effort directed at reducing food insecurity in many countries in the continent. Given that food deficits are projected to rise, the problem probably will only get worse (Trueblood and Shapouri, 2002; Paarlberg, 2002).



The household food insecurity in Kenya, for instance, is caused by inadequate farming area. It is only 18% of Kenya's territory which is suitable for farming. Another cause is poverty. The 2007/08 United Nations Human Development Report noted that almost 24% of Kenyans are living on less than one dollar a day, therefore not food sustaining (CBS, 2009).

2.4.3 Nottingham Health Profile

The Nottingham Health Profile contains 38 items divided into six domains (Energy, Pain, Emotional Reactions, Sleep, Social Isolation, Physical Mobility). Each item in the questionnaire has a weight attached, providing an estimate of the distress associated with the state described.

Hayes et al. (1995) found the SF-36 Health Survey Questionnaire as suitable for use with older adults. Hill et al (1996) also found Its abridged version suitable for routine health outcomes assessment in health care for older people, in their work 'Evidence from preliminary work in community-based health services in England'.

Evidence-based Medicine & Public Health (2016) digests the health level assessment approaches and points to the comprehensiveness of Nottingham Health Profile. The overall Nottingham Health Profile score was obtained by averaging the domain scores. NHP total and domain scores range from 0 (no perceived distress) to 100 (maximum perceived distress) and if administered by a trained interviewer, the NHP could be a feasible, reliable and valid option for assessing adult patients with mild to moderate cognitive impairment.



In their research work, Baro et al (2016) also found the Interviewer-administered Nottingham Health Profile to be suitable, reliable and valid, even in patients with moderate cognitive function.

2.5 The Grameen Bank

The concept of microfinance started in the 70's when Muhammad Yunus began the Grameen Bank (Joanna, 1999), an institution that has both been the spark and the model for many other institutions such as the one this study is about. In 1983, Muhammad Yunus, with a dream of finding a means to total eradication of poverty from the world, established Grameen against the advice of banking and government officials. This was a bank devoted to providing the poorest of Bangladesh with micro loans. Grameen Bank believes that credit is a basic human right, not the privilege of a fortunate few. The bank has grown tremendously and now provides over 2.5 billion dollars of micro-loans to more than two million families in rural Bangladesh (Yunus, 1997).

The Grameen Bank is a specialized financial institution that was established by government order in 1983 to provide credit to the rural poor and vulnerable with the aim of improving their economic status (Hossain, 1988). A typical Grameen Bank branch was comprised of members who formed groups, federated into centers. Five members comprised a group, between four to eight groups comprised a center. All the members of a particular center met weekly to repay their loans, deposit savings, and then to propose loans.

Each center had a center house, a simple building that served as meeting place for center meetings. At a weekly center meeting, women lined up in their groups of five, with the



group with longest tenure seated in the front. The center chief is selected by her peers. She reports to the Center Manager, the Grameen Bank employee. The center chief usually gave the loan proposals to the center manager (McDonnell, 1999).

Most literature confirms that Grameen Bank borrowers needed no collateral (Todd 1996, Hashemi et al. 1996; Counts 1996). In fact, a candidate needed to have sufficiently few assets to be admitted for membership in the bank. Grameen Bank's organizational system and associated practices have evolved over the years in response to the specific developmental needs of the target group (Shams 1992).

A person who was interested in joining the bank must first find four other people to form a group since it should comprise of people who knew and lived near each other, were of same gender, and were not from the same family. Group members were collectively responsible for each other's loans; if one defaulted, the others were required to repay her portion. The group members, mostly women of five, underwent a training program, where they were taught the rules and regulations of the Grameen Bank (Sarker, 2001).

Grameen Bank emphasized the involvement of women in poverty reduction since they are the most burdened. As of December 1999, 94.5% of the bank's members were women (Grameen Bank, 1999). While on training, candidates attended center meetings and witnessed the transactions of their peers, making sure that they were interested in the responsibility and benefits of bank membership. Some illiterate candidates also learned to sign on their loan documents. The area manager tests them later and when satisfied, he



visited each candidate's home to verify that her assets were sufficiently few and that husbands would support their wives in their borrowing and saving efforts.

Successful candidate groups were admitted to the bank and in the next center meeting, they came to the branch office to receive the first loan. Borrowers began loan repayment the following week by paying the first of fifty installments of principal plus 10 percent interest (Hossain, 1988).

Grameen was expanding throughout the country and success continued in all regions. Pressure within and without the organisation for further expansion lead to negotiations with international aid agencies; they eventually formed a consortium for grant use monitoring. These developments lead to a massive growth of the bank. By December 1999, up to 1,149 Grameen Bank branches were operating in 39,706 villages with 67, 691 centers. About 95% of the 2,357,083 Grameen Bank members then were women. The Grameen Bank boasts of 97-98% loan recovery rate (Sarker, 2001).

Now employing over 13, 000 employees, the Grameen Bank is a huge corporation. Achieving 2,802 million US dollars of cumulative disbursed loans just before year 2000 was a huge success. Indeed by 2008, the Grameen Bank and Bangladesh Rural Action Committee (BRAC) reached more than 10 million households in Bangladesh, nearly half the rural population, and the annual disbursement of microfinance programs was close to US\$1.8 billion with an outstanding balance of US\$1.5 billion (Shahidur et al, 2013). This was a great success by all standards. But greater was the positive direct effects of its works



on improving poor women's engagement in economic activities (Todd, 1996), and positive indirect effects such as utilizing higher yielding variety that increased productivity in crop production (Alam, 1988).

Indeed, microcredit became a symbol of focused interest in changing the lives of the people at the very bottom. Microcredit has become synonymous with a hope that maybe we can do something about poverty; maybe in the past we didn't do it right, maybe microcredit would help us unfold the mystery and secrets which we have never been able to explore about poverty. The Grameen Bank has demonstrated and sparked this renewed focus. Little wonder, then, that Grameen Bank remains an icon in both fields of microfinance studies and practice.

2.6 Microfinance in Africa

If properly harnessed, microfinance could offer a variety of solution to the problems in African where poverty levels seem not to be decreasing but remain generally high. Fox and Liebenthal (2006) point out that only one African country, Uganda, has seen a steady decade-long decline in poverty.

Micro financial institution consists of agents and organizations that engage in relatively small financial transactions using specialized, character-based methodologies to serve low income households, micro enterprises, small farmers and others that lack access to the banking system (World bank, 1988).



A proposed causal chain for how micro- credit and micro-savings impact on poor people was developed. Having reviewed the evidence of effectiveness of micro- credit and micro-savings in sub-Saharan Africa, researchers turned attention to exploring the causal chain, to try to unpack how and why microfinance impacts on the poor in the ways reported above.

Foremost, microfinance initiatives can effectively address material poverty, the physical deprivation of goods, services, and the income to attain them. When properly guided, the material benefits of micro-financing can extend beyond the household into the community. The economic performance of Sub-Saharan Africa and other regions over the past three decades has been closely associated with their savings and investments (UN/OSCAL, 2000).

The use of the two-gap model revealed that the targeted regional savings rates of 16.6 percent in 1995 and 20 percent in 2000 was needed to achieve overall economic growth of 5 percent in Africa by 2000. Up to 1998, the achieved average saving rate was far from the target (Culgakovski et al., 1991). Other patterns of Africa's saving include its dependence on public savings in contrast to Asia, where private savings are critical. Promoting private savings in Africa is crucial for two reasons.

First, evidence from South East Asian countries show that sustaining high economic growth is contingent upon significant levels of capital accumulation. Second, SSA characterized by its heavy dependence on foreign savings, mostly ODA, to fill the



investment-saving gap that averaged 11 percent of GDP for the 1970-95 period (Calgagovski et al., 1991).

Due to the binding lending constraints that Sub-Saharan African countries are facing in the international capital markets or external balance conditionality imposed by bilateral and external donors, the promotion of national saving could boost investment and influence the prospects for sustainability of growth. Identifying policies and institutions that promote saving should be crucial in any strategy aimed at easing the transition to less aid dependence of SSA.

Microfinance initiatives that recognize and build upon local knowledge and tradition are more culturally compatible with the local community. McDonnell (1999) explains in his introductory remarks that key features of the Grameen Bank model need be examined so that lessons that can be learnt from its replication in other countries be helpful in formulating policy to enable indigenous people, and in particular women, gain access to credit.

People feel more familiar and comfortable with concepts that borrow from their own tradition; this, in turn, improves MFI acceptance and outreach. Microfinance approaches rooted in local culture are also more participatory because clients are readier to identify with and thus participate in the financial decisions and actions shaping their lives. As a result, people become more invested in and committed to the sustainability of the microfinance initiatives, assume ownership and responsibility for their development, and



become more self-reliant. Indeed, for countries in Africa and elsewhere, one important lesson of the Grameen Bank as found by Hossain (1988) is that, appropriate procedures can be developed only after considerable experimentation, through a thorough understanding of the physical and socio-economic environment.

As already noted, the group methodology is an important indigenous institution. Traditional and informal African savings and loan schemes include, *Ekubin* Ethiopia, *Tontines* in Cameroon and Niger, *Esusu* in Nigeria, *Susu* in Ghana, *Gameyain* Egypt, and *Sandukin*

Tunisia (UN/UWC, 2000). These schemes are based on traditional knowledge and values, and microfinance initiatives that build upon them can count on legitimacy, accountability, and self-enforcement. In Nigeria, African Traditional Responsive Banking (ATRB) is a unique loan scheme that draws from the best of African traditional microcredit practices but tempered by modern knowledge.

The Country Women's Association of Nigeria (COWAN) was established by merging traditional with modern practices. At its core are the traditional *Esusu* and *Aajo* practices, combined with a community based institutional structure, training and advisory services, and a "social banking" model that is traditional and responsive. ATRB has succeeded on a number of fronts in its first five years: savings mobilization has increased by 100%, the loan fund portfolio over 50%, and loan repayments remain at 98%. ATRB successfully



empowers poor and rural women economically, socially and politically, while creating a sense of belonging and ownership.

For Gabor (1991), whereas donor funding can play an essential role in the start-up of a microfinance initiative, if MFIs are to make a lasting impact, they cannot remain dependent on donor funding, but must become self-sufficient. Self-reliant MFIs are better able to maintain their identity, autonomy, and mission. In many instances, microenterprises rather than formal employment create an informal economy that comprises as much as 70% of the national economy. Yet the lack of saving and access to finances in Africa creates a state of perpetual scarcity, a poverty cycle that restricts people's potential to improve their livelihoods.

According to the United Nations (2001), in May 2000 the Government of Tanzania approved a national microfinance policy. The government recognized that microfinance systems are and will increasingly become integral parts of the country's financial system, with the potential of better financially serving the people, the majority of who reside in rural areas. The policy formulation process began in 1996 with a comprehensive review of the micro-finance market.

The review was followed by a joint government-donor review mission, along with participatory input from MFIs and other stakeholders. The policy identifies three categories of implementation strategies: regulation and supervision, development and maintenance of standards, and capacity building. Although it is too early to assess the impact of this policy,



it does reflect the recognition of microfinance as a formidable economic sector among national policy makers.

In a Zimbabwe study, there are major differences in income distribution. For example, nearly half of the new client and non-client households had a monthly income of less than Z\$2,000, compared with about one-fifth of the repeat client households.

In contrast, half of the repeat clients had an estimated monthly household income of Z\$4,000 or more. Members of repeat borrower households have on average one year of education more than those of non-client households. The average number of income sources was 2.5 for clients' households compared with 2.1 for non-clients. Similar numbers in the Uganda study were 3.23 compared with 2.53 (Barnes & Keogh, 1999).

Researchers have already conducted field experiments to test whether savings constraints prevent the self-employed from increasing the size of their businesses. One such research is "Savings Constraints and Microenterprise Development: Evidence from a Field Experiment in Kenya" Pascaline and Jonathan (2009). They opened interest-free savings accounts in a village bank in rural Kenya for a randomly selected sample of poor daily income earners. Despite the fact that the bank charged substantial withdrawal fees, take-up and usage was high among women and the savings accounts had substantial, positive impacts on their productive investment levels and expenditures. These results imply that a substantial fraction of daily income earners face important savings constraints and have a demand for formal saving devices.



Savings can be herculean for the poor. In trying times, it is simply out of the question. The food crisis that hit the world a decade ago saw MFI savers in Mozambique and Ghana tapping into their savings accounts to buy food, make their loan repayments, and keep their businesses going. (Opportunities International Blogs quote from 'Nuts and Bolts of Microfinance – Risk Management Examples and Tools' (2010)). Even though it is good news that they have savings accounts for the first time in their lives, they are already spending the small safety nets they had built up for themselves because there are no alternative investments to turn to.

2.7 Microfinance in Ghana

Microfinance is one of the forces against poverty in Ghana. As at 2005/06 an average of 28.5 per cent of Ghanaians lived in poverty. This suggests that some of the interventions at poverty reduction have yielded positive results if compared to earlier statistics of 98/99 when the figure stood at 40%.

However, the poverty profiles of the three northern regions of Ghana remained comparatively high, above the earlier 40% even in 2006 (GOG and UNDP, 2007). Microfinance activities started as susu collection in Ghana. The word susu was coined from Nigerian word esusu meaning small amount of money in naira. In the absence of banking facilities and other formal financial sources, the Susu has been a major source of fund mobilization for the unbanked in Ghana, most especially rural Ghana, (World Bank, 1994).



Earlier studies have highlighted the problem of limited access to credit, particularly by entrepreneurs in less developed countries. According to Aryeetey et al. (1994), between 24 and 52% of entrepreneurs in Ghana are credit constrained. Studies by Parker et al. (1995) later confirmed this finding. Microfinance is therefore critical for a nation like Ghana with such huge financing gaps, especially so for unstructured startups who often have no collateral.

In Ghana, McNally and Dunford (1998) found that microcredit programme participants reported a reduced vulnerability to the “hungry season” relative to the baseline period compared to nonparticipants. The nutritional status of infants in borrower families (weight for age and height for age indices) was improved relative to the other groups. There was no difference in the maternal health status (body mass index) among study groups.

According to Tham-Agyekum et al (2010) of the Department of Agricultural Extension, University of Ghana-Legon, microfinance has passed through similar stages in Ghana as the rest of the world as follows:

Phase One: The provision of subsidized credit by Governments starting in the 1950’s when it was assumed that the lack of money was the ultimate hindrance to the elimination of poverty.



Phase Two: Involved the provision of micro credit mainly through NGOs to the poor in the 1960's and 1970's. During this period sustainability and financial self – sufficiency were still not considered important.

Phase Three: In the 1990's the formalization of Microfinance Institutions (MFIs) began.

Phase Four: Since the mid 1990's the commercialization of MFIs has gained importance with the mainstreaming of microfinance and its institutions into the financial sector (Steel & Andah, 2006).

In Ghana, over the period (2001-2010), credit to the private sector has not been that consistent. In 2001, credit to private sector increased to 33.2% from 16.2%. In 2005, an analysis on the stock of credit revealed the private sector continues its dominance of access to credit of 81.9%. In 2006, total outstanding credit to the private sector increased by 59.7% compared with 42.8% while the distribution of the credit flow remained broad-based but skewed in favour of three main sectors namely, Services (24.1%), Commerce & Finance (26.4%) and Manufacturing (12.0%).

However, with a deliberate government intervention that sought to make private sector the engine of growth, Tham-Agyekum et al (2010) reports that government's borrowing from the banks increased, hence the private sector is crowded out in terms of finance. Enough funds will be made available to MFI and their needs will then be met.

Effects of Microfinance in Ghana



"Impact Assessment of Microfinance Interventions in Ghana and South Africa - A Synthesis of Major Impacts and Lessons" by Sam Afrane (Journal of Microfinance, Volume 4, No. 1, 2002) established that 43% and 44% of the enterprises sampled in Ghana and South Africa, respectively, took on new workers. In addition, the total number of people employed by the enterprises surveyed increased by 46% and 49%, respectively. Improved employment would also trigger a new line of micro-savings that can put forward another cycle of micro-enterprises to grow the business climate of the poor.

Both the quantitative and qualitative results of the two studies have shown an improvement in the conditions of the clients following the receipt of credit. Generally, manifestations of positive changes were observed in almost all the impact indicators defined, namely, economic, social, access to facilities, and spiritual. On average, a moderate level of impact was achieved for both projects with ten and six indicators scoring "high" impact levels for SOMED and SAT, respectively.

In more specific terms, differing degrees of positive impacts were recorded in each of the projects in the areas of business turnover, procurement of inputs/raw materials and machinery, creation of additional jobs, acquisition of business skills, marketing outlets, acquisition of domestic assets, increased access to quality food and nutrition intake, water and sanitation facilities, and health services. For instance, turnover increased by 157% and 118% on the average for clients in SAT and SOMED, respectively.



These increases indicate that injections of small amounts of capital into microenterprises are capable of raising the incomes of the operators to appreciable levels within a relatively short time. These findings and others from Bolivia, Uganda, and Columbia (Eclof, 1999) amply show that microenterprise financing is really one of the strategic means through which the fight against poverty in developing countries could be won.

On the other hand, the impact results of the social and spiritual domains contained mixed positive and negative effects, as compared with the other two domains. The positive impacts included enhanced public respect and acceptance, self-esteem, participation in community activities, monetary contributions to social projects, and empowerment of women. On the negative side, pressure of time resulting from increased business activities, worsening family relations, poor church attendance, and participation in church activities were observed.

The evidence from these two studies indicates that although microfinance programs have every potential to improve the conditions of beneficiaries, they also tend to create disturbing negative impacts if necessary counteracting measures are not taken. The challenge, therefore, to MFIs is to be mindful of these negative tendencies so that appropriate steps can be taken to minimize these effects as much as possible in the design of credit.

Obeng (2011) also undertook a case study of Jaman North District, Ghana regarding ‘the Impact of Micro-credit on Poverty Reduction in Rural Areas’. Among others, the survey



data and analysis show positive changes in the assets acquired by most programme beneficiaries in relation to non-beneficiaries. They are better able to afford enamel cooking utensils, clothing and many more assets than the non-beneficiaries. Some are able to renovate their houses from mud buildings to sand crate blocks while some also acquired more land for farming and other agricultural activities.

According to Kennedy, this clearly shows that access to microcredit lead to poverty reduction. This again confirmed what (Robinson, 2002) said that microcredit helps to reduce poverty by creating wealth which leads to an increase in the levels of incomes of the vulnerable. This answers the research question on whether microcredit can reduce rural poverty.

Also, the most targeted clientele of most of MFIs are women. Exclusive lending to women began in the 1980s when Grameen Bank found that women have higher repayment rates, and tend to accept smaller loans than men (Hossain, 1988). Subsequently, many microcredit institutions have used the goal of empowering women to justify their disproportionate loans to women. Microcredit is a tool for socioeconomic development, and the protection of vulnerable women is an integral part.

Egyir (2008) used Ghana's rural microfinance experience to establish that women in Ghana derive better livelihoods. For the most part, it increased their working capital, improved access to education for their kids, improved the influence and participation of poor women in family and community decisions and activities. It also proves that the rural poor with



little effort can access credit. This answers the question why microcredit target women. It does because women are the most venerable in our society and for that matter if the women get access to credit through Microcredit poverty is going to reduce.

2.8 Grameen Ghana in Northern Region

Northern Ghana continues to present Ghana with the most formidable development challenge. Of the five regions (Northern, Upper East, Upper West, Central and Eastern Regions) in Ghana with the highest levels of poverty in 1992, three are in northern Ghana. While other regions have seen poverty levels decline dramatically over the past one and half decade, Northern Ghana has fallen further behind (Ghana Living Standard Surveys, 1987-1992).

Seidu and Bambangi (2006) demonstrated that women's access to financial services has enhanced their decision-making capacity in the Kassena-Nankana District in the Upper East Region of Ghana. These are similar to Khandker's conclusion in 2005 that microfinance programmes are helping the poor beyond income distribution with contribution to local income growth.

For Khandker (2005), microfinance programmes have spillover effects in local economies, thereby increasing local village welfare.

Grameen Ghana is among many other financial NGOs working to reduce the incidence of poverty in these regions. Others include but not limited to IBIS Ghana, ACDEP and BIBIR Ghana. Grameen Ghana is a not-for-profit organisation that was established in Ghana in



2001. The organisation has its headquarters in Tamale, the capital city of Northern Region of Ghana. Operating in three Credit Branches, Grameen Ghana directly contributes to Ghana's Poverty Reduction Strategy (GPRS) which places particular emphasis on the development of storage, transport and processing capacity of rural produce (Alhassan et al 2011).

The overall goal of Grameen Ghana is to reduce poverty and improve living conditions in the rural areas and especially increase the incomes of women and vulnerable groups through increased self- and wage- employment. The immediate objective of Grameen Ghana is to promote a competitive rural micro and small enterprise sector in participating districts, which is supported by relevant, good quality, easily accessible and sustainable services. The organisation works to reduce poverty in the areas of microcredit, food security and education. The microcredit component of Grameen Ghana was started in June 2003 with the goal of providing financial services with education to economically active people (women) in rural communities.

Thus, the credit scheme targets rural enterprises owned and managed by women. With an initial membership of 900 in 2003 the project serves over 8,000 women. The organisation aims at attaining operational sustainability, and to increase its outreach to a total of 18,000 beneficiaries and to achieve financial sustainability by 2012. Grameen Ghana operates in six Districts in the Northern Region of Ghana. The Districts are Tamale, Savelugu-Nanton, Central Gonja, Zabzugu-Tatale, Nanumba North and Nanumba South. The Districts have been zoned into three Credit Branches – Tamale Branch comprising Tamale, Savelugu-



Nanton and Central Gonja Districts; Zabzugu-Tatale Branch comprising only Zabzugu-Tatale District and the Nanumba Branch comprising two Districts (Nanumba North and Nanumba South). Grameen Ghana has prepared a penetration plan describing a scale up procedure into new Region, the Upper East Region of Ghana. In all, three new Branches are expected to be added. These are Karaga Branch and Central Gonja Branch both in Northern Region and Bolgatanga Branch in the Upper East Region. Would-be beneficiaries in the new branches have self-selected and have organized themselves into solidarity groups ready to take loans.

The organisation has several funding partners. The partners provide technical assistance, small grants, concessionary and commercial loans to the organization. Examples of the funding partners are UNDP, SPEED Ghana, Grameen Foundation, Planet Finance, Ghana Commercial Bank and Cordaid. The main methodology used to disburse credit is credit with education characterised by the peer or solidarity group lending approach. The main policies are the provision of 12 to 24 weeks' loan period, weekly/fortnightly repayment, absence of guarantee period and sponsorship of children's education. Membership is opened to all women but is based on the individual's interest or willingness (self-selection). Members self-select themselves into smaller groups of between 5 and 6. The selection process begins with community investigation process.

This is usually carried out by staff of Grameen Ghana to know the ground truth of communities before programme placement. The main reason for investigating communities is to avoid duplication of resources. Thus, communities already benefiting



from microcredit programmes are precluded from the list of programme placement. Community investigation also enables Grameen Ghana to study existing markets and to identify market opportunities that will address the demand side of the intervention. This is to nip in the bud the problem of business failures resulting from lack of husband's support.

More importantly, new members receive 4 to 6 weeks' capacity building training in key areas like business skills, leadership skills, book-keeping and group dynamics. The capacity training is aimed at improving the business management skills of women beneficiaries. Indirectly, the capacity training helps to reduce unobserved differences (e.g., entrepreneurship and character) among individual clients but does not eliminate them completely. On average, the loan size is GH¢ 120 representing over 200% increase over the average loan size of GH¢ 37 in 2003.

An appraisal of the impact by Seidu et al. in 2011 found that Grameen Ghana's credit programme has not significantly improved the income of women processors suggesting that the objective of the project that aims at improving the incomes of women shear butter processors cannot be attained unless women shear processors gain improved access to market services, particularly international market and having an enhanced amount in terms of the quantum of money given them. Women shear processors' ability to affect (increase) incomes significantly through Grameen Ghana microcredit is determined by their levels of education and market access, both of which are low.



2.9 Lessons from the literature

From the research works observed above, one can see that microfinance is a powerful developmental tool. It is also observed that marginal gains have been made in utilizing it for bringing people out of poverty. Why are people still poor after many years of microfinance access and use?

Patrick and An (2002) observe that "The economic impact assessment revealed that Grameen Bank as well as BRAC, definitely succeed in reducing their member's vulnerability and by consequence prevent them from falling even further into poverty.

However, there was no consensus on whether the two institutions also reduced poverty per se." Opinion of researchers, therefore, has not established a unanimous stand on whether or not micro-credits increase incomes and therefore contribute to the fight against poverty, the authors do agree on the fact that micro- credit institutions are helping to reduce the vulnerability of their clients. In other words, micro-credit programs do assure that the situation of their poor members does not deteriorate any further.

Inadvertently, researchers have agreed that microfinance does not definitely remove people from poverty. This research I am undertaking is to postulate that, comparatively, MFIs enjoy higher marginal benefits on microloans to the poor than the poor themselves, and that this is a major factor for which they have failed to lift the poor out of poverty.

"Is Microfinance an Effective Strategy to Reach the Millennium Development Goals?", a Focus Note by Elizabeth et al (2003) also notes that "...both individual program results and



database averages justify the optimism that innovative products and methodologies can enable microfinance institutions to lower their costs and reach the very poor profitably. Once sustainable, institutions can become a permanent feature of the financial landscape, growing rapidly to reach significant scale without reliance on donor funding." Now the gaping question I ask is, without reliance on donor funding, are the microfinance institutions sustainable?

And if they are, on whose backs (funding source) have they become successful? If they are also not sustainable, on whose backs do they intend to ride into sustainability? Could it be the poor? Does their operation have a positive impact on the poor? Are there unintended benefits even to non-beneficiaries? Research studies such as this one on Grameen Ghana will continue to unearth more answers on these issues.



CHAPTER THREE

METHODOLOGY

3.1 THE STUDY AREA

The study area is Zabzugu, located in the geopolitical Northern Region of Ghana. It is on longitude 0° 19' 29" E on the stretch of road between Yandi and Tatale. Administratively, the Zabzugu District Assembly is one of the twenty-six (26) District Assemblies in the Northern Region. It was established by the Legislative Instrument 2053. The District covers an area of about 1,332 km sq. It shares boundaries with the Tatale-Sanguli District to the east, Yendi Municipal to the West, Nanumba North and South and Nkwanta Districts to the South and Saboba and Chereponi Districts to the North.

About 90% of the people of Zabzugu district are farmers in both crop farming and rearing of small ruminants. The main crops cultivated by farmers in the district are yam, millet, maize, sorghum, cassava, groundnut, cowpea and soya bean. Goats and sheep are the small ruminants reared in the district. They are often sold during the lean season (May to July) to meet the food needs of households (MOFEP, 2013). The 2010 Population and Housing Census put the population of the district at 61,927.00. This is made up of 30,542.5 males representing 49.2% and 31,384.5 females representing 50.8% (GSS, 2012). Women participation in economic activity is high both on and off-farm.

Women traditionally gather sheanut from the wild shea trees typical of the savanna landscape. The women process these nuts to produce sheabutter originally for home use, but in recent times, sheanut processing has become an important economic activity.



It is this economic aspect of sheanut processing that this study is focused on, specifically, the role of micro-credit that the processors accessed from Grameen Ghana, a Financial Non-Governmental Organisation (FNGO).

3.2 THE RESEARCH DESIGN

A research design can be described as the logical sequence that connects the empirical data to the study's initial research questions and ultimately to its conclusions. In the view of Inkoom (1993), it is defined as a plan which guides the investigator in the process of collecting, analysing and interpreting observations, and a logical model of proof that allows the researcher to draw inferences concerning causal relations among the variables under investigation. In this regard, this research was designed to enable the methodology clarify and operationalize key concepts of this study: 'Effects of Grameen Bank System on Sheanut Processors' Poverty Reduction in Northern Region, Ghana'. The main objective of the research design therefore, was to ensure that the evidence collected addressed the initial research question.

To this end, the design of this dissertation work has been detailed as follows:

The overall research was designed as a quasi-experiment with non-equivalent groups (beneficiaries of Grameen Ghana microloans and non-beneficiaries). In the non-equivalent groups research design, intact groups that are presumed to be similar such as the treatment and control groups are most often used (William, 2006). For the purposes of this study, the treatment group was the beneficiaries of Grameen Ghana microfinance services and the control group was the non-beneficiaries, i.e. the 'with' and 'without' respectively.



This study also used quasi-statistics, developed by LeCompte and Preissle (1993), which allows the researcher to count the number of times something was mentioned in field notes as a very rough estimate of frequency. Such information extracted from the field were coded, ordered and counted so as to use quantitative techniques on their frequencies. To this end, three key estimators of social well-being were adopted; the Nottingham Health Profile, the Food Consumption Score and the Average Years of Schooling.

This study was planned as follows:

- a. Determining the appropriate sampling and research tools to employ for the study.
- b. Identification of key variables of this study and how they were measured.
- c. Data collection techniques used.
- d. Data processing into forms appropriate for analysis.
- e. Data analysis was done in a way that allowed the research questions to be adequately answered in the eventual research findings.

3.2.1 Sampling Techniques Used

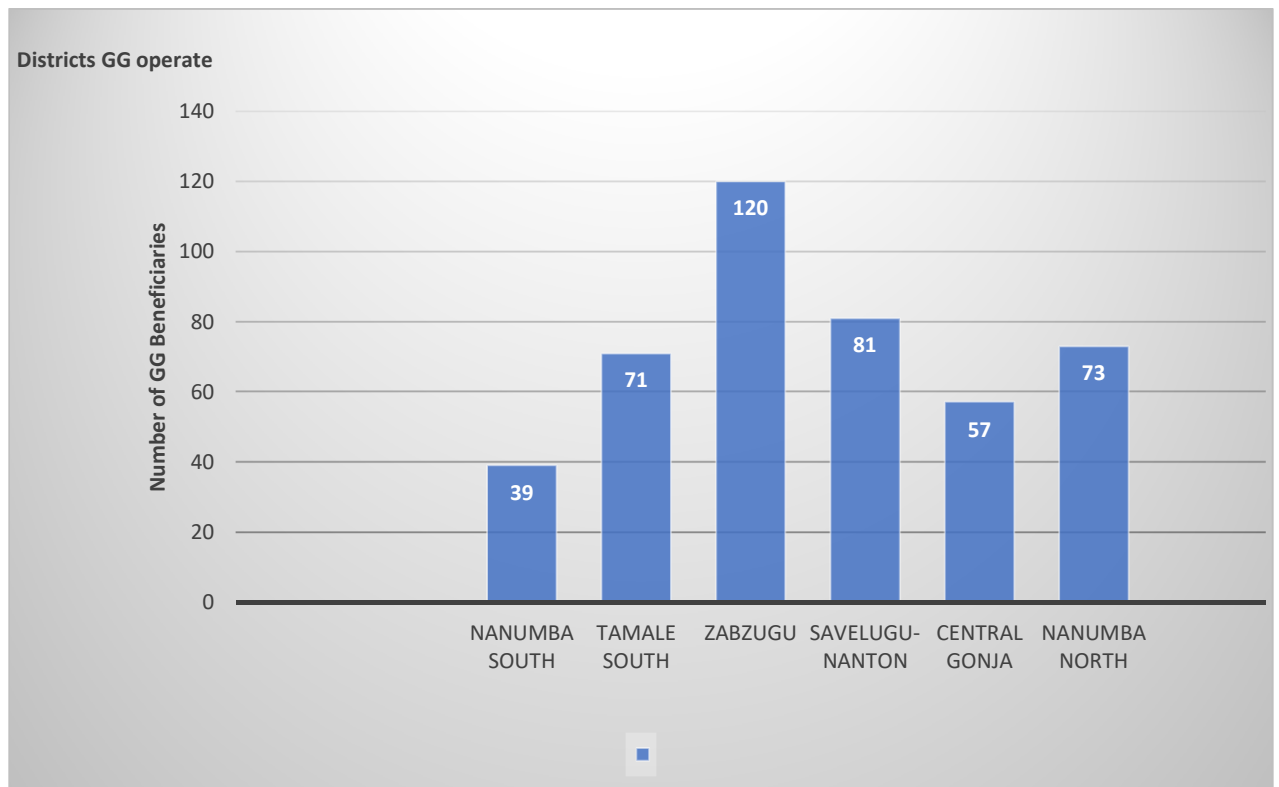
Grameen Ghana operates in seven districts, namely, Zabzugu, Tamale South, Savelugu-Nanton, Central Gonja, Zabzugu, Nanumba North and Nanumba South. Purposive sampling technique was used to select Zabzugu District out of the total of the seven Districts in which Grameen Ghana operates. Purposive sampling is a non-probability sampling method used when “elements selected for the sample are chosen by the judgement of the researcher” (Black, 2010).



The reasons for the purposive selection of Zabzugu District were, firstly, because it has the greatest number of Grameen Ghana beneficiaries than any other district, and the probability that it will have the characteristics and dynamics of all the other five districts was deemed to be high. Beside this, the peri-urban nature of the district capital (Zabzugu township) was quite representative of GG range of customers across rural and peri-urban settlements in the Northern Region of Ghana. Figure 3.1 shows the number of Grameen Ghana beneficiaries per district.

Figure 3.1: Number of Grameen Ghana Beneficiaries by District

GG BENEFICIARIES BY DISTRICT



Source: Grameen Ghana



Figure 3.1 indicates the number of beneficiaries of Grameen Ghana microloans by district. It is clear that Zabzugu has the greatest number of beneficiaries. It is also important to note that, taking the average number of beneficiaries for the other five districts besides Zabzugu, we get 56 $(= (73+57+81+71+39)/5)$.

This implies that the number of beneficiaries in Zabzugu District alone is effectively more than twice the average number of beneficiaries from the other five districts.

Other reasons that influenced the use of purposive sampling were the similarities of all the six districts in terms of culture, geographic region, and the prevalent occupation of their people; farming. These similarities implied that each district was possibly representative of others, especially since Grameen Ghana used quite similar service standards across their operational districts. To this extent, purposive sampling as proposed by Saunders (2012) was used to select Zabzugu district. Saunders (2012) argued that purposive sampling should be used to “focus on one particular subgroup in which all the sample members are similar, such as a particular occupation, etc.”.

3..2.2 Determination of the sample size and sample selection

Grameen Ghana is currently serving 120 beneficiaries scattered across the Zabzugu District, thus the sample frame (N) is 120. The research employed the mathematical sample determination approach to determine the sample size (n). The margin of error (α) allowed for the study was 6.5 per cent. Based on that the mathematical sampling model was applied as follows:

$$n = N \div [1 + N (\alpha)^2]$$

Where:



n = the sample size (?)

N = the sample frame (120)

α = the confidence interval (0.065)

Substituting the above given information into the model results in the following as the sample size for the study:

$$n = 120 \div [1 + 120 \times (0.065)^2] = 79.628 = 80.$$

To this end, the processors were stratified into Grameen Ghana beneficiary and non-beneficiary groups. Eighty (80) Grameen Ghana beneficiaries and 80 non-beneficiaries of Grameen Ghana intervention were randomly selected for the study. This brought the total number of selected respondents to 160. All 160 respondents were selected from various groups within the Zabzugu District in the manner described above to ensure good representation. To further enhance representation across the district, the entire district was zoned into four and 40 respondents were selected from each zone. This zoning is illustrated below in fig 3.3 below. In addition to these 4 group leaders among the beneficiaries (1 from each zone) and 4 influential women among the non-beneficiaries (1 from each zone) as well as 2 GG staff were selected as key informants.



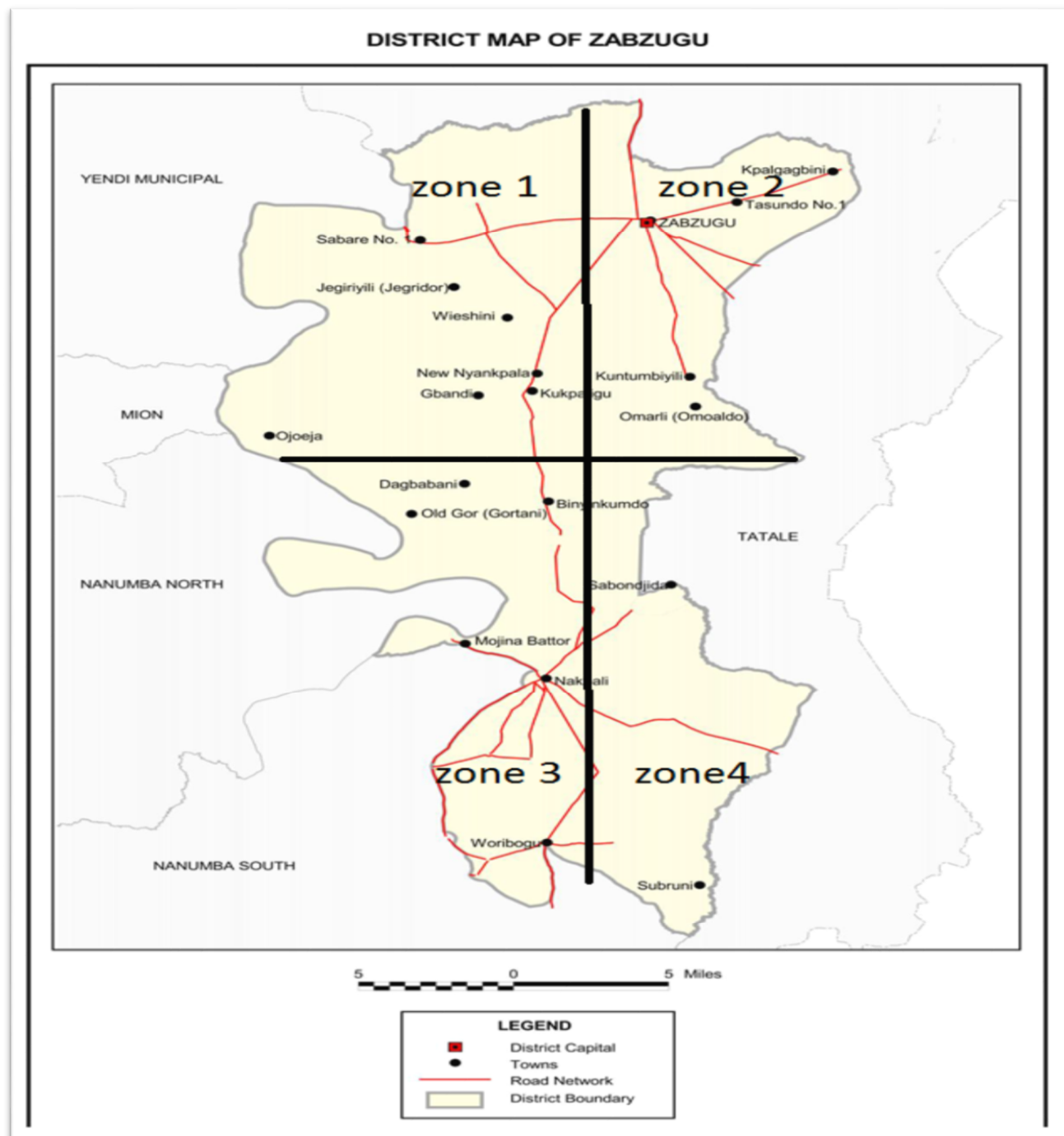


Fig 3.2 Zabzugu District Map (divided into 4 zones) Map source: Ghana Statistical Services (2014)

3.3 Data collection instruments

Data for this study was obtained mainly from primary sources. Primary data was obtained through field survey using structured questionnaire and interview guide to elicit response from respondents regarding household consumption on health, education and food security, as well as other socio-economic attributes of the respondents, the period of, and amount of microcredit received and frequency of access to microcredit.

The questionnaires were administered to women beneficiaries and non-beneficiaries, while oral interviews were done for key informants and GG staff using the interview guide. Responses from the questionnaires provided the broad qualitative data that was processed into quasi-quantitative information using quasi-statistics concepts from the works of LeCompte and Preissle (1993). This was supported by the qualitative data gathered from the Key Informant Interviews.

3.3.1 Questionnaires

The questionnaires were administered to women beneficiaries and non-beneficiaries. It sought information on respondents' bio data, access to GG loans, expenditure for home and business under three thematic areas: feeding, health and education of their children.

Particularly, questionnaires were made to meet specific research response requirements for models such as the Likert Scale, the Food Consumption Score, Nottingham Health Profile and the Average (Completed) Years of Schooling Assessment. To understand the behavior of the key variables, a five- point Likert scale was adopted in the questionnaire that sourced the following response categories; strongly agree=5, agree=4, undecided=3, disagree=2 and strongly disagree=1.



This was useful in measuring agreement levels to effects of Grameen Ghana intervention on poverty reduction amongst them, and the perceptions of respondents on their accessibility to the intervention itself.

These models are explained below:

Food Consumption Score: The WFP's flagship indicator for establishing the prevalence of food insecurity in a country or region is the Food Consumption Score (FCS). It is heavily informed by the linkage between dietary diversity and household food access. The FCS combines data on dietary diversity and food frequency using 8 food groups (i.e., "staples," which include foods as diverse as maize, rice, sorghum, cassava, potatoes, millets, pulses, vegetables, fruit, meat and fish, dairy products, sugar, and oil). "Poor" food security scores reflect the fact that households may be falling short of consuming at least one staple food and one vegetable each day of the week and "acceptable" scores are based on an expected daily household consumption of oil and pulses in addition to staples and vegetables (Jones et al, 2013).

The FCS is intended to monitor changes in food security situations, to identify food-insecure regions. In this study, it was adopted to shed light on nutrition and food security situation of beneficiaries and non-beneficiaries of Grameen Ghana micro-credit, so as to compare the two and decipher if micro-credit enhances food security situation of beneficiaries or not.

The cutoffs for the FCS may be adjusted upwards in situations where nearly all households consume sugar and oil regularly, effectively establishing a minimum FCS of 7 for all



households. The standardization of cutoffs and weightings for the FCS allows for greater comparability of the score across contexts. However, these weightings may obscure important national or regional differences. For example, in regions where fruits and vegetables are not easily accessible to some families, staples may give an indication that can only be a distortion of the reality (Jones et al, 2013).

The Nottingham Health Profile is designed to measure subjective health status (Hunt & McEwen, 1980). It is a questionnaire that contains 38 questions grouped into six domains: physical mobility (eight items); social isolation (five items); emotional reactions (nine items); pain (eight items); sleep (five items); and energy (three items). Each question is answered “yes” or “no” according to whether the symptom is present or absent “in general” (Hunt, McKenna, McEwen, Backett, Williams, & Papp, 1980). The use of the Nottingham Health Profile in this research is to assess the relative health status of Grameen Ghana beneficiaries and non-beneficiaries to estimate the effects of the intervention to the healthy well-being of sheanut processors.

Average Years of Schooling Assessment is the years of formal schooling received, on average for a selected group, often used in World Bank publications to evaluate educational levels of a populace. For the purposes of this study, it applied to the children of respondents, to enable comparability between the education of children of beneficiaries and that of non-beneficiaries, for the determination of effects of Grameen Ghana intervention on education of sheanut processors’ children.

Likert Scale (Likert, 1932) was developed as a principle of measuring attitudes by asking people to respond to a series of statements about a topic, in terms of the extent to which



they agree with them, and so tapping into the cognitive and affective components of attitudes. Likert-type or frequency scales use fixed choice response formats and are designed to measure attitudes or opinions (Bowling, 1997; Burns & Grove, 1997).

3.3.2 Key informant interviews

The key informant interview was a semi-structured interview that sought clarification from people in the community of study who have access to strategic details of the information being gathered, either by virtue of their position or influence. Four group leaders, popularly called Magazias (or GG loan group chairpersons) among the beneficiaries (1 from each zone) and 4 influential women among the non-beneficiaries were selected (1 from each zone) as well as 2 GG staff (Credit Officer on field and Finance Officer in the office) as key informants. In undertaking the interviews, various rankings (very low, low, high, very high / not at all, very few, few, many, all, etc) were key words noted down about the emphasis and ratings of effects of Grameen Ghana on beneficiaries. The key informant interview presented an advantage of open one-to-one question and answer session which was good for gathering greater details from the informant.

3.4 Validation and Reliability of Research Instruments

The purpose of the validation was to remove any obscure or ambiguous questions and to observe respondents' reactions to the questions which ensured the clarity and appropriateness of the measuring instrument. The instrument passed face and content validity:



3.4.1 Face Validity

Respondents were asked in the questionnaire to give a face value decision whether the (described) tests were good enough for us to understand effects of GG intervention on them. 78% of respondents agreed that the tests described to them would adequately measure the said effects.

3.4.2 Content Validity

This thesis supervisor and another lecturer from the same Department were requested to technically assess the validity of the tests/approaches used. They both made their assessments and suggested add-ons which were included in the final instrument used.

Reliability test to check the consistency of the measuring instrument over time was conducted using the test-retest method. The same set of questionnaires were given to the same purposively selected (20 beneficiary) respondents in the Zabzugu District at two points in time (an interval of seven days) and the scores were compared. The reliability coefficient was 0.81 which showed that the reliability of the questionnaire was good.

3.5 Data processing and analysis

This section looks at how data was processed, followed by the approaches used in analysis of the information to address the individual objectives of the study.

3.5.1 Data Processing

In processing data, respondents' feedback was sorted, grouped and ordered. This paved way for coding, as suggested by Bogdan and Bilking (1998) that, first ordering field data



and other information chronologically or by some other criteria, forms the basis for coding. Microsoft Excel was helpful in this process, by allowing entries of various feedback per cell, and various respondent sets by excel workbook.

In undertaking this research, already established estimation and processing instruments were used. Benchmark of evaluations were set, and the laid down process was therefore followed in processing data:

In the case of Food Consumption Score, the frequency of consumption of each food group was multiplied by an assigned weight for each group and the resulting values were summed to obtain the Food Consumption Score. The assigned weights for each food group (i.e., meat, milk, and fish = 4, pulses = 3, staples = 2, vegetables and fruits = 1, sugar and oil = 0.5) were determined by a team of analysts based on the energy, protein, and micronutrient densities of each food group (Jones et al, 2013). After this process, results for beneficiaries and non-beneficiaries were separately grouped and summarized by averaging the entire data into an indicator for the group. Other comparisons with individual scores were undertaken.

In the Nottingham Health Profile, items in each domain were assigned a weight; the total score for each domain was set to be 100, where a score of 0 indicates good subjective health status and 100 indicates poor subjective health status.

The Nottingham Health Profile total score was obtained by averaging the six domain scores (Hunt et al, 1980). The domain scores were further averaged per group to obtain beneficiaries' and non-beneficiaries' NHP scores to allow for both individual and group comparisons.



Average Years of Schooling data was processed by averaging the number of years of first child schooling for beneficiaries and non-beneficiaries per zone of the four zones the district was divided into (Reference to Chapter 3, map in Figure 3.3 above).

The Likert Scale data was processed by counting the number of choices per rank for beneficiaries, and same done for none beneficiaries. For example, the number of respondents who chose that access to Grameen Ghana loans was 'not easy at all' for beneficiaries was 8, and that for non-beneficiaries was 12.

3.5.2 Data Analysis

Data collected were analyzed with the use of descriptive statistics; frequencies, averages and percentages. In analysis, the 'with' and 'without' approach was applied by comparing responses from Grameen Ghana microfinance beneficiaries and non-beneficiaries to establish whether beneficiaries were generally better off than non-beneficiaries or otherwise.

Household Food Security Survey model (HFSS), Nottingham Health Profile (NHP), and the Average (Completed) Years of Schooling Assessment (AYSA) were used in assessing relative food security, health and education of children of respondents amongst beneficiaries and non-beneficiaries.

Objectives 1 and 2 were analyzed by comparing the HFSS, NHP and AYSA indicators of beneficiaries to non-beneficiaries. In this case, the net effects of the pairs of indicators revealed the extent of poverty reduction or otherwise (objective 1), and differentials in aspects of the lives of beneficiary sheanut processors indicated differentials in effects of GG intervention on beneficiaries (objective 2).



Objective 3 was analyzed using results of the Likert Scale as a basis for frequencies and percentages that summarized the impression of respondents regarding accessibility of GG micro-credit.

3.5.3 Poverty Benchmarks and hypothesis testing

To test the study hypotheses, we need to compare our research finding for FCS, AYS and NHP to a benchmark or standard agreed cut-off point. In this regard, for the purposes of this study, a person is said to be poor if he falls into any two or more of the following categories:

I. NHP > 50

That is, should the person's subjective health level as measured by the Nottingham Health Profile fall below average. NB: Worst health case is 100 NHP

II. FCS < 84.4

"Poor" food security scores reflect the fact that households may be falling short of consuming at least one staple food and one vegetable each day of the week. This is the standard applied by the WFP.

III. AYS < 4 years

That is if the respondent is unable to sustain her first child through two-thirds of basic primary education of six years. This is in line with Ghana Education Service' standard 6 years primary education.



These benchmarks shall apply to both beneficiaries and non-beneficiaries to ensure a level playing field for the treatment and control groups respectively.



CHAPTER FOUR

RESULTS AND DISCUSSION

The study sought to find the relationship between the poverty situation of sheanut processors estimated by change patterns on food security, health and education (confirmed by true effects on real social life) of respondents in Northern Region and Grameen Ghana intervention. It details the effects of Grameen Ghana in providing micro-loans to sheanut processors in Zabzugu District, Northern Region. The study captured these effects using questionnaires and key informant interviews to gather data and the comparative research approach of ‘with’ or treated, and ‘without’ or control groups for data analysis within the framework of quasi-statistics as espoused by LeCompte and Preissle (1993). This chapter presents and discusses findings of the study based on the individual objectives it set out to achieve. The discussions of the research results will be largely based on established benchmark of poverty indicators already discussed in the research design section of this dissertation.

4.1 Food Consumption Scores

FCS measures food security of particular regions and people. In this study, it was adopted to shed light on nutrition and food security situation of beneficiaries and non-beneficiaries of Grameen Ghana micro-credit, so as to compare the two and decipher if micro-credit enhances food security situation of beneficiaries or not.

After responses from the questionnaires were grouped separately for beneficiaries and non-beneficiaries, an average of the scores were taken per category to aid easy comparison. Upon collation of the data and processing, the results are summarized in Table 4.1 below.



Table 4.1: FCS for beneficiaries and non-beneficiaries of GG

Food Group	Weight	Beneficiaries		Non-Beneficiaries	
		Average Frequency	Weighted Score	Average Frequency	Weighted Score
Staples	2	15	30	15	30
Pulse	3	8	24	4	12
Vegetables	1	7	7	2	2
Fruit	1	7	7	2	2
Meat & Fish	4	8	32	5	20
Diary	4	7	28	2	8
Sugar	0.5	7	3.5	3	1.5
Oil	0.5	7	3.5	1	0.5
Total			FCS(b)=135		FCS(n)=77

Source: Field data, 2016

Table 4.1 above shows the FCS of beneficiary and non-beneficiary respondents. It is clear that the beneficiaries are more food secured and enjoying a better-balanced diet than the non-beneficiaries. However, it was still imperative that we get specific benchmark of the FCS to establish this firmly. Whiles beneficiaries maintained a very good balanced diet across the food groups, non-beneficiaries were found deficient in some food groups such as oil, dairy products, vegetables and fruits. Their weekly consumption of pulse and sugar



food groups were also not good enough, though much better than those of immediate past mention.

“Poor” food security scores reflect the fact that households may be falling short of consuming at least one staple food and one vegetable each day of the week, and that, “acceptable” scores are based on an expected daily household consumption of oil and pulses in addition to staples and vegetables (Jones et al, 2013). Figuratively, this implies that, the FCS value of, or lower than 84.5 is suffering from food insecurity, and FCS of 112 or more are having adequate food:

$$84.5 \geq \text{FCS} \geq 112$$

In-between these two are people that can best be described as partially food secured. From table 4.1 above, it is quite clear that the beneficiaries are in the food security safe zone, while the non-beneficiaries are in the food security danger zone. The fact that none of the two sets of respondents falls into the partial zone demonstrates remarkable improvements in food accessibility or greater affordability for Grameen Ghana beneficiary sheanut processors over their non-beneficiary counterparts; a very good indicator that Grameen Ghana has positive effects on poverty levels of beneficiary sheanut processors. This finding was confirmed in a Ghana study by Mc Nally & Dunford (1998) in which micro-credit participants reported a reduced vulnerability to the ‘hungry season’, relative to the baseline period, compared to non-participants.

This finding is significant in answering the research question ‘has GG improved the livelihoods of women beneficiaries in Zabzugu District?’. The response from the research



results is a yes. It also addresses the research objective of determining the contribution of GG to poverty reduction in Zabzugu over the past five years. The effect is that, GG has made beneficiaries food secure as compared to their counterpart non-beneficiaries who are food insecure as seen in table 4.1 above.

It is vital to point out that the averaging covered up for some three (3) respondent beneficiaries who, individually, fell into the partially food-secured category alongside even fewer (two) non-beneficiaries. The point here is that, the benefits of the Grameen Ghana intervention may be very good overall, but its effect on food security for beneficiaries is ununiformly biased towards greater food security. This results also suggests that Grameen Ghana affects beneficiaries in remarkably different ways as this was one of the objectives this study set out to achieve, and therefore constitute a rejection of hypothesis Ho₂ , which postulates otherwise. While most beneficiaries are adequately food secure, a very small fraction are only partially food secure. There is therefore significant positive relationship between GG intervention and poverty reduction among shea-nut processors and so, we reject hypothesis Ho₁.

4.2 Nottingham Health Profile

It is a subjective estimation of the health status of an identifiable group of people within a period. As an established concept, predetermined weights have been set for the various subareas of the health profile (shown in appendix). Table 4.2 below illustrates the results from respondents.



Table 4.2: NHP values for beneficiary and non-beneficiary respondents

Domain	Beneficiaries	Non-Beneficiaries
	Weighted Score	Weighted Score
Physical Mobility	43	87
Social isolation	29	84
Emotional	61	87
Pain	38	99
Sleep	40	56
Energy	18	99
NHP	38.2	85.3

Source: Field data, 2016

Here, 38 standard questions grouped into six domains: physical mobility (eight items); social isolation (five items); emotional reactions (nine items); pain (eight items); sleep (five items); and energy (three items) (refer to questionnaire) were answered by respondents, by stating yes or no, to represent presence of condition or otherwise. The NHP total score is obtained by averaging the six domain scores. Please refer to appendix I for weight allocation per question.

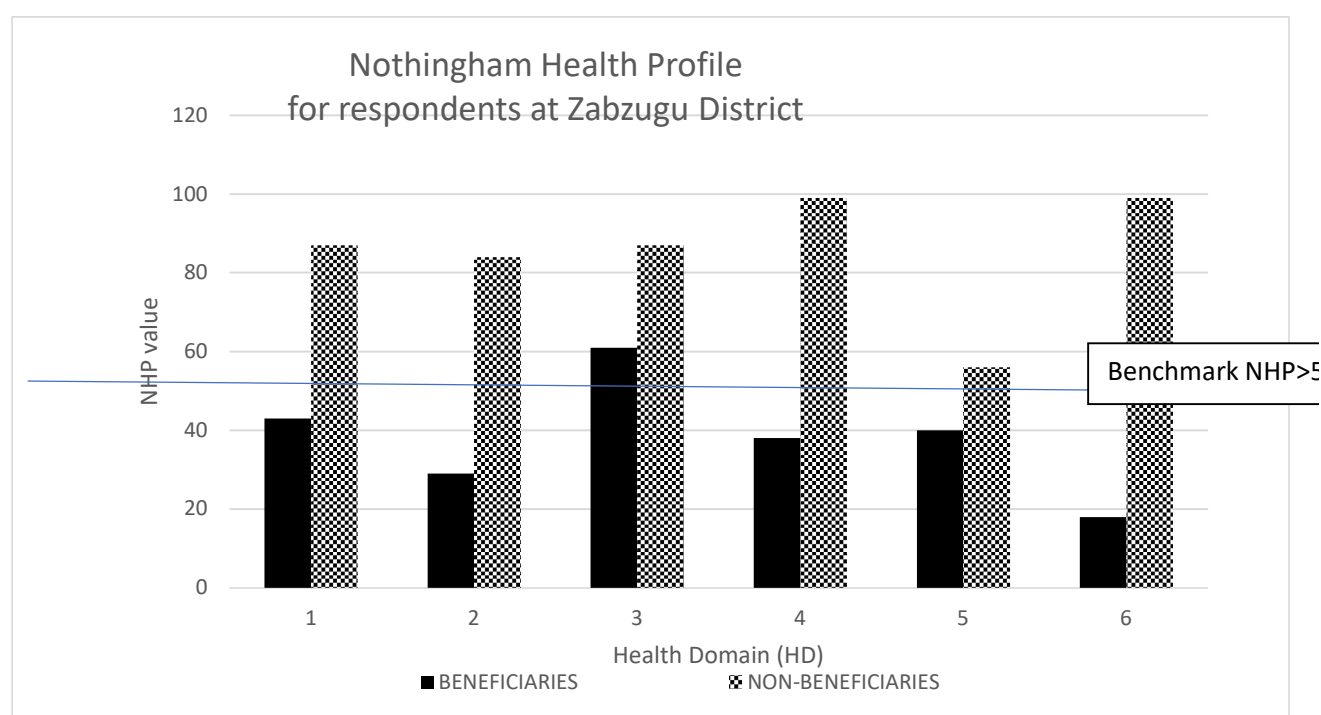
The results indicate that beneficiary respondents were healthier, with a total score of 38.2, than non-beneficiary respondents (total score = 85.3). The total score for each domain is 100 where a score of 0 indicates good subjective health status and 100 indicates poor subjective health status. The gap between the two NHP values for beneficiaries and non-beneficiaries is 47.1 ($85.3 - 38.2 = 47.1$), demonstrating that beneficiaries are 47.1% subjectively healthier than their non-beneficiary counterparts.



It also shows that while the subjective health gap between the beneficiaries (treatment group) and non-beneficiaries (control group) was wider for energy domain (18-99), it was quite close on emotional domain (61-86). It is possible to safely conclude on this evidence that the subjective emotional status of women beneficiaries is quite remote from their subjective physical well-being.

This is demonstrated graphically below in Figure 4.2.

Table 4.2: NHP values for beneficiary and non-beneficiary respondents



HD: 1= physical mobility, 2= social isolation, 3=emotional reactions, 4=pain, 5=sleep, 6=energy

Source: Field data, 2016

As shown in fig. 4.2 above, Grameen Ghana beneficiary respondents were subjectively more than twice as healthy as the subjective health status of their non-beneficiary counter-



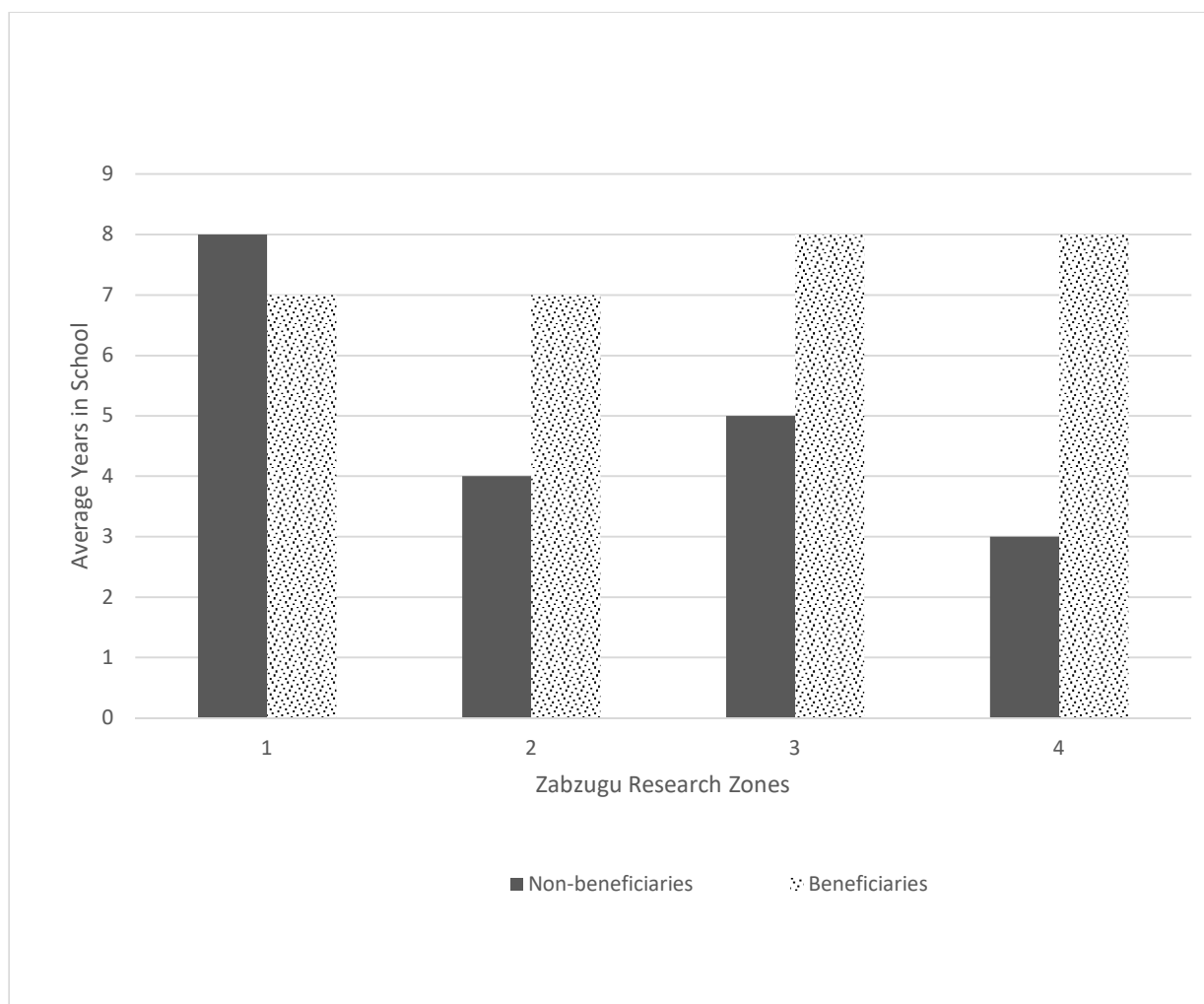
parts. This answers the research question regarding whether GG has contributed to improving poverty levels of beneficiaries. The determination above that beneficiaries are twice as subjectively healthy as non-beneficiaries also satisfies the research objective to determine the contribution of Grameen Ghana's microcredit scheme to poverty reduction among sheanut processors in Zabzugu, Northern Region, over the past five years. This becomes clearer when we use the set benchmark of poor NHP>50, as seen in the graph above. To this end, we confirm the rejection of H_{01} hypothesis that claims no link between GG microloans and poverty situation of beneficiaries.

Average Years of Schooling Assessment

Respondents indicated the number of years their first child had been in school. This was averaged per research zone of the district as indicated in Figure 3.3 above. The results of this is displayed in fig. 4.3 below.



Fig 4.3: Years in School for 1st Child



Source: Field data, 2016

Figure 4.3 depicts how remarkably well Grameen Ghana beneficiaries are able to keep their wards in school for the most parts in Zones 2, 3 and 4. Zone 1, which covers the largest portion of the Zabzugu main township is an exception. This could be due to the fact that more diverse economic activities take place there. Bicycle and motorbike repair works, mobile money services, transportation and similar town-like ventures are available here and adds to the mix to dilute the effects of Grameen Ghana intervention vis-à-vis non-



beneficiaries who may be involved in or affected by other economically viable job roles. This particular result from Zone 1 also suggests that GG is more effective in rural agrarian settings, and that in peri-urban areas the outcomes may not be the same. This finding constitutes a rejection of the second hypothesis H_{02} of this study which postulates that GG affects beneficiaries in the same way.

In spite of this, overall, beneficiaries had an average of 4 years more education than non-beneficiaries. Indicating that women sheanut processors who were Grameen Ghana beneficiaries were better able to afford school fees for their wards than their non-beneficiary counterparts. Using our $AYS < 4$ years benchmark, it is clear that beneficiaries are better able to educate their children than non-beneficiaries. This satisfies the research objective of determining the contribution of Grameen Ghana's microcredit scheme to poverty reduction among sheanut processors in Zabzugu.

This finding is consistent with the results obtained on school drop outs in which 3 out of every 10 non-beneficiaries' children were reported to have dropped out of school over the past five years, compared to just 1 out of 10 for Grameen Ghana beneficiary's children. This finding is also similar to that of Barnes & Keogh (1999), who found in their study that, members of microfinance borrower households had on average one year of education more than those of non-beneficiary households. The

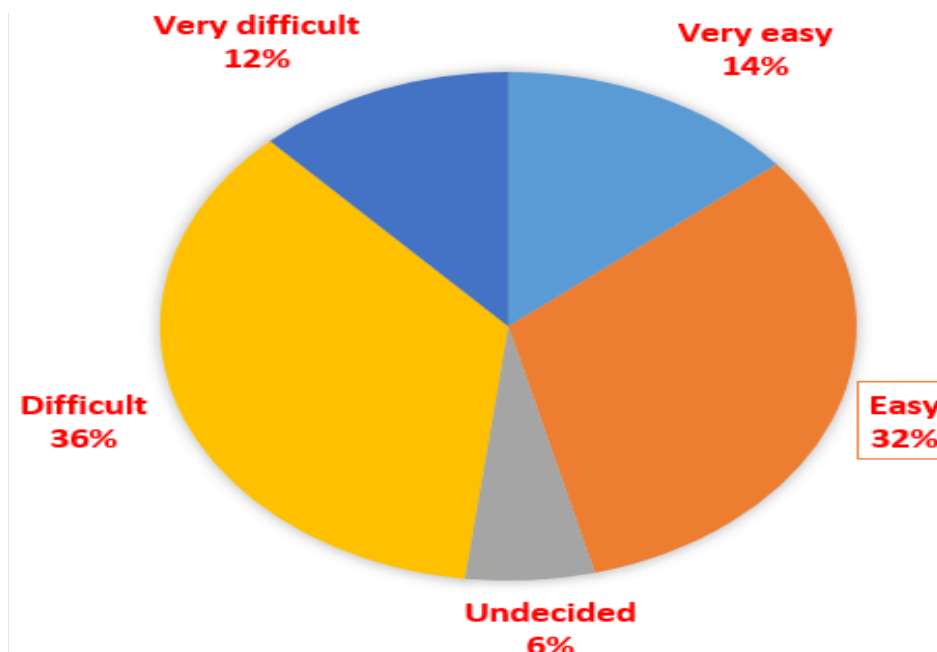


Accessibility of Grameen Ghana

It was discovered that accessibility was restricted to women only. The rationale was that women were most affected by poverty due to their household and children-catering traditional duties. To this end, they formed women groups numbering between 5 and 6 who were registered, trained, tested and trimmed before disbursement. Therefore, the accessibility was rightly examined on women respondents as comprised in the composition of this research work which already had women only as respondents.

Respondents were asked directly to state in a 5-point Likert scale their perception or experience about the accessibility level of GG intervention. Results on Likert Scale on accessibility of respondents to Grameen Ghana micro-credit is shown in figure 4.4 below.

Fig 4.4: Accessibility of GG micro loans to respondents



Source: Field data, 2016



While figure 4.4 indicates the overall impression of respondents that GG is relatively inaccessible, i.e., up to 48% (36+12) for difficulty in accessibility compared to 46% (32+14) who deemed it easily accessible. This is determinate of the inaccessibility of Grameen Ghana loans to sheanut processors over the past five years as set out to be investigated in the objectives of this study. On this basis we accept the hypothesis H_{03} which postulates that Grameen Ghana microloans are inaccessible to sheanut processors.

As a way of differentiating accessibility as assessed by the treatment and control groups, it became important to determine the differential rankings of Grameen Ghana accessibility among the beneficiaries and non-beneficiaries respectively. This is illustrated in table 4.4 below.

Table 4.4: Ranking of GG accessibility

Rank of GG accessibility	Beneficiaries	Non-beneficiaries
Very easy	19%	10%
Easy	41%	22%
Undecided	1%	10%
Difficult	29%	43%
Very difficult	10%	14%

Source: Field data, 2016

Table 4.4 above depicts a sharp contrast in the ranking of the accessibility of Grameen Ghana micro-credit to respondent shea-butter processors. Whereas 60% of respondents



who were Grameen Ghana beneficiaries (19% + 41%) felt accessibility was easy, only 32% of non-beneficiaries (10% + 22%) felt accessibility was difficult.

In contrast, whereas 57% (43% + 14%) of Grameen Ghana non-beneficiary respondents indicated it was difficult, only 39% (29% + 10%) of respondents who were Grameen Ghana beneficiaries indicated it was difficult. This sharp contrast in assessment of accessibility is an indication of a disagreement between the 'with' and 'without' groups regarding how easy it was to take a loan from Grameen Ghana as a woman sheanut processor.

This research also found out that up to 10% of Grameen Ghana non-beneficiary women in shea-butter processing were undecided as to whether the intervention was accessible or not (compared to just 1% of beneficiaries). With such high uncertainty levels, it is quite plausible to deduce that the ranking of low accessibility from non-beneficiaries were not based on perception, but rather the lack of perception. This was due to ignorance either of the existence of the intervention or of specific requirements of Grameen Ghana to access micro-credit from them.

Beneficiaries who ranked Grameen Ghana low on accessibility indicated that the process of acquiring the second loan was quite rigorous. They felt that with initial successful repayment of their first loan, subsequent loans should not have come with strict procedures and much struggles at all. Overall, therefore, Grameen Ghana was found to have a limited accessibility of only 46%, and it can be concluded that Grameen Ghana was relatively inaccessible.

This finding is in line with earlier studies highlighting the problem of limited access to credit, particularly by entrepreneurs in less developed countries. According to Aryeetey et



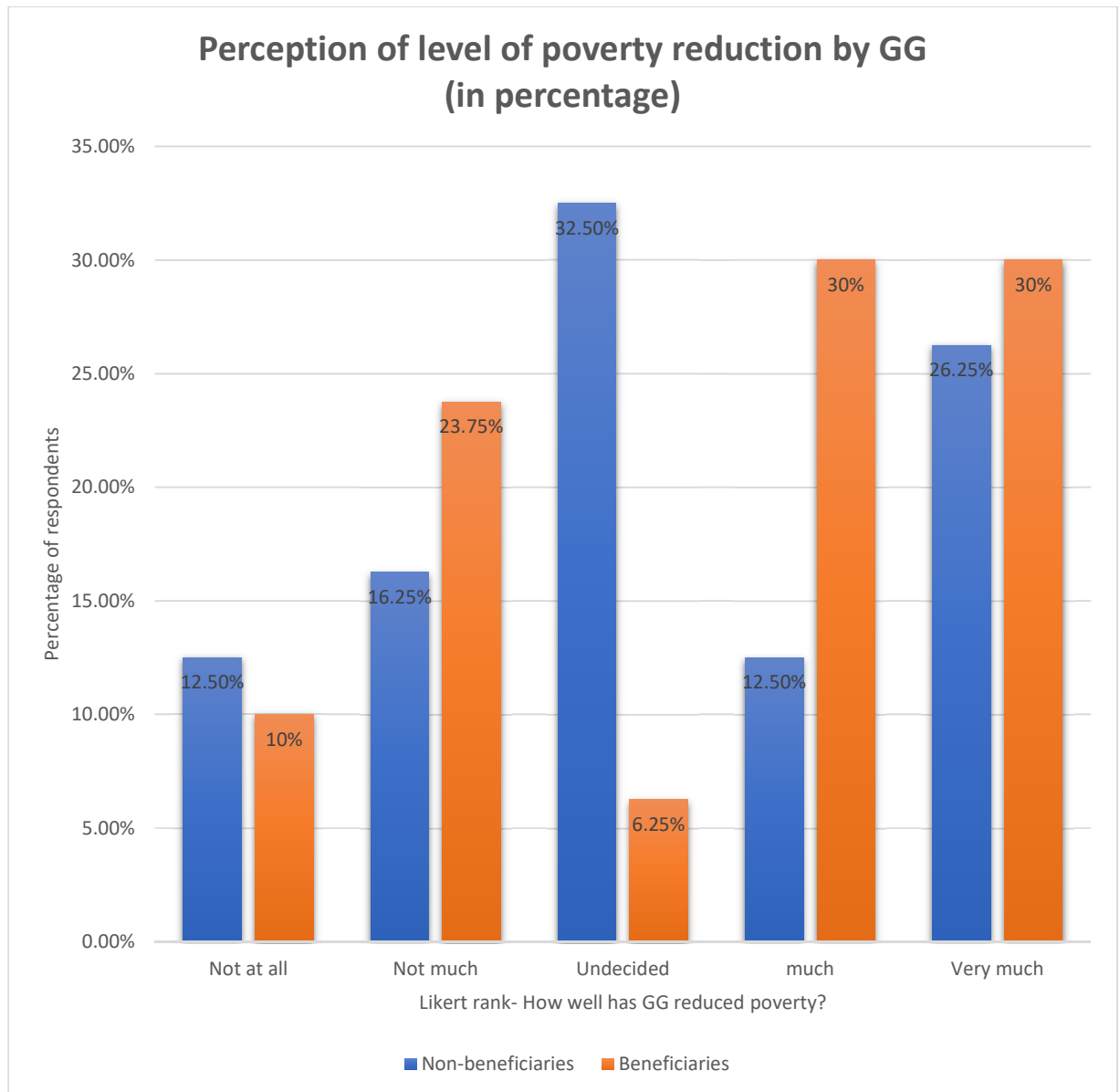
al (1994), between 24% and 52% of entrepreneurs in Ghana are credit constrained. A study by Parker et al (1995) also confirms this finding, that the majority of the poor are unable to access credit to improve their economic and social well-being.

Poverty Reduction by Grameen Ghana

Poverty level is a key focus of Grameen Ghana. Figure 4.5 below indicates how respondents viewed Grameen Ghana's intervention relative to poverty reduction.



Fig 4.5: Perception of poverty reduction



Source: Field data, 2016

From fig. 4.5 above, it is evident that the percentage of respondents who rated Grameen Ghana as having reduced poverty was much greater than those rated otherwise: (30%+30%=) 60% of beneficiaries and (26.25+12.5%=) 38.75% of non-beneficiaries



indicated that Grameen Ghana reduced poverty ‘much’ or ‘very much’; conversely, only $(10\%+23.75\%=)33.75\%$ of beneficiaries and $(12.5\%+16.25\%=)28.75\%$ of non-beneficiaries indicated the intervention did not reduce poverty. All the key informants agreed that non-beneficiaries of Grameen Ghana got indirect benefits from the activities of the beneficiaries, including borrowing money and tools from them.

Also, from fig. 4.5, a good number of non-beneficiaries (representing 32.5%) were undecided, largely because, they had not personally benefited from a loan from Grameen Ghana and were not ready to decide for those who were beneficiaries. Only 6.25% of the beneficiaries were unsure whether Grameen Ghana’s micro-credit had enhanced their economic condition or not. This looked strange. While we can attribute non-beneficiary doubting of Grameen Ghana’s poverty reduction ranking to their ignorance or and lack of involvement, over 6% who were direct beneficiaries could not be doubting whether the intervention was good in reducing poverty or not.

Again, quite peculiar, among non-beneficiary respondents, were some 12.5% of them who opted for Grameen Ghana intervention not reducing poverty at all. They claimed that some of the beneficiaries were still struggling. This claim, was interrogated very much during the key informants’ interviews and was confirmed. One woman indicated that the beneficiaries of Grameen Ghana even borrow from her sometimes to make up for their micro-credit repayments. Further interrogation on this finding from beneficiaries established that the burden of the interest weighed down much on their profits. Two



particular beneficiaries even claimed that there are times they have to dip into their capital to make up for repayments when sales are low.

Juxtaposing this finding against our results from the Food Consumption Score, Nottingham Health Profile and the Average Years of (first child) Schooling, it is quite revealing that micro-credit improved the well-being of beneficiaries, relative to non-beneficiaries, but did not adequately improve their economic capacity to lift them out of poverty. This conclusion was arrived at after profiling the length of years of borrowing and compared to individual scores from the FCS, NHP and AYS. Table 4.5 shows the number of years respondents had benefited from Grameen Ghana intervention.

Table 4.5: Period of GG intervention to beneficiaries

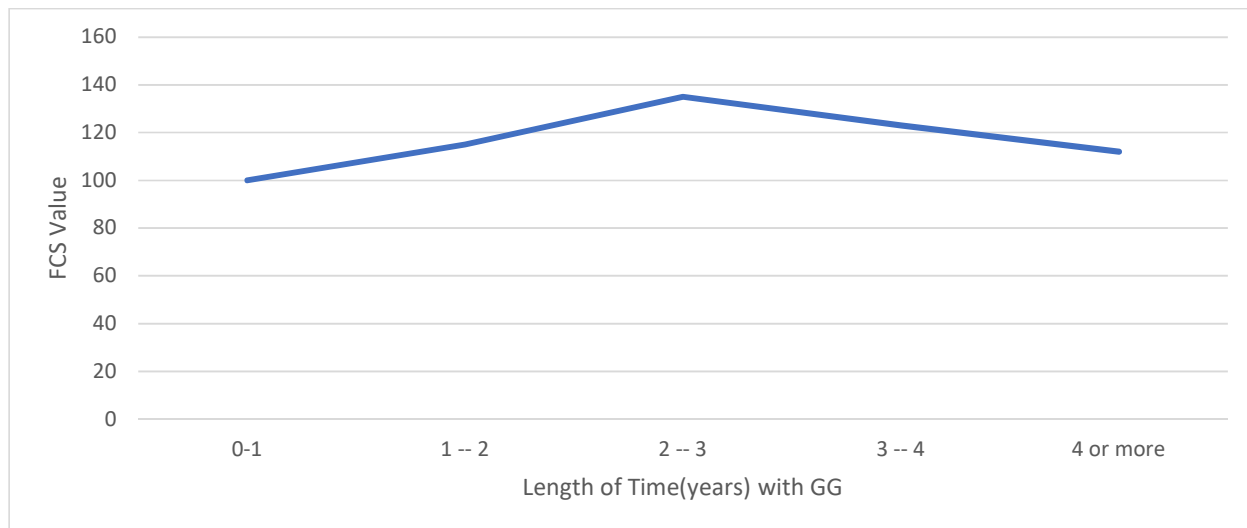
Duration on Intervention	No. of GG Beneficiaries	FCS
Less than a year	19	100
More than a year but not up to two years	28	120
Between two and three years	18	138
More than 3years but not up to four	9	120
Four years or more	6	112

Source: Field data, 2016



When these beneficiaries were examined regarding their FCS, NHP and AYS scores, the results are displayed in fig. 4.6, 4.7 and 4.8 below:

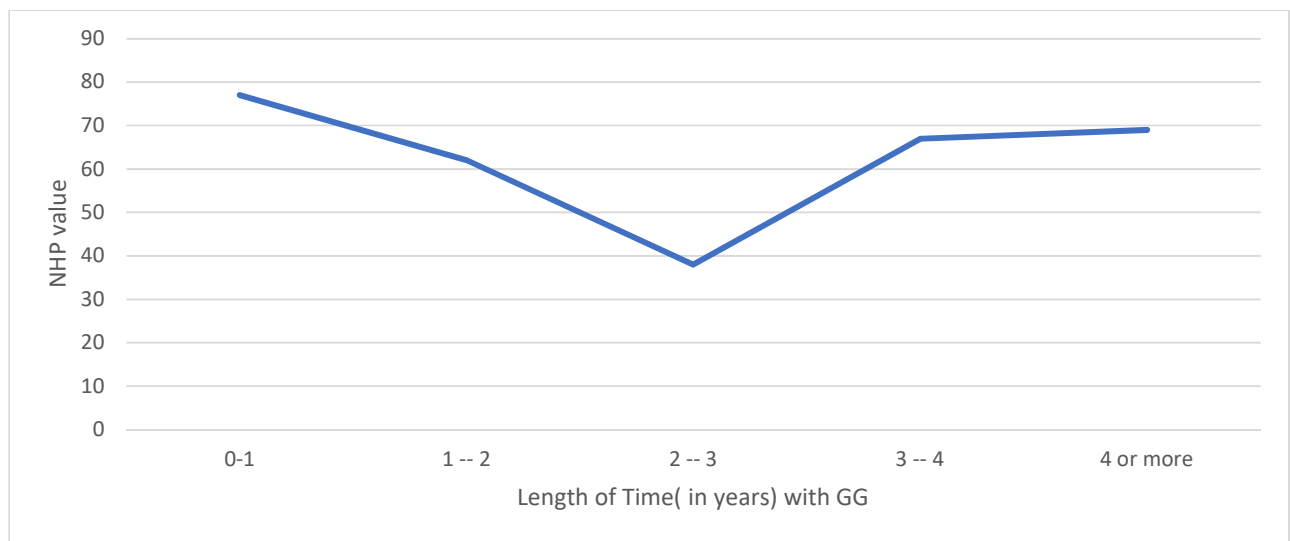
Fig 4.6: beneficiaries' FCS for various periods



Source: Field data, 2016

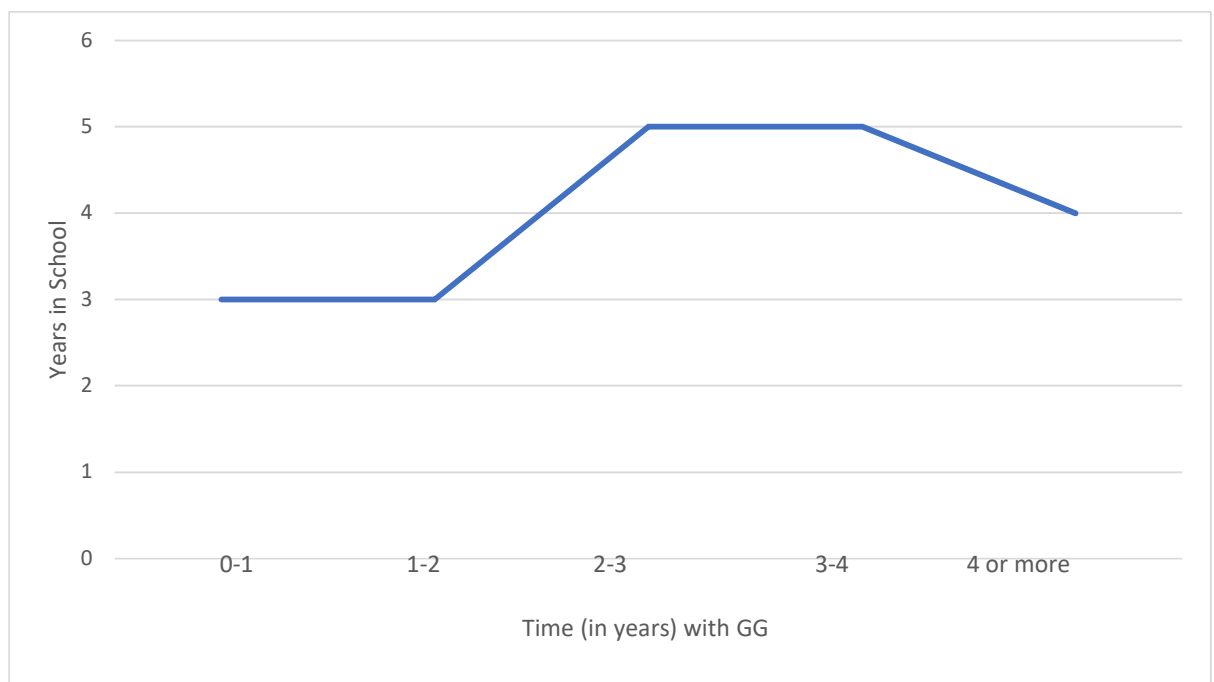


Figure 4.7: Beneficiaries' NHP score for various periods



Source: Field data, 2016

Fig 4.8: Beneficiary AYS over time for various periods



Source: Field data, 2016



Figures 4.6, 4.7 and 4.8 above indicate a higher improvement in living standards for new beneficiaries and marginally lower standards of well-being for those beneficiaries who have reached 4 years or more with Grameen Ghana: Food Consumption Score for those who had been 2-3 years exceeded 130, but was 112 for those who have been on the intervention 4 years or more; The Nottingham Health Profile was also worse off for those four years or more, at 69 instead of 38 that those 2-3 years with Grameen Ghana had; even the Average years of (child) Schooling was lower for beneficiaries who have stayed on for four years or more compared to between 2-3 years by 1 year.

Indeed, regarding education for instance, the EPPI Centre (2010) did a study in which they found that the impact of micro-credit and micro-savings on education was varied, with limited evidence for positive effects and considerable evidence that micro-credit may be doing harm, negatively impacting on the education of clients' children.

These results lend much credence to the notion of Ledgerwood (2013) that microcredit works at household management of risks and investments, rather than the targeted business directly. That is, microfinance is very good at providing capacity to better manage the effects of poverty but does not actually reduce it.

According to the Food and Agricultural Organisation of the United Nations, 'poverty cannot be eradicated without addressing the pervasive inequalities in incomes and economic opportunities between and within countries, between rural and urban areas, and between men and women. Reducing such inequalities will need to start with improving access for the poor to productive resources, basic services and social protection' (FAO, 2015).



Furthermore, Stalwart et al (2010), found evidence to suggest little impact of micro-credit on food security and went on to conclude that even that evidence was not across board.

This finding is, however, contrary to the findings of hanker (2005) who found that people who stayed longer in a micro-credit program had better benefits than new entrants. This was because the longer you stayed the more likely it was that your business would have expanded further to enable you fully annex the potential of the funds disbursed. Beyond these, those who stay long on the intervention would enjoy more training sessions both technically on quality shea-butter production and administratively on lessons of how to manage their business. These enhanced their capacity to be more productive and profitable.



CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary

The overriding purpose of this study was to assess the effects of Grameen Ghana's micro-finance activities on poverty reduction among rural sheanut processors in Zabzugu District. To this end, an assessment of the contribution of Grameen Ghana's intervention to poverty reduction directly and indirectly through micro-loans was carried out to find out how accessible such loans were to the sheanut processors and determine how it affects the living standard patterns of beneficiaries and non-beneficiaries as an estimate of their differences in poverty situation.

The rationale for this research was to assess micro-credit since it is seen as a step to enhancing poverty reduction and also serves as a bridge to eradicate inequality of various forms in Zabzugu district. The specific findings per objective are treated below.

Objective 1 sought to determine the contribution of Grameen Ghana's microcredit scheme to poverty reduction among sheanut processors in Zabzugu, Northern Region, over the past five years.

Whiles the Likert Scale analysis showed that respondents largely felt that GG had affected their livelihoods positively, the FCS, NHP and AYS indicators revealed that after about four years, such positive effects begin to erode.

Objective 2 sought to describe how Grameen Ghana microloans affect beneficiaries differentially. This study revealed sharp contrasts in beneficiary use of microloans from



GG and varied living standards among same. Accordingly, it came to light that beneficiaries who were very poor tended to use microloans from GG to fend for household expenses rather than investing in their businesses.

Objective 3 sought to determine accessibility of Grameen Ghana loans to sheanut processors over the past five years. Overall, Grameen Ghana was found to have a limited accessibility of only 46%, and it was thus seen as relatively inaccessible (using >50% as criterion).

5.2 Conclusions

The study found that Grameen Ghana contributed to the increment in living standards, as compared with non-beneficiaries. This researcher, however, found that this improvement was inadequate to lift the shea-butter processors out of poverty. This conclusion was confirmed by the fact that long-standing beneficiaries had a trend of lower living standards compared to the levels of those in the early years of the programme.

To determine how easy sheanut processors could access Grameen Ghana microloans, we interviewed beneficiaries on how difficult/easy it was for them to get to join the intervention. While most beneficiaries agreed that it was easy to access micro-credit based on a good selection criterion by Grameen Ghana, majority of the non-beneficiaries felt the intervention was quite inaccessible with stringent selection criteria. Since accessibility has more to do with those who haven't joined wanting to join, and even those on the program wanting to access more funds, we concluded that, the intervention was largely inaccessible.





Based on the AYS data analysis for research zone 1 relative to the remaining 3 zones, this work also concluded that the effects of microloans from Grameen Ghana is minimal when exposed to an environment of diverse economic opportunities beyond farming and lower-end trading. This conclusion was consistent in comparison of zone 1 to all the other three zones: In Zone 1, Grameen Ghana beneficiaries are lagging behind non-beneficiaries in their children's AYS, while in all the other 3 zones, Grameen Ghana beneficiaries are well off in children's AYS than non-beneficiaries. The economic environment of the other 3 zones are similar to each other in terms of being rural and largely agrarian, as opposed to the economic condition of zone 1 which has a peri-urban economy with diverse economic activities and greater opportunities to create wealth.

Comparing NHP statistics for women beneficiaries and non-beneficiaries, this study also found that the greater energy level differences between the two could not account for the rather low differences in emotional reactions/status. We thus conclude that the emotional state of women is not directly affected by the level of health in terms of physical fitness and their availability of energy. This resonates even in their ability to sleep relatively more soundly even in distress, as demonstrated in the study.

The FCS showed us that Grameen Ghana beneficiaries were generally out of danger of food insecurity and mal-nutrition whereas non-clients were not. We can safely conclude on this basis that (as later confirmed in the study), microfinance interventions such as Grameen Ghana are only good at supporting the poor to address the emergencies of poverty, such as access to food and basic healthcare, but are incapable of bringing them out of poverty. The profit margins are split between meeting household emergencies

(recurrent) and interest payment to Grameen Ghana (recurrent), leaving very little or no gap for the prospects of investing to grow their businesses.

5.3 Recommendations

5.3.1 Recommendations for sheanut processors

- a. Group savings in very small amounts but regularly (such as susu), can offer a good escape route for sheanut processors from the poverty cycle, rather than over reliance on microloans. Small savings can offer an alternative funding source for family emergencies without the added burden of interest payments and related charges that erode the gains of microloans.
- b. Accessibility to profitable markets is just as important as access to microloans from GG, if not more important. Getting competitive pricing from unexploited markets such as foreign buyers can offer higher prices and bigger profit margins. This is critical in off-setting interest charges and household expenses, and possibly, avail some funds for expanding the business of sheanut processing.

5.3.2 Recommendation for Grameen Ghana

- a. The findings from this research proved that the work of Grameen Ghana in providing micro-credit has been effective in a limited way to enable women shea-butter processors manage the incidence of poverty. This should encourage Grameen Ghana to improve its funding sources to include even local ones to further expand its activities.
- b. A savings model should be instituted to instill the culture of savings into beneficiaries. This can serve as a wean-off strategy to graduate very successful



beneficiaries off the program, to the extent that their savings can serve as a form of revolving fund to them. This has the tendency to also improve the ease of extension of the intervention to allow for greater accessibility.

- c. A sales point can be organized in Tamale for sheanut products of beneficiaries. This can be formalized and streamlined to allow for online-purchases out of the metropolis, and face to face purchases within the metropolis. With the improved quality and a little marketing, the demand for the shea-butter would be increased. This holds potential not only for increased sales, but possible price increases to inure to the benefit of processors.

5.3.3 Recommendation for practitioners in general

Given that this study provides a basis for concluding that micro-credit contributes to poverty reduction, albeit, with limited significance, defining the attributes that constitute poverty reduction into details in the area of development microfinance would prove to be valuable to the practitioners. Development practitioners can test with different funding focuses to know which attributes are most affected. Such an effort would enable microfinance practitioners to drive microloans towards more targeted areas that will speed up this process.

5.3.4 Recommendations for Research

The following recommendations are offered for related research in the field of development microfinance:

- a. Given the changing nature of effects of microfinance, a series of longitudinal studies based on this model, would document trends and thereby increase the



coverage period to assess impact of microloans on operational communities, and not restrict to only effects, as is the case in this study.

- b. The study pointed to a direction of improved household stature for women who are culturally allowed minimal role in household decision-making. It would be interesting to delve into household decision dynamics of women beneficiaries from microfinance in Northern Ghana.

5.3.5 Recommendations to policy makers

- a. In view of the critical role financial NGOs play in the fight against poverty and deprivation, the Bank of Ghana should relax minimum capital requirements and other restrictive policies that has the tendency to crowd out credit to the disadvantaged in society.
- b. Based on the finding of reduced benefits after a couple of years of rising benefit, some elements of extortion, particularly regarding exorbitant interest rate and other charges may be negatively affecting beneficiaries. The Bank of Ghana is encouraged to undertake more regular checks on Financial NGOs with a view to reducing the interest burden or other loan conditionalities that adversely affect their clients.



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Appendices

Appendix 1

Questionnaire

Name:.....

House

No.....

Sex: ☐ Male ☐ Female ☐ GG: Beneficiary ☐ Non-Beneficiary

Age:

Food Consumption Score

How many times do you consume the following food groups in a week?

1. "staples," which include foods as diverse as maize, rice, sorghum, cassava, potatoes, millets etc; times
2. Pulses; ... times
3. Vegetables; times
4. Fruit; Times
5. meat and fish; times
6. dairy products; . . . times
7. Sugar ... times
- and 8. oil.... Times

Nothingham Health Profile

Part I

Weight Section

- | | | |
|--------------------------------|-----|----|
| 4. I'm tired all the time. | Yes | No |
| 5. I have pain at night. | Yes | No |
| 6. Things are getting me down. | Yes | No |



7. I have unbearable pain.	Yes	No
8. I take pills to help me sleep.	Yes	No
9. I've forgotten what it's like to enjoy myself.	Yes	No
10. I'm feeling on edge.	Yes	No
11. I find it painful to change position.	Yes	No
12. I feel lonely.	Yes	No
13. I can walk about only indoors.	Yes	No
14. I find it hard to bend.	Yes	No
15. Everything is an effort.	Yes	No
16. I'm waking up in the early hours of the morning. Yes	Yes	No
17. I'm unable to walk at all.	Yes	No
18. I'm finding it hard to make contact with people.	Yes	No
19. The days seem to drag.	Yes	No
20. I have trouble getting up and down stairs.	Yes	No
21. I find it hard to reach for things.	Yes	No
22. I'm in pain when I walk.	Yes	No
23. I lose my temper easily these days.	Yes	No
24. I feel there is nobody that I am close to.	Yes	No



25. I lie awake for most of the night.	Yes	No
26. I feel as if I'm losing control.	Yes	No
27. I'm in pain when I'm standing.	Yes	No
28. I find it hard to get dressed by myself.	Yes	No
29. I soon run out of energy.	Yes	No
30. I find it hard to stand for long (e.g., in kitchen).	Yes	No
31. I'm in constant pain.	Yes	No
32. It takes me a long time to get to sleep.	Yes	No
33. I feel I am a burden to people.	Yes	No
34. Worry is keeping me awake at night.	Yes	No
35. I feel that life is not worth living.	Yes	No
36. I sleep badly at night.	Yes	No
38. I'm finding it hard to get along with people.	Yes	No
39. I need help to walk about (walking)	Yes	No
40. I'm in pain when going up or down stairs.	Yes	No
41. I wake up feeling depressed.	Yes	No
42. I'm in pain when I'm sitting.	Yes	No



Part II

Is your present state of health causing problems

with your:

43. Work? (that is, paid employment) Yes/No

44. Looking after the home? (cleaning, repairs etc.) Yes/No

45. Social life? (going out, friends, to movies etc.) Yes/No

46. Home life? (that is, relationships at home) Yes/No

47. Sex life?

Yes/No

48. Interests and hobbies? (sports, arts and crafts etc.) Yes/No

49. Vacations? (summer vacations, weekends etc.) Yes/No

Average Years of Schooling

50. How many years has your first child been in school?

51. Is your first child still in school or dropped out? Out In

Likert Scale

Rate the following



52. I can access GG loans:

Very easily Easily Undecided Not easily Not easily at all

Why.....

53. Grameen Ghana has reduced poverty level among sheanut processors:

Very much Much Undecided Not much Not at all

Why.....

54 How long have you been accessing funding from GG

Less than a year

more than a year but not up to two years

two years or more

56 How many times have you accessed loan from GG

1	2	3	4	5 or more
---	---	---	---	-----------

57 What is your accumulated amount accessed from GG

1,000 or less	Between 1,000 and 2,000	Between 2,000 and 3,000	3,000 or more
---------------	----------------------------	----------------------------	------------------



58. Do you think the tests (described to you) can adequately measure effects of GG on you?

YES

NO

