2006

CODESRIA

Dissertation By
SAMUEL KWESI
NDZEBAH

UNIVERSITY OF CAPE
COAST

IMPACT ASSESSMENT OF MICROCREDIT PROGRAMMES ON SOCIO-ECONOMIC LIFE OF WOMEN IN THE RURAL FARMING COMMUNITIES IN CENTRAL REGION OF GHANA

2006

UNIVERSITY OF CAPE COAST

IMPACT ASSESSMENT OF MICROCREDIT PROGRAMMES ON SOCIO-ECONOMIC LIFE OF WOMEN IN THE RURAL FARMING COMMUNITIES IN CENTRAL REGION OF GHANA

SAMUEL KWESI NDZEBAH

2006

1

UNIVERSITY OF CAPE COAST

IMPACT ASSESSMENT OF MICROCREDIT PROGRAMMES ON SOCIO-ECONOMIC LIFE OF WOMEN IN THE RURAL FARMING COMMUNITIES IN CENTRAL REGION OF GHANA

BY

SAMUEL KWESI NDZEBAH

THESIS SUBMITTED TO THE DEPARTMENT OF AGRICULTURAL ECONOMICS AND EXTENSION, UNIVERSITY OF CAPE COAST IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF MASTER OF PHILOSOPHY DEGREE IN AGRICULTURAL ECONOMICS

DECEMBER 2006

CANDIDATE'S DECLARATION

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

Candidate ……………………………..   Date……………………………..

SAMUEL KWESI NDZEBAH

SUPERVISORS' DECLARATION

We hereby declare that the preparation and presentation of the thesis were supervised in accordance with the guidelines of supervision of thesis laid down by the University of Cape Coast.

………………………………………….   Date…………………………..

PROF. K. N. AFFUL

PRINCIPAL SUPERVISOR

…….…………………………………….   Date……………………………..

DR. A. E. A. FADIPE

SUPERVISOR

………………………………………….   Date……………………………..

MR. WILLIAM GHARTEY

SUPERVISOR

ABSTRACT

In order to make the major thrust of this study, which is to ascertain the impact of microcredit on socio-economic life of women in the Central Region of Ghana a reality, this research work seeks to: assess and compare changes in the socio-economic situations of beneficiary and non-beneficiary women and their households; investigate the extent to which microcredit programme interventions have empowered women; examine the relationship between the socio-economic situations of women and microcredit programme interventions, socio-demographic characteristics of the women, and socio-economic characteristics of the women; and ascertain how microcredit programme interventions explain/affect changes in the socio-economic situations of women, and their empowerment.

The study involved 90 women each of microcredit programme beneficiaries and non-beneficiaries in the Asikuma-Odoben-Brakwa and Twifo-Heman-Lower Denkyira districts. The women were selected through a multi-stage sampling technique. Descriptive correlational survey was conducted with structured interview schedule to collect data which was analyzed using frequencies, percentages, measures of central tendencies and dispersions to summarise the data for easy description. T-test and chi-square test statistics were also run to test statistically significant differences. Furthermore, Correlation Coefficient was used to examine relationships whereas multiple regression (OLS) and logit regression models were run to

ascertain the quantitative impact of microcredit programmes on the extent of women involvement in decision-making, level of living, and income changes.

The study revealed that microcredit has had significant positive impact in explaining the extent of women involvement in decision-making, level of living of women and women income changes.

It was also found that the level of living of beneficiary women was significantly greater than the level of living of non-beneficiary women. Also mean involvement of the beneficiary women in decision-making was comparatively greater than mean involvement in decision-making by the non-beneficiary women counterparts.

Furthermore, the assessment of changes in women income revealed that 88.9% of beneficiary women compared with 35.6% of non-beneficiary women had experienced an increased change in their income. The mean annual income earning of ¢5,474,230.78 from the economic activities of beneficiary women was also found to be significantly greater than mean annual income of ¢1,934,931.51 from the non-beneficiary women economic activities.

ACKNOWLEDGEMENTS

My heartfelt thanks go to my principal supervisor, Prof. K. N. Afful of the Department of Economics, University of Cape Coast, for his counselling, guidance, inspiration and encouragement. It was his constructive criticisms and corrections that have made the write up of this thesis materialize. Prof., I am heavily indebted to you. May Jehovah God continue to bless you.

Furthermore, I dearly appreciate and thank Dr. A. E. A. Fadipe and Mr. William Ghartey all of the Department of Agricultural Economics and Extension, University of Cape Coast, who also supervised my work. Their vital suggestions, encouragement and supervision were wonderful for the completion of this thesis.

I cannot forget all staff of the Department of Agricultural Economics and Extension (especially, Prof. J. A. Kwarteng, Dr. Ismail bin Yahya, and Mr. Martin Bosompem) for their encouragement and guidance that helped me through both the course work and thesis research of my M.Phil studies successfully. I sincerely thank you all.

Also to all other acquaintances who have provided their immense assistance in diverse ways (religiously, morally, and academically), I say I do appreciate you all.

Not forgetting the sources of funds for the execution of the research, I am happy to express my gratitude to CODESRIA – Small Grant for Thesis Writing and CIDA-CETAA for their financial assistance.

D E D I C A T I O N

To my mother, Sarah Awortwe, and my wife to be I do dedicate this work.

TABLE OF CONTENTS

CONTENTS	PAGE

LIST OF TABLES

LIST OF FIGURES

LIST OF ACRONYMS

ADB – Agricultural Development Bank

BRAC – Bangladesh Rural Advancement Committee

BRDB - Bangladesh Rural Development Bank

BOG – Bank of Ghana

BIDS – Bangladesh Institute of Development Studies

CBO – Community Based Organizations

CBN – Cost-Of-Basic-Needs

CEDECOM – Central Region Development Commission

CRAN – Christian and Rural Association Network

CUs – Credit Union

CWTP – Consultation With The Poor

DFID - Department for International Development

ENOWID – Enhancing Opportunities for Women in Development

FASDEP – Food and Agric Sector Development Policy

FEM – Food Energy Method

FFH – Freedom From Hunger

FSM – Food-Share Method

GBD – Grameen Bank of Bangladesh

GDP – Gross Domestic Product

GHAMFIN – Ghana Microfinance Network

GLSS – Ghana Living Standards Survey

GPRS – Ghana Poverty Reduction Strategy

GPRSD – Ghana Poverty Reduction Strategy Document

GSS – Ghana Statistical Service

GTZ – German Technical Co-Operation

HDI – Human Development Index

HPI – Human Poverty Index

IAs – Impact Assessments

IDA – International Development Agency

IFAD – International Fund for Agricultural Development

LOC – Little Opportunity Cycle

MFO – Microfinance Organization

MFIs – Microfinance Institutions

MOFA – Ministry of Agriculture

MPs – Microfinance Practitioners

MSC – Microcredit Summit Campaign

NBFIs – Non-Bank Financial Institutions

NDPC – National Development Planning Commission

NGO – Non-Governmental Organization

OLS – Ordinary Least Squares

PNDCL – Provisional National Defense Council Law

RBs – Rural Banks

RCBs – Rural and Community Banks

RMFIs – Rural and Microfinance Institutions

SAT – Sinapi Aba Trust

S & LS – Savings and Loans Companies

SPSS – Statistical Product for Scientific Solution

UNCDF – United Nations Child Development Fund

UNDPs – United Nations Development Programmes

UNDW – United Nations Decade for Women

USD – United States Dollars

CHAPTER ONE

INTRODUCTION

Introduction

This chapter provides an introduction to the research undertaken. Among the topics discussed in the chapter are: background to the study, problem statement, general and specific objectives of the study, and hypothesized variables used to estimate relationships. Also the chapter includes the research hypotheses of the study, significance of the study, limitation and delimitation, study area description, and the organization of the whole report.

Background to the Study

In recent times, the world is faced with a major challenge of reducing poverty and vulnerability especially among women. Of the world's 6 billion people, 2.8 billion on less than US $2 a day and 1.2 billion live on less than US $1 a day (ARMS, 2004; World Bank, 2000). Also according to the United Nations Development Program's Human Development Report 1999, nearly 340 million women are not expected to survive to age 40 due to poor living conditions. Therefore there may be an intergenerational transfer of poverty along gender lines which might ensure that girls born into poverty become women who will remain in poverty. Gender bias and the low priority placed on women in most poverty alleviation programs will further restrict the abilities and opportunities of women to improve their lives.

To help correct the situation of intergenerational transfer of poverty, delegates at the 1995 Fourth World Conference on Women at Beijing set an ambitious goal of reaching 100 million of the world's poorest families, especially the women of those families, with credit for self-employment and other financial and business services by the year 2005 (Microcredit Summit Campaign, 2001). While not a panacea, microcredit provides a powerful tool for progress in nearly all of the 12 critical areas of concern outlined by the delegates. These concerns are as below:

- The persistent and increasing burden of poverty on women;

- Inequalities and inadequacies in, and unequal access to, education and training;

- Inequalities and inadequacies in, and unequal access to, health care and related services;

- Violence against women;

- The effects of armed or other kinds of conflict on women, including those living under foreign occupation;

- Inequality in economic structure and policies, in all forms of productive activities, and in access to resources;

- Inequality between men and women in the sharing of power and decision-making at all levels;

- Insufficient mechanisms at all levels to promote the advancement of women;

- Lack of respect for, and inadequate promotion and protection of the human rights of women;

21

- Stereotyping of women and inequality in women's access to, and participation in, all communication systems, especially in the media;

- Gender inequalities in the management of natural resources and in safeguarding of the environment; and

- Persistent discrimination against and violation of the rights of the girl child

(Microcredit Summit Campaign, 2001).

With the above concerns, the Microcredit Summit Campaign (MSC) at launching, focused on four core themes for plan of action and declared Microfinance Practitioners (MPs) to provide microcredit services based on these themes. The four core themes are as follow:

Reaching the Poorest: The Summit recognizes that the field of microfinance includes institutions providing financial and other services to constituencies that are overlooked by the traditional banking sector. However, the Summit specifically focuses on reaching the poorest families, defined in the "Declaration and Plan of Action" as families in developing countries among the bottom 50 percent of those living below their nation's poverty line. Another way of looking at this target is to see the 1.2 billion people living in absolute poverty as comprising some 240 million families. These 240 million families comprise the group from which most of the Microcredit Summit's target of 100 million poorest will come. Within industrialized countries the Summit is focused on all of those living below their nation's poverty line.

Reaching and Empowering Women: According to Hallen, 1996 Shalidur and Khandker, 1998, women are a good credit risk, and that women-run businesses tend to benefit family members more directly than those run by men. At the same time, through earning an income women achieve a higher status in their homes, their communities, and their nations (Hallen, 1996; Shalidur and Khandker, 1998).

Building Financially Self-Sufficient Institutions: The "Declaration and Plan of Action" emphasizes the importance of programs in developing countries reaching financial self-sufficiency. Microcredit programs in developing countries can improve their efficiency, and structure their interest rates and fees to eventually cover their operating and financial costs (Microcredit Summit Campaign, 2001).

Ensuring a Positive, Measurable Impact on the Lives of Clients and their Families: While financial measures such as program repayment rates give an indication of the strength of a microcredit institution, the Microcredit Summit is committed to programs having a positive, measurable impact on the lives of the very poor. Two impact assessment studies (Lipold and Mknelly, 1998; Carter and Edgecomb, 1999) conducted by the non-governmental microcredit organization Freedom from Hunger showed that current clients of its affiliate institutions in Honduras and Mali experienced positive program impact at the individual, household, and community levels. The studies demonstrated that when compared to non-clients, current clients were more likely to have larger enterprises; experience an increase in personal income and household food consumption; have

23

personal savings; and feel a greater sense of empowerment and higher self-esteem (Lipold and Mknelly, 1998; Carter and Edgecomb, 1999)

Microcredit programs are therefore expected to demonstrate their potential for being successful interventions as effective and efficient delivery vehicles for (a) overcoming failure of the formal financial sector to provide financial services to the poor and, (b) reducing poverty and correcting gender inequality all over the world especially, in the developing countries.

Gaile and Foster (1996) classify rural women as the poorest and for that matter, the most vulnerable in their societies. The common occupation they engage in is farming. The majority of the rural women engage in the provision of family labour, which is not remunerated, and in some situations, others find themselves as subsistence farmers and fishmongers. The document emphasized the fact that most rural women are unable to support the proper up-keep of their families in terms of better nutrition, good health care, clothing, good housing, and education. In Ghana, the goal of the poverty reduction strategy is to achieve equitable economic growth and accelerated poverty reduction within a sustained democracy. Among the specific policy objectives thrust for achieving the broad goal are increasing production and gainful employment, and implementing special programmes for the vulnerable and excluded (World Bank, 2004; and Gaile and Foster, 1996). Within the farming and fishing businesses sub-sectors, the conservation of resources combined with increased production and incomes represent the core element for a long-term strategy for poverty reduction (Atta-Agyepong and Weidinger, 2002).

24

As the majority (about 60%) of the country's populace are rural folks and engage in agricultural and fishing activities (ISSER, 2005), it will be difficult for Ghana to achieve its planned economic growth and poverty reduction without significant improvement in the performance of agribusiness and fishing business (MOFA, 2003). The Food and Agricultural Sector Development Policy (FASDEP) therefore provides a framework for improving agribusiness and fishing business and make them catalysts for rural transformation. The strategy on production and gainful employment to which farming and fishing are the key, seek among other things to improve public sector delivery programmes (e.g. microfinance programmes) and also provide incentives to stimulate the private sector. According to the FASDEP, the activities are aimed at increasing and sustaining production for local consumption and export, and expanding employment especially in geographical areas that have high poverty profiles (MOFA, 2003).

In recent times, some institutions including financial institutions (Agricultural Development Bank, Rural Banks, and Credit Unions) and non-financial institutions (District Assemblies, and NGO) have made serious attempts to provide microfinance services to promote agricultural and fishing activities aimed at reducing poverty and vulnerability especially in the rural areas. According to Buvinic (2004) about 67.6 million people around the world have access to micro financing. In the past, only pockets of privileged cash crop producers had access to formal financing. Women were typically excluded from formal finance regardless of their activities, as women are believed to be lacking

collateral for ordinary loans and ignored by formal financial institutions (Pal 1995). In the last decade, the myriad of microcredit schemes has changed this situation by targeting rural women.

In Ghana, microcredit programmes are therefore expected to be instrumental in furthering the paramount economy-wide objective – namely, alleviation of poverty – by enabling the poor to undertake micro-investments that have high return and fostering social and economic empowerment. Hence the need to scale up microcredit programmes (especially, NGO-based ones) as full warrant within the context of comprehensive poverty alleviation strategy comprising other complementary investments.

Statement of the Problem

Over the years, many credit programmes instituted to improve the living standards of beneficiaries have failed to improve access to credit especially on the part of the women. This created an inevitable credit gap - which refers to the unmet credit needs of potential borrowers who were unwilling to borrow at terms offered by informal lenders and who could not gain access to formal loans because of failure to meet eligibility criteria (Aryeetey, 1995). The general unmet credit needs of women have prompted some governmental and non-governmental organizations to institute credit programmes which are gender sensitive towards women (some, purely run for women) to aid them engage in income-generating micro enterprises. One of these programme interventions, which has become increasingly popular since the early 1990's, involves microfinance schemes which provide financial services to the working poor (Johnson and Rogally, 1997) and

focused on poverty reduction and economic survival of the poor especially the disadvantaged women. As result, poor women in Ghana including rural women in the Central Region particularly now can access credit from the following: CEDECOM, CRAN, SINAPI Aba Trust, Plan International, World Vision, and Freedom from Hunger, ADB and Rural Banks, SIF, and District Assemblies.

In contributing to the understanding of how best financial services to the poor can be provided, MFIs, donors and governments have been interested in knowing to what extent microcredit interventions affect the beneficiaries. Consequently, a number of impact assessment studies on the performance of microcredit interventions have been conducted in the recent years at different places. But, the methodological issues reviewed suggest that there have been few rigorous impact studies (Zeller and Meyer, 2002; Coleman, 2001). This is distressing given the enormous resources that are being invested into these programmes. Evidently, microcredit impact on reducing poverty amongst women is not clear-cut. Some researchers argue that access to credit has the potential to significantly reduce poverty (Khandker, 1998; Baker, 2000). On the contrary, other researchers argue that access to credit has minimal or no impact on poverty reduction (Morduch, 1998; 1999). However, the evidence of reducing vulnerability of women is quite clear. The provision of microcredit has been found to strengthen crisis-coping mechanisms, diversify income-earning sources, build assets and improve the status of women (Hashemi, Schuler, and Riley, 1996; Montgomery, Davies, Saxena, and Ashley, 1996; Morduch, 1998; Husain, Wehnert, and Shakya, 1998).

Furthermore, since the introduction of microcredit services in the study area, majority of research done focused more on the objectives, feasibility, and utility of credit to the poor than on its impact on the beneficiaries (MkNelly and Dunford, 1996). Therefore it is necessary to undertake independent rigorous research at this area to assess the impact of microcredit on reducing poverty and vulnerability of women to help clarify the existing evidence, and to determine if microcredit programmes are efficient in the use of scarce resources or if these resources could be put to more effective use in alternative interventions. The evidence of microcredit in this study will be assessed following a methodology that corrects selection bias and ensures that treatment group conforms to control group.

Objectives of the Study

General objective

The general objective of the research is to assess the effect of microcredit on the socio-economic life of women in the Central Region of Ghana.

Specific objectives

In order to achieve the general objective, the research will specifically seek to:

1. assess changes in the socio-economic situations of beneficiary and non-beneficiary women and their households.

2. compare changes in the socio-economic situations of beneficiary and non-beneficiary women and their households.

3. investigate the extent to which microcredit programme interventions have empowered women.

4. examine the relationship between the socio-economic situation of women and;

    (a) microcredit programme interventions,

    (b) socio-demographic characteristics of the women (age, marital status, household size, educational level, presence of husband), and

    (c) type of economic activity

5. ascertain how microcredit programme interventions explain changes in the socio-economic situations of women, and their empowerment.

Variables of the Study

Dependent variables:

The main dependent variable considered in this study is socio-economic life of women. This was measured by investigating primarily, changes in empowerment, level of living, economic output level, and income level. These variables have been identified and used to assess poverty and vulnerability situations among rural women (Ardayfio-Schandorf, Brown, and Aglobitse, 1995). Other dependent variables that give indication of secondary effect of microcredit interventions are savings level, ability to care for children, household asset acquisition, and household food consumption (nutrition). These can be evaluated if and only if we are sure that there has been increased output and income from economic activities carried out by the women.

Output and income and their changes could easily be obtained from the respondents. Changes in output and income levels were measured qualitatively with ordinal measurement technique (as decreased, same, or increased). Empowerment was measured by the involvement in decision-making, control of personal income, household income and children welfare, and household headship among others. Ardayfio-Schandorf et al (1995) showed in their impact study that the more a woman is involved in decision-making whether alone or jointly, the more empowered she become. Measure of current status was obtained for the level of living indexes which were estimated from households': source of drinking water, toilet facility, building materials, energy for cooking, and material possessions.

Independent variables:

The independent variables that were assumed to affect women situation on the dependent variables discussed above and thus were considered in this study are microcredit programme intervention, type of economic activity, and socio-demographic characteristics of women (age, marital status, sex, size of household, and educational level).

Hypotheses

The central hypothesis for the study is that: "The microcredit programme participants will experience greater increase in income, level of living and

empowerment when compared with their non-programme participant counterparts".

To assess whether or not microcredit programmes have brought about positive changes in the life of beneficiary women, the study tested the following statistical hypotheses:

1. H_0 : The income levels of women who are beneficiaries of microcredit programmes had not significantly improved more than the income levels of women who are not beneficiaries of microcredit programmes.

   H_1 : The income levels of women who are beneficiaries of microcredit programmes had significantly improved more than the income levels of women who are not beneficiaries of microcredit programmes

2. H_0 : The level of living of microcredit programmes beneficiary women is not significantly greater than the level of living of the women who are not beneficiaries of microcredit programmes.

   H_1 : The level of living of microcredit programmes beneficiary women is significantly greater than the level of living of the women who are not beneficiaries of microcredit programmes.

3. H_0: The involvement of beneficiary women in decision-making is not significantly higher than the involvement of non-beneficiary women in decision-making.

    H_1: The involvement of beneficiary women in decision-making is significantly higher than the involvement of non-beneficiary women in decision-making.

4. H_0: Microcredit programme participation does not make significant positive influence in explaining socio-economic life of women.

    H_1: Microcredit programme participation makes significant positive influence in explaining socio-economic life of women.

5. H_0: There is no significant positive relationship between socio-economic situations of the women and microcredit programme intervention, socio-demographic characteristics of women and socio-economic characteristics of the women.

    H_1: There is significant positive relationship between socio-economic situations of the women and microcredit programme intervention, socio-demographic characteristics of women and socio-economic characteristics of the women.

All the hypotheses above were tested at the alpha level of 0.05. Hypotheses 1 was tested using chi-square test statistic. Independent sample t-test was used to

compare means between beneficiary and non-beneficiary women level of living and the extent of their involvement in decision-making.

Furthermore, correlation coefficient was considered suitable to examine relationships between microcredit programme participation, type of specific economic activity, and socio-demographic characteristics of respondents, and respondents' income earning changes, level of living, and empowerment (extent of their involvement in decision-making).

Significance of the Study

Assessing the impact of microcredit is vital in determining whether established programmes achieve the desired outcome and thus if microcredit programmes represent efficient use of resources. Hence, for the different stakeholders in the microfinance industry, impact assessment has become a necessity. It is therefore hoped that having assessed the effect of microcredit on poverty and vulnerability of women, the study would provide valuable findings and recommendations that can prove beneficial for policy making:

▪ Policy makers, MFIs and donor community can gain a better sense of direction they need to take, that will enable them to know how they can collaborate to reach a greater number of people through the design of better products and services, and promote the establishment of an environment conducive to the growth of the microfinance sector.

- Specifically for MFIs, the study can assist to draw out strategic management information to better orient themselves for improved financial performance and sustainability.

- Donors want to be assured that their resources are being used for their intended purposes and emphasize the importance of impact assessment to evaluate the return on their investment.

- Recommendations from the study shall enable microcredit programmes to bring banking to the doorsteps of the poor, and pursue their credit-cum-social empowerment approach to poverty alleviation. It is believed that strengthening women's economic roles will give them autonomy and more control over important decisions affecting them and their families.

- The study also advices MFIs on how they could build up their equity base and hence ensure the long-run financial sustainability of their lending services.

- Concrete and available information about the importance of microcredit provided by MFIs on household income will enable rural poor women to make informed decisions about the different range of services they need.

Furthermore, the study will contribute to the knowledge for academic and research purposes. The findings from the research will help clarify the existing knowledge of the impact of microcredit on the poor, specifically, women. It will also encourage future research into the impact of microcredit. The study used an approach which is simple and unbiased in its selection; therefore will be easy, less expensive and rigorous approach to be followed in assessing the impact of microcredit interventions at other places.

34

Limitations

The primary purpose for which this research was conducted was to fulfill academic requirement to complete Master of Philosophy degree in Agricultural Economics which was time bound. That actually compelled the researcher to restrict to the use of design that would permit the accomplishment of the broad aim of the study within the stipulated period. This might affect the degree of controlling for some internal and external threats to validity (such as selection bias). The whole study was expected to be completed and report submitted in a maximum of twelve (12) months.

Since rural dwellers hardly keep records on their socio-economic activities, the research relied on the respondents' power to recall and or perceptions to obtain some of the data required for the study. This might affect the realities of the women situations in the study and thus inferences from the findings of the study may reflect women's situations in the central region but not the entire country.

Delimitations

This research concentrated on the effect of microcredit programmes that have been introduced to the rural farming communities in the central region only. Thus the inferences made from the findings have been delimited only to women's situations in the Central Region but not the entire country.

Also in assessing the impact of microcredit programme interventions in the Central Region, this study delimits itself to two of the four core themes as enshrined by the microcredit summit campaign. Thus the study ascertained impact on reducing poverty (lives of women and their families) and empowering women.

Definition of Terms

Empowerment – increase in the women position in decision-making that affect the welfare of their households.

Beneficiary women – women in the study area that are participating or have been participated to benefit from microcredit programmes.

Non-beneficiary women – women in the study area who have never join to benefit from any formal microcredit programme.

Level of living – women household living standard with regard to source of drinking water, toilet facility, building materials, energy for cooking, and material possessions.

Eligible Participants – beneficiary women whose households total wealth was equal to or less than price of 0.5 acre land size at the time of joining microcredit program three years ago.

Ineligible Participants – beneficiary women whose households total wealth was greater than price of 0.5 acre land size at the time of joining microcredit program three years ago

36

Eligible Non-participants – non-beneficiary women whose households total wealth was equal to or less than price of 0.5 acre land size three years ago.

Ineligible Non-participants – non-beneficiary women whose households' total wealth was greater than price of 0.5 acre land size three years ago

Household head – any relative (husband, children, uncle, auntie, siblings, and woman herself) of women sampled that plays major role towards the welfare of the women household's members for the period the study covered.

Land holding – women wealth position converted into land size from the perception of the women

Rural area – Locations where development densities and intensities are low and where public services and facilities are not normally provided

Description of the Study Area

The facts and figures used for the description of the study area were obtained from the web site of Ghana districts (www.ghanadistricts)

Overview of Central Region

The study was conducted in the rural farming areas in Central Region. Central Region was historically part of the Western Region until 1970 when it was carved out just before the 1970 Population Census. It occupies an area of

9,826 square kilometres or 4.1 per cent of Ghana's land area, making it the third smallest in area after Greater Accra and Upper East. It shares common boundaries with Western Region on the west, Ashanti and Eastern regions on the north, and Greater Accra Region on the east. On the south is the 168-kilometre length Atlantic Ocean (Gulf of Guinea) coastline.

The region has a population size of 1,593,823 with a growth rate of 2.1 per cent per annum. The region is also the second most densely populated in the country, with a population density of 162 persons per square kilometre.

The region can be broadly divided into two. (i) The coast, which consists of undulating plains with isolated hills and occasional cliffs. It is characterised by sandy beaches and marsh in certain areas. (ii) The hinterland, where the land rises between 250 metres and 300 metres above sea level. It lies within the dry equatorial zone and moist semi-equatorial zone. Annual rainfall ranges from 1,000mm along the coast to about 2000mm in the interior. The wettest months are May-June and September-October while the drier periods occur in December-February and a brief period in August. Mean monthly temperature ranges from $24^{o}C$ in the coolest month (August) to about $30^{o}C$ in the hottest months (March-April).

Unemployment is much lower in the region (8.0%) than the national average (10.4%). Two districts, Mfantsiman (14.8%) and Cape Coast (11.3%), have values exceeding the national average. Unemployment affects females (8.2%) more than males (7.8%) in almost all the districts.

The predominant occupational area in all districts, except Cape Coast, is agriculture (52.3%), followed by manufacturing (10.5%). Agriculture (including fishing) is the main occupation and employs more than two thirds of the work force in many districts. Cocoa production is concentrated in Assin, Twifo-Hemang-Lower Denkyira and Upper Denkyira while oil palm production is mainly in Assin and Twifo-Hemang-Lower Denkyira. Other major agricultural enterprises are pineapple and grain production. Fishing is concentrated mainly in the six coastal districts.

Agriculture remains the main occupation for both males and females in all the districts except Cape Coast. More males (8.6%) than females (4.6%) are engaged in professional/technical occupations while more females (18.2%) than males (6.0%) are involved in sales work. It is important to note that in all the districts, except Cape Coast, less than 10% of the active population are engaged in service activities.

The region consists of 13 district and municipal assemblies two of which were randomly selected to represent the region for the study. The selected districts are Asikuma-Odoben-Brakwa District and Twifo-Hemang-Lower Denkyira District. The remaining districts are Abura-Asebu-Kwamankese, Agona, Ajumako-Enyan-Essiam, Assin North, Assin South, Awutu-Effutu-Senya, Cape Coast Municipal, Gomoa, Komenda-Edina-Eguafo-Abirem, Mfantsiman, and Upper Denkyira.

39

Asikuma-Odoben-Brakwa District

The Asikuma-Odoben-Brakwa District is one of the newly created districts of Ghana, and is located in the north-central portion of the Central Region of Ghana. The district was curved out of the former Breman-Ajumako-Enyan-Essiam District, in 1989. Its capital is Breman Asikuma.

The district covers a geographical area of 884.84 square kilometers. It is sandwiched between four main districts, at a uniform radius of about 40 kilometers apiece from each of them, except Ajumako, which is 25 kilometers away. On the northern border is the Birim South District. Eastern border lies the Agona District and the Ajumako-Enyan-Essiam District is on the Southern border.

The population of the district is estimated at about 87,796 in 2000 with an average growth rate of 2.3%. The District has a sex ratio of 96.5 males to 100 females. The Asikuma-Odoben-Brakwa District has 245 settlements, falling under 8 zones:- Asikuma, Odoben, Ahwhiam, Kuntanase, Jamra, Kokoso and Bedum. Though the main language spoken here is Fante. However, some settlers speak Breman, Agona and Gomoa dialects.

The District is a highly agrarian local economy, with about 85% of the labour force in active farming. Crops cultivated range from tree crops including cocoa, citrus, avacado to staple crops such as plantain, maize, cassava, cocoyams and banana. There are few industrial activities ranging from manufacturing of

40

roofing tiles, and saw milling to small scale industrial activities like citronella oil extraction and agro-processing units, such as gari processing at Jamra and Anwhiam, and palm oil extraction at Kuntanase.

Apart from the above, there are commercial activities such as petty trading, hawking, dressmaking, tailoring, hairdressing and fitting, handicrafts and other small scale industrial activities

The District is linked to the rest of the Central Region and adjacent district in the Eastern Region. Breman Asikuma, the district capital is a nodal town, about 40 kilometers apiece from Mankessim, Akim Oda, Agona Swedru and Assin Foso (all big commercial towns). The main road linkages in the district are Swedru-Asikuma-Oda (first class road) and Ajumako-Asikuma-Anyinabrim (second to third class roads). The rest of the high ways and feeder roads in the district are in deplorable state, thus affecting the volume of traffic flow in the district.

There are six active NGOs in the district. Each of these has been contributing meaningfully towards the improvement of the lives of the people in the district. These NGOs include: Habitat for Humanity, Perma-Ghana, and Freedom from Hunger.

Towns in the district include: Breman Odoben, Breman Brakwa, Breman Kuntanase, Breman Bedum, Breman Jara, Breman Fosuansa, Breman Kokoso, Breman Nwomaso, Breman Benin, Breman Amoanda, Breman Amanfopong, Breman Baako, Breman Ayipey, Breman Anhwaim, Nankese, Supunso, Towoboase, Sowotuom and Breman Nyamebekyere.

Twifo-Heman-Lower Denkyira District

Twifo Hemang Lower Denkyira District is also a young district established in 1988, and heavily relies on the private sector as its major development partner for growth.

Twifo-Hemang-Lower-Denkyira District (THLD) is bordered on the north by Upper Denkyira District, to the south by Abura-Asebu-Kwamankese, Cape Coast and Komenda-Edina-Eguafo-Abrem District, and to the west by the Western Region's Mpohor Wassa East District.

The population of the district stood at 107,787 in 2002 with a growth rate of 1.8%. The district is typically rural. It has a total land area of 1199km2 and 1,510 settlements. Only two of them namely Twifo Praso and Hemang, according to provisional results of the 2000 population census with, 8850 and 6523 inhabitants respectively, are urban.

According to a survey conducted by the Department of Planning (KNUST) in 1994, as much as 51% of the labour force is engaged in agriculture. This is followed by the service sector which employs 28% of the working population, with commerce taking 16% whilst industry engages 5% of the working population.

The towns in the districts include: Twifo Hemang, Jukwa, Twifo-Mampong, Wawase, Krobo, Nyenase, Twifu Ayiase, Mfuom, Ampenkro, Wamaso, Ntafrewaso, Nuamakrom, Mampona, Ankaako, Burukuso, Kyiaboso (Chiaboso), Twifo Agona, Denkyira Odumase, and Breman.
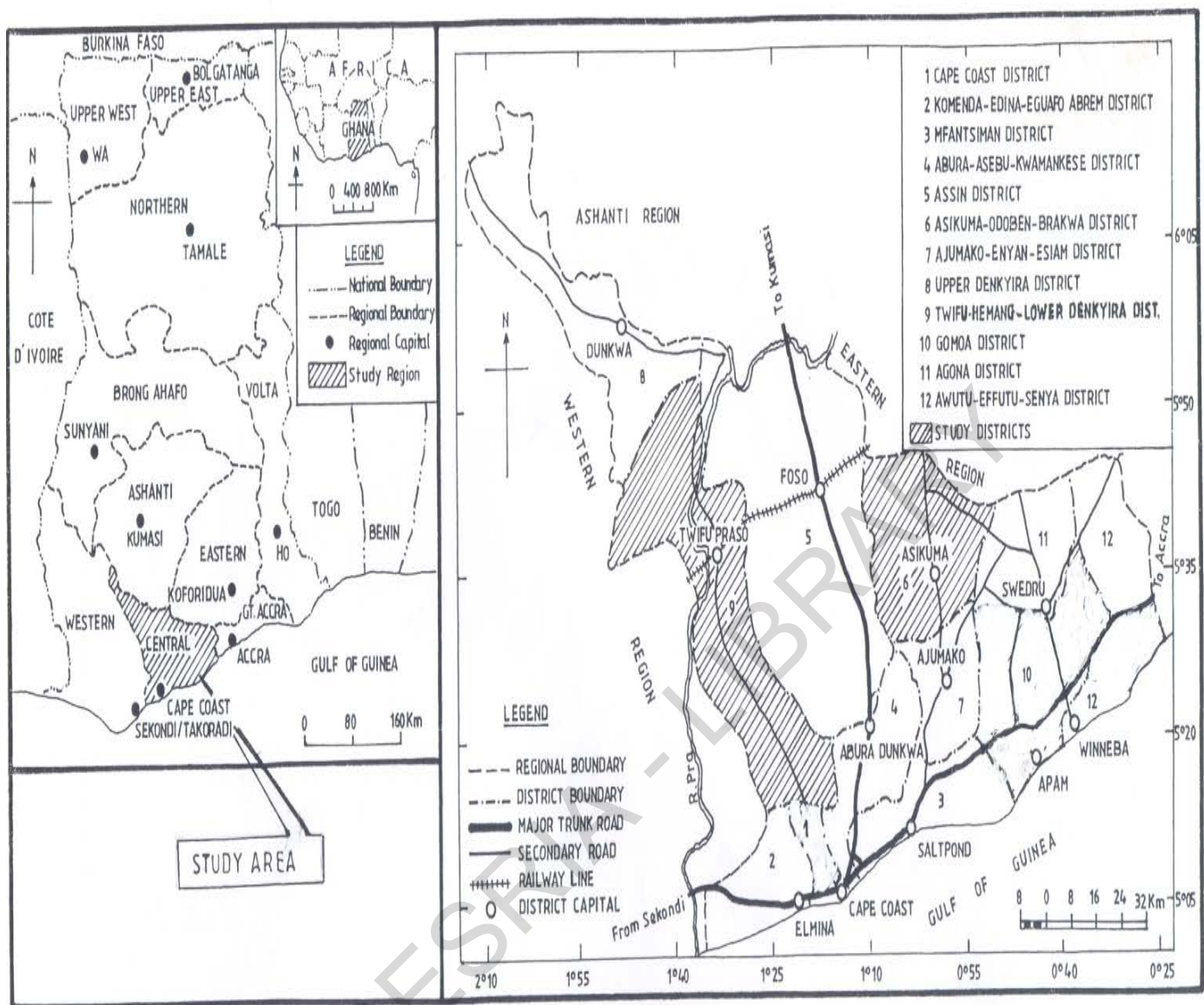
Figure 1: Map of Central Region showing Asikuma-Odoben-Brakwa and Twifu-Hemang-Lower Denkyira Districts

Source: Cartographic Unit, University of Cape Coast, 2006

Organization of the Study

This research report is organized into five main chapters. Chapter one entails discussions of sections that make up the introductory chapter. Chapter two deals with the review of both theoretical and empirical literature relevant to the study.

In chapter three, the methodology employed in the study is discussed. Chapter four presents analysis and discussion of results. The summary of the study, conclusions drawn from the study results, as well as policy recommendations based on the conclusions are presented in chapter five.

CHAPTER TWO

LITERATURE REVIEW

Introduction

In this chapter, theoretical and empirical underpinnings, which are found relevant to the subject, have been reviewed and discussed as below.

Theoretical importance of credit to aid rural folks

Credit can play a vital role in the successful implementation of activities in the economy as a whole. In a country like Ghana where 68% of the populace lives in the rural areas, average holdings are small and capacity to save is extremely limited, provision of credit assumes added significance (Nissanke and Aryeetey, 1998).
According to Owusu-Acheampong (1986), the production operations in most rural communities are traditionally carried out using simple tools and without much application of improved inputs and credits; a very small portion of the total outlay on operations and consumption is in the form of cash. Correspondingly, a very small proportion of total output is sold for cash. These communities are therefore engulfed in a Little Opportunities Circle (LOC) whereby little investment results in little marketable surplus which in turn results in little income which allows for little capital outlay for further investment. This circle can only be broken at a point between capital outlay and little income and the exogenous forces that can break through the circle is credit (Owusu-Acheampong, 1986). Thus it is being argue that if used productively and judiciously, credit can increase the investment opportunity of rural producer and

45

thereby increasing his output for home consumption and marketable surplus for the market.

The study adopts a theoretical position that participation in credit programmes tends to empower women by strengthening their economic roles. The underlying assumption is that strengthening women's economic roles gives them more autonomy and more control over important decisions affecting them and their families, as well as contributing to their self-confidence and their ability to plan for the future (Schuler and Hashemi, 1996). Furthermore, by providing a mechanism of drawing poor women out of their traditional female seclusion within the households and by providing a changed social organizational set up capable of producing opportunities for female self-employment or income generation, there is the creation of a new institutional context of augmenting and crystallizing women's empowerment through improvement in the decision-making power of women (Amin and Pebley, 1994).

Model of Microfinance Impact Chains

Behind all microfinance programs is the assumption that intervention will change human behaviours and practices in ways that lead to the achievement (or raise the probability of achievement) of desired outcomes (Hulme, 1997). Impact Assessments (IAs) assess the difference in the values of key variables between the outcomes on 'agents' (individuals, enterprises, households, populations, policymakers etc) which have experienced an intervention against the values of those variables that would have occurred had there been no intervention (Figure

2). All changes are influenced by mediating processes (specific characteristics of the agent and of the economic, physical, social and political environment) that influence both behavioural changes and the outcomes in ways that are difficult to predict (Sebstad, Neill, Barnes, and Chen, 1995).

The Figure 2 shows a simple conventional model of impact chain that conceptualizes the impact of programme intervention on beneficiaries. In a conventional microfinance project a package of technical assistance and capital changes the behaviour (and products) of a microfinance institution (MFI). The MFI subsequently provides different services to a client, most commonly in the form of a loan. These services lead to the client modifying her microenterprise activities which in turn lead to increased microenterprise income. The increased change in microenterprise income causes improvement in household income which in turn leads to greater household economic security. The modified level of household economic security leads to improvement of the health status of household members, ability to educate children and improve on skill levels and increased future economic and social opportunities. Ultimately, perhaps, these changes will lead to increase women involvement in social and political relations and structures.
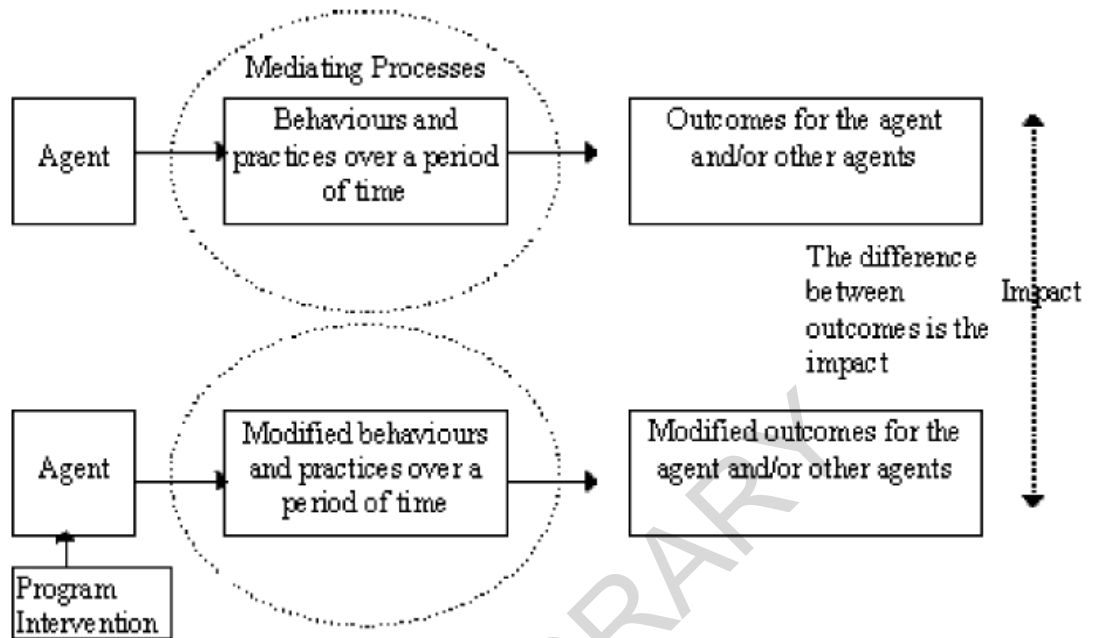
Figure 2: The Conventional Model of the Impact Chain

Source: Hulme, 1997

The complexity of such chains provides the assessor with a range of choices about which link (or links) to focus on. For microfinance, it is useful to distinguish between two main schools of thought with regard to which link(s) in the chain to focus on. For convenience, these are termed the 'intended beneficiary' school and the 'intermediary' school.

The intended beneficiary school, building on the ideas of conventional evaluation, seeks to get as far down the impact chain as is feasible (in terms of budgets and techniques) and to assess the impact on intended beneficiaries (individuals or households). The intermediary school on the other hand focuses purely on the beginning of the chain and in particular on changes in the MFI and its operations. Generally, two key variables are focused on by the intermediary

school: institutional outreach and institutional sustainability (Yaron, Benjamin and Piprek 1997). If both outreach and sustainability have been enhanced then the intervention is judged to have a beneficial impact as it has widened the financial market in a sustainable fashion. This is based on the assumption that the institutional impacts will extend the choices of people looking for credit and savings services and that this extension of choice ultimately leads to improved microenterprise performance and household economic security. While this assumption can be supported by theoretical frameworks it is an assumption which has proved invalid in a number of experiences (Wiig 1997).

While the choice between these two schools can ultimately be seen as an ideological choice it is possible to recognize different strengths and weaknesses. According to Hulme, (1997), the intended beneficiary school makes fewer assumptions about the impact chain and is better able to distinguish 'who' benefits and 'how'. It is, however, demanding in both methodological and cost terms. He further reported that the intermediary school usefully incorporates notions of sustainability and provides an IA methodological framework that can be operated largely with pre-existing data. It is, though, very weak on 'who' benefits and 'how'.

This study adopts the position of the intended beneficiary school by getting as far down the impact chain as is feasible (in terms of budgets and methodology) and assesses the impact of microcredit programmes on beneficiary women and their households.

Units of Impact Assessment

Following on from the design of a model of the impact path comes the choice of the unit(s) of assessment. Common units of assessment are the household, the enterprise or the institutional environment within which agents operate. Occasionally studies (Goetz and Sen Gupta, 1995; Peace and Hulme, 1994) have attempted to assess impact at an individual level, but this is relatively rare. More recently some studies have attempted to assess impacts at a number of levels, such as Hulme and Mosley (1996) who looked at microenterprise, household community and institutional levels. The household economic portfolio model (HEPM) seeks to assess impacts at household, enterprise, individual and community levels and thus produce a fuller picture of overall impacts (Chen and Dunn 1996).

As can be seen, a focus purely on the 'individual' or the 'enterprise' has such drawbacks that they could be viewed as discredited. The household economic portfolio model has much to recommend it - especially if institutional impacts are incorporated in the community level analysis. It does have the profound disadvantage, though, of making assessment demanding in terms of costs, skilled personnel and time. If used with limited resources it risks sacrificing depth for breadth of coverage of possible impacts.

The study makes use of the combination of individual women and their households as its unit(s) of assessment. This is because individuals and households could easily be defined and identified, permits an appreciation of

50

livelihood impacts, and Permits an appreciation of inter-linkages of different enterprises and consumption (Hulme, 1997).

Types of Impact

An almost infinite array of variables can be identified to assess impacts on different units. To be of use these must be able to be defined with precision and must be measurable. Conventionally, economic indicators have dominated microfinance IAs with assessors particularly keen to measure changes in income despite the enormous problems this presents (Schuler and Hashemi 1996; Goetz and Sen Gupta 1996; Sebstad et al, 1995). Other popular variables have been levels and patterns of expenditure, consumption and assets. A strong case can be made that assets are a particularly useful indicator of impact because their level does not fluctuate as highly as other economic indicators and is not simply based on an annual estimate (Barnes, 1996).

The social indicators that became popular in the early 1980s are educational status, access to health services, nutritional levels, anthropometric measures and contraceptive use. These have recently been extended into the socio-political arena in an attempt to assess whether microfinance can promote empowerment (Mayoux 1997; Goetz and Sen Gupta 1996; Schuler and Hashemi 1996; Hashemi et al 1996). This has led to the measurement of individual control over resources, involvement in household and community decision-making, levels of participation in community activities and social networks and electoral participation. The bulk of this work has focused on gender relations, but there are

sometimes partially-formulated assessments of class relations within it (Fuglesang and Chandler 1993). These extensions to the types of impact assessed permit IAs to be more sophisticated and to shed light on developmental impacts at a time when the goals of development have also been extended.

Sebstad et al (1995) usefully distinguished between 'domains of change' (e.g. household income) and the specific 'markers of change' (e.g. amount of income, number of income sources and seasonality of income) within each domain. While not fully comprehensive, the detailed sets of domains and markers, produced in their paper provide an excellent checklist for impact assessors to consider at the IA design stage. Often the exact markers used will be shaped by the methodology that is selected. This can cause problems for multi-method IAs which may not be able to apply a single definition for a marker for each of the methods used.

With the fact that impact assessors should always seek to keep the number of variables they measure to a manageable number and not be tempted to go for a comprehensive approach that will impact adversely on data quality and study relevance. This study measures changes in women income, involvement in decision-making, and level of living as main dependent variable to assess impact of microcredit programmes on the life of beneficiary women. The study also assessed impact based on other variable such as savings level, ability to care for children, household asset acquisition, and household food consumption (nutrition), and changes in health status.

Meaning of Evaluation

According to Germanov, Sharma, and Nepal 2004, evaluation is a participatory process designed to determine how well a programme or project has accomplished its goals. It is always based on the examination of some established, empirical variables or indicators, and how current practices compare to that of standard. Evaluation results provide managers with information about whether to expand a program, to continue a program at its current level, to reduce spending, or to stop spending entirely (Lindenberg, 2004).

Impact evaluation is intended to determine more broadly whether the programme had the desired effects or otherwise on individuals, households, and institutions and whether those effects are attributable to the programme intervention. Impact evaluations can also explore unintended consequences, whether positive or negative, on beneficiaries (Baker, 2000). Evaluation is therefore a tool that not only measures success, but can contribute to it, as well.

Evaluation has frequently been viewed as an external imposition. This is because though program staff can also conduct an internal program evaluation, outside consultants are often hired to conduct a formal program evaluation of a microfinance organization (Lindenberg, 2004). It is believed that reviews and examinations of effects by "neutral" outsiders are more critical for unbiased and uninfluenced assessment.

Types of Evaluation

There are two basic types of evaluation: formative and summative (Bennet, 1997). Formative evaluation is a tool used from the beginning to the end of a project. Typically, a formative evaluation is conducted at several points in the cycle of a project and is used to continually "form" or modify the project to make sure that its program activities match program goals and the overall mission. It is refer to as process evaluation: It focuses on providing information for program improvement, modification, and management (Baker, 2000)

Summative (Outcome) Evaluation is concerned with the program's effectiveness and efficiency. It deals with assessing the impact of a program. Typically a summative evaluation takes place after the project cycle has been completed and when it is possible that the impact of the project has been realized (Cohen and Gary, 1998). An evaluability assessment is often undertaken to enable researchers decide whether a program has the necessary preconditions to be evaluated (Baker, 2000).

Types of Impact Assessment

Impact assessment is a management mechanism aimed at measuring the effects of projects on the intended beneficiaries (Afrane, 2001.). For microfinance institutions (MFIs), impact assessment is important in enabling them to remain true to their mission of "working with poor people in their struggle against hunger, disease, exploitation and poverty" (Johnson and Rogally, 1997). Therefore, impact assessments can be used as management tools for aiding practitioners to better attain program goals (Cohen, and Gary 1998).

There are two most common types of impact assessments depending on the needs of the various stakeholders. They are donor-led impact assessment and

practitioner-led impact assessment. According to David Hulme at the Institute for Development Policy and Management, University of Manchester, donor- led impact assessment methods can be thought of as needing to "prove impact," while practitioner- led impact assessment is meant to "improve practice" of an organization (Hulme, 1997). The schematic presented in Figure 3, will help in conceptualizing this idea in the difference between the two types of impact assessments.

A donor-led impact assessment examines the impact of a Microfinance Organization (MFO) from the perspective of the lender. Results of a donor- led impact assessment are often shared with the donor's funders, which are usually government agencies or foundations. Future funding decisions are often made based on this assessment (www.ids.ac.uk/impacts/stateart).

Practitioner-led impact assessments focus more on how the impact assessment process can fit into existing work patterns, build on existing knowledge and experience, and produce results that can be easily used by management (www.ids.ac.uk/impacts/stateart).

This study measures the impact of the microcredit interventions and also provides an avenue to help improve the process of microcredit interventions in Central Region which can be extended to other parts of the country. Thus it concerns to both proving impact and improving practice of microcredit programmes in the Central Region.

Basis   **PROVING**<--------------------------------------->**IMPROVING**
                      IMPACTS   **PRACTICE**

55

↓

Primary   Measuring as accurately as possible   Understanding the processes

Goal ⟶ the impacts of an intervention   of intervention

and their impacts so as to improve

those processes

Main ⟶ Academics and researchers   Program Managers

Audiences   Policymakers   Donor field staff

Evaluation departments   NGO personnel

Program Managers   Intended beneficiaries

Associated	Objectivity	Subjectivity
Factors ⟶	Theory	Practice
	External	Internal
	Top down	Bottom up
	Generalization	Contextualization
	Academic research	Market research
	Long timescales	Short timescales
	Degree of confidence	Level of plausibility

Figure 2: Proving Compared with Improving Impact

Source: Hulme, 1997

Meaning of Microcredit

Microcredit, sometimes known as "microfinance" and "microlending" means provision of small working capital loans to the self-employed poor. It is believe that even small amounts of capital (typically $50 to $300) can make the difference between absolute poverty and a thriving little business generating

56

enough income to feed the family, send kids to school, and build decent housing (Hossain, 1988).

Defining microcredit may differ from country to country, groups to groups and individuals to individuals. Some of the criteria that have been used to define microcredit across the globe include: size - loans are micro, or very small in size (usually less than $300); target users - microenterpreneurs and low-income households; utilization - the use of funds - for income generation, and enterprise development, but also for community use (health/education); terms and conditions - most terms and conditions for microcredit loans are flexible and easy to understand, and suited to the local conditions of the community (Srinivas, 2005).

According to Microcredit Summit (2001), microcredit programmes extend small loans to very poor people for self-employment projects that generate income, allowing them to care for themselves and their families. Furthermore, Srinivas (2005) reported that 'microcredit' is the extension of small loans to enterpreneurs too poor to qualify for traditional bank loans. It has proven an effective and popular measure in alleviating against poverty, enabling those without access to lending institutions to borrow at bank rates, and start small business (Srinivas, 2005).

Another school of thought also expressed that "microcredit" is the name given to extremely small loans made to poor borrowers. A typical microcredit scheme involves the extension of an unsecured, commercial-type loan at interest to a poverty stricken borrower (Meade, 2001).

57

An interesting stand is taken by the Virtual Library on Microcredit. It takes microcredit beyond the confines of 'money' and argues in its conceptual framework that "microcredit" is as much about money as it is about information. According to the library, sustainability and non-dependence on external resources are means to the growth of microcredit programmes. It therefore focuses on providing pertinent and timely information in the form of strategies, tools, ideas and guides, to grassroots and intermediary organizations, and at the same time, educating the larger public on broader issues related to microfinance and microcredit. (Virtual Library on Microcredit, 2005).

Main Features of Microcredit

Microcredit schemes have unique characteristics that make them differ in their operations as compared to other credit systems. Some of the major features of most microcredit programmes are discussed below.

Loans are disbursed in groups to poor borrowers, with some amount of non-credit assistance also being made available. The non-credit assistance typically ranges from skills training through marketing assistance to lessons in social empowerment (Khandker, 1998).

Most microcredit programmes are usually set up in the following way. As reported by Coleman (2001), credit services are targeted to landless or assetless borrowers, the moderately to extremely poor. Borrowers are placed into groups of 10-20 people which meet regularly with the loan officer of the microcredit

58

programme. These groups of borrowers guarantee for themselves to substitute for collateral and take over the role of securing the loans dispersed (Coleman, 2001).

Each borrower in a group agrees to be held liable for all debts incurred by any member of the group. In the event that a borrower defaults, the other members of the group are required to make up the amount in default. Borrowers are encouraged or even required to monitor the behavior of one another to make sure that no one is danger of default. This process has led to extremely low rates of default, especially for first time borrowers. Repayment rates are usually above 95%.

The key implications of microcredit are in its name itself: 'micro'. A number of issues come to mind when 'micro' is considered: The small size of the loans made, small size of savings made, the smaller frequency of loans, shorter repayment periods and amounts, the micro/local level of activities, and the community-based immediacy of microcredit.

Objectives of Microcredit

The basic objective of microcredit is to give poor people access to capital and exploit their capacities and potentialities for economic development (Pathak, 2004).

With the current interest in microcredit issues, several developmental objectives have come to be associated with it, besides that of only "credit". Of particular importance is savings as an end in itself, and as a guarantee for loans. Microcredit has been used as an 'inducer' in many other community development

activities, used as an entry point in a community organizing programme and as an ingredient in larger education/training exercises (Srinivas, 2005).

Importance of Microcredit

To the poorest microentrepreneurs in the developing world, US $50 is a fortune. They can invest that money to make their labours far more productive. So far, significant number of microentrepreneurs worldwide have benefited from microcredit, using their loans to increase their income and lift their families out of poverty. But there remain about 200 million families who work hard, but cannot access affordable credit (www.villagebanking.org/village.htm#microfinance)

Microfinance Institutions (MFI's) have made significant progress in providing credit and savings facilities to the poor. Experience of these institutions shows that provision of microfinancial services enables the poor to build strong microenterprises, to increase their income and to participate in economic growth (North, 2005).

Microfinance helps poor households meet basic needs and protects them against risks. The use of financial services by low-income households leads to improvements in household economic welfare, and enterprise stability and growth. By supporting women's economic participation, microfinance empowers women, thereby promoting gender-equity and improving household well-being (Hashemi, Schuler, and Riley, 1996). However, the level of impact relates to the length of time clients have had access to financial services.

Microcredit helps in reducing poverty by providing the poor with a credit facility to start a small business. It not only supports the economic condition of the poor people but also has positive impacts on their social life through better standard of living, with greater access to education and health facilities and empowerment to participate in decisions of the society.

Microcredit Role in Poverty Alleviation

Poverty is defined as an income (or more broadly welfare) level below a socially acceptable minimum (Weiss and Montgomery, 2004). The condition of poverty has been interpreted conventionally as one of lack of access by poor households to the assets necessary for a higher standard of income or welfare, whether assets are thought of as human (access to education), natural (access to land), physical (access to infrastructure), social (access to networks of obligations) or financial (access to credit) (World Bank, 2000).

The poverty-reduction impact of microcredit remains controversial. Among the early poverty impact studies is Hulme and Mosley (1996). This study employed a control group approach looking at the changes in income for households in villages with microfinance programs and changes for similar households in non-program areas. In general a positive impact was found on borrower incomes of the poor over the period of 1988 - 1992. On average an increase over the control groups ranging from 10-12% in Indonesia, to around 30% in Bangladesh and India (Hulme and Mosley, 1996).

However, despite the breadth of the study and its use of control group techniques, it has been criticized for possible placement bias, whereby microfinance programs may be drawn to better placed villages, so that part of the advantage relative to the control group may be due to this more favorable location. The quality and accuracy of some of the data, particularly in relation to the representative nature of the control groups, has been questioned (Morduch 1999). There also appears to be a basic problem with the case studies, since these were not based on a comparison between baseline data and that for a later survey year.

Other initiatives that have provided some of the firmest empirical work were the surveys conducted in the 1990's by the Bangladesh Institute of Development Studies (BIDS) and the World Bank. These provided the data for several major analyses, such as Pitt and Khandker (1998). Khandker (1998) summarizes a number of different studies conducted in Bangladesh using the 1991/92 survey and focusing on three major microfinance programs, including the Grameen Bank and the Bangladesh Rural Advancement Committee (BRAC). Impact was assessed using a double-difference approach between eligible and ineligible households (with holdings of land of more than half an acre making households ineligible) and between program and non-program villages. After controlling for other factors, such as various household characteristics, any remaining difference is attributed to the microfinance programs. Among the conclusions drawn is that the program had a positive effect on household consumption, which was significantly greater for female borrowers. On average a

loan of 100 taka to a female borrower, after it is repaid, allows a net consumption increases of 18 taka. In terms of poverty impact it is estimated that 5% of participant households are pulled above the poverty line annually. These are strong and positive results and probably the clearest evidence that microfinance is working in the way intended to bring sustained relief from poverty.

However a couple of caveats are in order. First, the accuracy of the original results as presented in Pitt and Khandker (1998) has been disputed on the grounds that the eligibility criteria of low land holdings was not enforced strictly in practice. In a reworking of the results focusing on what are claimed to be more directly comparable households, no impact on consumption from participation in a program was found (Morduch, 1999). Second, in the BIDs-World Bank survey data the 'ultra poor' (defined as those with less than 0.2 acres of land) form nearly 60% of participants and the likelihood of participation is strongly and negatively associated with level of land holding. Nonetheless, how much is borrowed depends principally on the entrepreneurship of households, so that the argument that the risk-averse very poor will benefit proportionately less has not been totally dismissed. Furthermore, the panel data reveals a relatively high dropout rate of around 30%, indicating that there may have been problems of repayment for many households.

In Asia, there are examples of other studies that are less convincing results. Coleman (2001) and MkNelly and Dunnford (1996) both focus on experiences with village banking in Thailand. Coleman (2004) utilizes data on villages that had participated in village bank micro finance schemes and those

control villages that were designated as participants, but had not yet participated. This allows a double difference approach that compares the difference between income for participants and non-participants in program villages with the same difference in the control villages, where the programs were introduced later. From the results the poverty impact of the schemes appears highly dubious. Months of village bank membership had no impact on any asset or income variables and there was no evidence that village bank loans were directed to productive purposes. The small size of loans means that they were largely used for consumption. However, one of the reasons there was a weak poverty impact is that there was a tendency for wealthier households to self-select into village banks.

Coleman (2004) uses the same survey data but reconsiders the estimation strategy to control for self-selection. He argued that the village bank methodology, which relies on self-selection by loan size and monitoring by frequent meetings, may not reach the poorest. As many better-off households tend to be on village bank committees, the failure to control for this leads to systematic biases. The regression results of Coleman (2004) indicate that there was substantial difference between ordinary members and committee members of village banks. The impact of microcredit on ordinary members' wellbeing was either insignificantly different from zero or negative. On the contrary, the impact of microfinance programs on committee members' measures of wealth, such as income, savings, productive expenses and labor time was positive, implying a

64

form of program capture by the better-off in the village, even though this group may not be well–off by national standards.

A similar result in terms of rationing microcredit in favour of better-off groups or members is found by Doung and Izumida (2002) in a study of six villages in Viet Nam. There whilst credit availability is linked with production and income household economic position and prestige in a village plus the amount of credit applied for are the main determinants of how credit is allocated.

Microcredit Role in Women Empowerment

Empowerment in broadest sense refers to "an individual's or group's increased "power". In a development context, it refers both to "internal" change within an individual's sense of esteem and autonomy, and "external" change in social status and basic power relationships in society" (MkNelly and McCord, 2001).

One of the attractions of the microfinance movement is the possibility of a more fundamental "empowering" effect that goes beyond increased economic returns. Given the wide range of possible indicators of empowerment, it is useful to start by reviewing the criteria that other researchers have used and their broad findings.

Amin and Pedbley (1994) worked in Bangladesh and found that membership in BRAC positively affected a woman's decision making role, her control over resources and mobility but less so on their attitudes regarding marriage and education of their daughters. They also showed that their

65

respondents felt membership in credit programs was important from the standpoint of reducing their chances of desertion by their husbands.

This is reinforced by Naved (1994) who found that the women credit-program participants in her sample felt their status had improved within the household due to the fact that they were seen as income earners for the family through their access to credit. The women conceptualized this improvement in status by stating that they were more active participants in household decision-making and had more control over household income, particularly the portion which was derived from their own earning.

Another study supporting the positive view on microcredit and empowerment is that by Hashemi, Schuler and Riley (1996). They developed an empowerment index based on eight empowerment indicators namely, mobility, economic security, ability to make small purchases, ability to make larger purchases, involvement in major decisions, participation in public protests and political campaigning, relative freedom from family domination and political and legal awareness. Their analysis demonstrated that a woman contribution to household's income enhanced her empowerment. That is supported by a study of White (1992) based on her fieldwork in rural Bangladesh.

Furthermore, Hashemi et al (1996) also showed that the probability of empowerment is eight to twelve times as high for a woman who is contributing to family support or involved in a credit program (and not contributing).

On the whole, the view presented that microcredit improves female status within the household appears more convincing than that argued by the 'skeptics'

66

camp. There are two main reasons for this contention. First the underlying thread of the positive argument (access to an important household resource (credit) enhances a female's status within the household) is both intuitively appealing and resonates with the theoretical literature on bargaining models of the household (Lundberg and Pollack 1993). Secondly, the focus on female control over loans as a key component of the skeptics' argument fails to recognize that credit enters the overall household income pool and that household members jointly participate in the loan investment.

Challenges in the Microfinance Sector

The provision of financial services in rural areas can be problematic. This is because of seasonality, risks associated with agricultural production and the wide spatial dispersion of potential borrowers (which raises servicing costs considerably) (DFID, 2003). These problems are particularly acute in Africa. There have been few successful experiments with the newer models for financial service provision in rural Africa although in places like Kenya more traditional savings and credit cooperatives do reach large numbers of people (Gaile, 1997). It should, however be noted that some borrowers in remote and risk prone areas might never have adequate debt capacity and thus urging credit on such people should be avoided (DFID, 2003).

Another challenge of replicating the success of microcredit programmes in the microfinance sector is the more difficult one. This is because there is no single model of poverty, and global cultures are so diverse. The peer supports provided

67

in loan circles of Bangladesh are more difficult to apply in a transient inner city neighbourhood of say, North America or Africa. (Kilgour, 1998) Nonetheless, there are common elements in most regions of poverty suggesting that lessons can be learned and applied elsewhere.

The challenge of replicating and adapting successful programmes also depends on better dissemination of information (the need to get the message out). Experts and practitioners must find effective ways to let those who have benefited from microcredit share their experiences directly with other communities that are at an earlier stage in the process.

Problems of Microcredit

Microcredit models of poverty alleviation are usually confronted with a variety of problems and shortcomings. Among these problems, those reviewed in the study are: the problem of turning profit on the loan; microcredit loans do not reach the poorest of the poor (instead they tend to reach the moderately poor members of society); the danger of borrowers becoming dependent on microcredit, rather than using it as a means to escape poverty; problem of durability of poverty reduction (Meade, 2001).

Turning a Profit on the Loan: One of the most fundamental problems with microcredit programs is the problem of using loans effectively with the difficulty in actually turning a profit on the loans. For most microcredit schemes, borrowers must bear the cost of the loan and interest payments, and must invest a significant part of their time in group activities mandated by their programs.

68

Also, the loans usually finance some type of "women's work" which is not seen as fit for men to do. This leads women to rely on their female children for supplemental labor, and thus female children are under increased pressure to stay out of school so that they can help contribute to the family income (Khander, 1998). However, investments of loans may not turn a profit. In this event the money to repay the loan must come from reduced consumption or borrowing from some other source, usually on worse terms.

Another problem is capture of the loans by male relatives. In some cases, male relatives use female borrowers as fronts to get relatively low interest loans. These loans may or may not be used to benefit the family, and the female borrowers rarely see any benefit at all. And yet, the women are still held responsible for repayment of the loans (Mayoux, 1997)

One other important obstacle to turning a profit is the fact that as microcredit programs become more successful and hand out more loans, more people enter the local marketplace as microentrepreneurs. Scully Nan Dawkins (2000) wrote that the cumulative effect of rising costs, declining demand, and competition from both cheap imports and increased entrants into the sector leads to shrinking profits in informal-sector trade. In Zimbabwe for example, women traders in the informal sector experienced significant declines in income following the implementation of structural adjustment, and new entrants into the sector reported earning less than they had previously earned in their formal sector jobs.

69

In other words, the initial success of microenterprises can lead to subsequent over competition problems, especially when international trade liberalization is factored into the equation. A few microentrepreneurs in a given area may be able to turn a profit. A large number probably can not.

Indeed the chances of a female-headed enterprise succeeding at all are often quite small. The experience of microentrepreneurs in Botswana is illustrative. Seventy-five percent of the people engaged in informal sector business activities are women. A majority of their microenterprises never grow. They either fail completely or remain at the initial stage of street vending. Studies conducted in Botswana, Kenya, Malawi, Swaziland, and Zimbabwe revealed that most enterprises that started with 1-4 workers never expanded (Ntseane, 2000).

Inability to Reach the Poorest of the Poor: A second important drawback to microcredit programs is that they don't reach the poorest members of the society. Zamman (2000) in his report, "Assessing the Poverty and Vulnerability Impact of Micro-credit in Bangladesh", noted that "the poorest have a number of constraints (fewer income sources, worse health and education, etc) which prevent them from investing the loan in high-return activity".

However, there appears to be a growing consensus that moderate-poor microcredit borrowers benefit more than extremely poor borrowers. The reasons for this are clear. The poorest need tiny loans which are not cost effective even for microcredit programs. The poorest also place the greatest demands on microcredit training programs, which make the cost of lending even higher. As microcredit

70

programs are pressured to become more self-sufficient, the incentive to lend to such desperately poor borrowers evaporates (Mayoux, 1997).

This is a major problem for microcredit programs. Although they are raising some people out of poverty and keeping some people from further poverty, they do not appear to be reaching the people who need assistance the most. In fact, such programs may even be increasing the chasm between the poorest and the rest of society.

Microcredit Dependency: Another possible failure of microcredit programs lies behind seemingly benign statistics. Some researchers have proposed the idea that the high repayment rates, repeated borrowing, and low drop-out rates indicate a dependency on microcredit programs rather than an attraction to successful microcredit programs on the part of poor borrowers.

Many borrowers have no alternative to borrowing from microcredit programs, and consequently can not afford to default. Neither can they afford to stop borrowing or drop-out of the programmes. There is nowhere else for them to go. (Khandker, 1998) In order to stay in good standing with the microcredit program, borrowers may even be forced to resort to pawnbrokers or other alternate sources of funding. Therefore, unless borrowers can increase their incomes they may become permanently dependent on microcredit lending (Khandker, 1998).

71

Again this is a significant failure, as many microcredit programmes tout themselves as more progressive alternatives to the existing systems of informal credit which have caused so many problems in poverty stricken areas (systems such as share cropping, debt bondage, and so on). The chances of microcredit programs becoming just another form of debt-based oppression are real and must be addressed before microcredit programs can progress much further. And yet it has hardly been discussed up to this point

Durability of Poverty Reduction: Infusions of cash in almost any amount are bound to have some effect on the poverty stricken borrowers. But this does not necessarily mean that the effect will be permanent. The poverty reductions may be rolled back in two ways. First of all, borrowers may use loans for consumption purposes which result in a momentary increase in living standards, but which must be paid for by cuts in future consumption. (Zaman, 2000). Secondly, borrowers must make a net profit on their investments. Otherwise, as noted above, they may become dependent on the creditor programs. Even if they do not become dependent on microcredit lenders, they will still have failed to improve their economic position. Again, this would be a failure of microcredit lenders to achieve their goals.

Structure and Performance of Rural and Micro Finance Industry in Ghana

The financial system in Ghana falls into three main categories: formal, semi- formal, and informal.

Formal financial institutions are those that are incorporated under the Companies Code 1963 (Act 179), which gives them legal identities as limited liability companies, and subsequently licensed by the Bank of Ghana (BOG) under either the Banking Law 1989 (PNDCL 225) or the Financial Institutions (Non-Banking) Law 1993 (PNDCL 328) to provide financial services under Bank of Ghana regulation. Most of the banks target urban middle income and high net worth clients. Rural and Community Banks (RCBs) operate as commercial banks under the Banking Law. However, they cannot undertake foreign exchange operations, their clientele is drawn from their local catchment area, and their minimum capital requirement is significantly lower. Some collaborate with NGOs using microfinance methodologies. Among the nine specified categories of non-bank financial institutions (NBFIs), the Savings and Loans Companies (S&Ls), which are restricted to a limited range of services, are most active in micro and small-scale financial intermediation using microfinance methodologies. One leasing company has opened a micro- leasing window (Bank of Ghana, 2000).

Semi-Formal Institutions: Non Governmental Organizations (NGOs) and the Credit Unions (CUs) are considered to be the semi formal system in that they are formally registered but are not licensed by the Bank of Ghana. NGOs are incorporated as companies limited by guarantee (not for profit) under the Companies Code. Their poverty focus leads them to relatively deep penetration to poor clients using microfinance methodologies, though mostly on a limited scale.

They are not licensed to take deposits from the public and hence have to use external (usually donor) funds for microcredit. Credit Unions are registered by the Department of Cooperatives as cooperative thrift societies that can accept deposits from and give loans to their members only. Although credit unions are included in the NBFI Law, BOG has allowed the apex body Ghana Cooperative Credit Union Association to continue to regulate the societies pending the introduction of a new Credit Union Law (Andah and Steel, 2003).

Informal Financial System: According to Andah and Steel (2003), the informal financial system covers a range of activities known as susu, including individual savings collectors, rotating savings and credit associations, and savings and credit "clubs" run by an operator. It also includes moneylenders, trade creditors, self-help groups, and personal loans from friends and relatives. Moneylenders are supposed to be licensed by the police under Moneylenders Ordinance 1957.

The commercial banking system, which is dominated by a few major banks (among the 17 total), reaches only about 5% of households, most of which are excluded by high minimum deposit requirements. With 60% of the money supply outside the commercial banking system, the rural banks, savings and loans companies, and the semi- formal and informal financial systems play a particularly important role in Ghana's private sector development and poverty reduction strategies. The assets of RCBs are nearly 4% of those of the commercial banking systems, with S&Ls and CUs adding another 2%. The term "rural and micro finance institutions" (RMFIs) is used to refer collectively to the full range

of these institutions. However, these institutions use different methodologies to reach different (albeit overlapping) clientele among farmers, rural households, the poor, and microenterprises; and hence different regulatory and supervisory instruments may be appropriate. Based on the best information available, some selected institutions that are required to play important role in the rural finance are discussed below:

Agricultural Development Bank (ADB)

ADB has played an important role in making finance available for agriculture. It has however suffered from poor economic conditions in the 1970s and early 1980s, poor repayment, and other problems, resulting in negative net worth by the end of the 1980s and restructuring in 1990 (Nissanke and Aryeetey, 1998).

Furthermore, "the share of smallholder credit in ADB's total lending declined to 15% in 1992, while the share of lending to agriculture fell to 30%," and short-term loans accounted for some 80% of lending (Nissanke and Aryeetey, 1998). The share of smallholders has since risen to 24% in 1999 and the share of agriculture loans to 51%. After restructuring of ADB to permit universal banking, its financial profitability has improved, but it has remained subsidy-dependent (Kowubaa, 2000).

Rural and Community Banks

The Rural and Community Banks are unit banks owned by members of the rural community through purchase of shares and are licensed to provide financial

intermediation in the rural areas. Rural Banks (RBs) were first initiated in 1976 to expand savings mobilization and credit services in rural areas not served by commercial and development banks. The number expanded rapidly in the early 1980s in response to the demand for rural banking services created by the government's introduction of special checks instead of cash payment to cocoa farmers. The small numbers of rural outlets of commercial banks were woefully inadequate to meet the demand to cash these checks, let alone provide other banking services, creating undue hardships on farmers who often had to travel long distances or spend days at the banks to cash their checks. More RBs and agencies were, therefore, hurriedly opened to help service areas without banking facilities. (Andah and Steel, 2003).

The strong promotion of RBs to service the government's policy of paying cocoa farmers by check had adverse consequences for their financial performance (Nissanke and Aryeetey, 1998,). Through a combination of rapid inflation, currency depreciation, economic decline, mismanagement of funds and natural disasters (especially in 1983), combined with weak supervision, only 23 of the 123 RCBs qualified as "satisfactory" in 1992 when the classification started.

The obvious need for re-capitalization and capacity-building was addressed during 1990-94 under the World Bank's Rural Finance Project, with half of them achieving "satisfactory" status by 1996. The combination of very high (62%) primary and secondary reserve requirements imposed by BOG in 1996 and high T-bill rates helped to reduce the risk assets and increase net worth, further improving their financial performance. The number of RCBs reached a

peak of 133 in 1998, but fell to 111 in 1999 with the closure of 23 distressed banks and the commissioning of one new bank. These closures sent a strong signal to the remaining rural banks to maintain or improve their operations in order to achieve satisfactory status. Between 1999 and 2001 there was 64% increase in the number of satisfactory banks. (Bank of Ghana, 2000).

During the 1990s, some of the RCBs adopted a more commercial approach and introduced innovative programs, often in collaboration with NGOs that offered proven microfinance methodologies, such as Freedom From Hunger's Credit with Education program. A few RCBs have succeeded in expanding to over 20,000 clients and reaching high levels of operational and financial sustainability. The total number of recorded depositors in all RCBs is 1.2 million, with about 150,000 borrowers (some of them groups of 5 to 35 members, so actual outreach is somewhat greater). On average, however, RCBs are relatively small compared even to African MFIs, especially in terms of lending though relatively profitable. (Andah and Steel, 2003).

Non-Governmental and Community-Based Organizations

NGOs have facilitated the development of good microfinance practices in Ghana by introducing internationally tested methodologies, often in partnership with RMFIs (Chord 2000). The methodologies introduced by these NGOs often are based on group solidarity methods, and have benefited from linkages with CBOs that have already come together on the basis of some kind of location, occupations, friendship, family ties, gender, or other grounds to serve a purpose at

the community level (Chord, 2000). This can save the long and expensive process of promoting and training prospective groups. Meanwhile, some CBOs also have procedures and modalities of doing things that may not suit the microfinance scheme (Chord, 2000). NGOs and CBOs are particularly important in making financial services available in the rural areas of the country, where both commercial and rural banks are scarce. However, they tend to be somewhat localized and dependent on donor funds, in part because of the relative poverty of the areas and their association with welfare-oriented programs.

Of course, Ghana lacks NGOs whose primary mission is microfinance (Women's World Banking Ghana began as an NGO, but became an S&L). Although some 50 NGOs have active microcredit programs, they are generally multipurpose or welfare-oriented agencies (only four exceed 3,000 clients and total outreach is only about 60,000 clients; GHAMFIN, 2003). The principal exception is Sinapi Aba Trust (SAT), which was established in 1994 and offering both group-based and individual loans. SAT has reached financial and operational sustainability and sufficient scale to qualify and succeed as a licensed S&L. The ability to take and intermediate savings would free it from its current reliance on RCBs and other intermediaries to handle clients' funds and on donor funds to finance its lending (Chord, 2000). The SAT S&L would be set up as a microfinance provider separate from SAT NGO, which will provide technical services.

The models used by NGOs are often introduced by the NGOs in collaboration with RCBs or other RMFI partners. "Village banking" is a group

and individual savings with credit methodology promoted by some NGOs, notably Catholic Relief Services and the SNV/Netherlands Development Programme. It is an adaptation of the Grameen Bank model as further adapted by K-REP (Kenya), in which both share capital and savings deposits are mobilized from members (with a one-third match from the donor agency, in the case of the SNV program). Loans are made to groups of ten members, but benefiting only half of them at a time and reaching the second half only after repayment of the initial loans. Loans are limited to the combined savings of the individual applicant and guarantor plus the one-third supplement, with an interest rate of 40% per annum (Chord, 2000).

Freedom From Hunger's (FFH) Credit with Education program uses individual savings with group credit to target women and provide accompanying education on health, nutrition, family planning, financial planning and budgeting, and microenterprise development. Group members make mandatory savings contributions for at least three months before qualifying for a loan. Increasing repeat loans are made on four- month cycles with an interest rate of 3-4% per month. FFH trains the loan officers for partner RMFIs (mainly RCBs) and the groups handle the bookkeeping of members' savings and repayments, so the program can be quite profitable. An inventory credit scheme is another product developed by one NGO (Technoserve) on the warehouse receipts model and has led several commercial banks to adopt this form of lending.

With respect to linkages between CBOs and RMFIs, conditions for success emerging from an evaluation of different schemes include (Chord, 2000):

- Empowerment of the groups through training and logistic support that enables them to fully co-operate with the MFIs and sustain the project;

- Frequent reporting that keeps each other abreast with developments in the scheme;

- Transparency and participatory nature of the interactions;

- Well-established procedures for record keeping and accountability.

Donor Programmes

Most donor-supported programmes use the microfinance methodologies described above under Rural and Community Banks, and often work through existing NGOs and other organizations. Examples include the SCIMP Solidarity Group System (group savings with credit) and ENOWID (group and individual savings with credit) (Chord 2000).

Informal Finance

Moneylenders: By the mid-1960s, moneylending had become more of a part-time activity by traders and others with liquid funds than a full- time profession (Offei, 1995). Loans from moneylenders typically average 3 months and rarely are made for more than 6 months (though some borrowers may take longer). The typical interest rate in the early 1990s was 25-30% for a 3- month loan; this represented a decrease from the 1983 rate of 100% on loans under 6 months, reflecting some market sensitivity to lower inflation and increased liquidity in the post-reform period (Aryeetey, 1994). Moneylenders invariably

require security, preferably in the form of physical assets such as buildings, farmland and undeveloped land. Unlike commercial banks, moneylenders incur little transaction costs in enforcing pledges of such collateral made before family members or traditional authorities, as the moneylender can simply make use of the property until the debt is repaid. Loans to employees, including civil servants, are often secured by an arrangement with the paymaster. Verbal guarantees from family heads, friends and relatives may also be accepted as security.

The importance, and certainly the registration, of individual moneylenders may have been reduced by the emergence of rural banks, Credit Unions, 'susu' associations and clubs, and especially S&Ls, which has enabled moneylending-type operations to become licensed. Official statistics indicated that in 1972, there were 33 licensed money lenders in Accra Region. By 1988 the number had dwindled to 4 (Anin, 2001). These days most individual moneylenders do not hold licenses or operate full time, and the Ordinance has ceased to be of any importance, although it remains in the statute books.

Poverty Trends in Ghana

Trends in poverty across Ghana have been measured both through formal survey mechanisms used to calculate household consumption and expenditure levels, and thus establish nutrition-based income measured Ghana lines, and also through qualitative consultations, such as the 'voices of the poor' exercise.

The establishment of an absolute poverty line by the Ghana Statistical Service (1999) represents a departure from previous quantitative poverty analyses,

traditionally based on ratios of mean household consumption per capita. Two poverty lines have been calculated, based on data from the Ghana Living Standards Survey (GLSS, 1998/99).

In monetary terms, these two poverty lines translate as ¢700,000 per adult per year (approximately US$100) and ¢900,000 (approximately US$129) in 1998/99. The lowest or 'hard core' poverty line represents food poverty, meaning that those whose incomes fall below this are unable to meet their calorific requirements. The higher poverty line makes room for some basic non-food items.

In the 1990s, according to the upper poverty line, the percentage of Ghanaians defined as poor (poverty incidence) fell from almost 52% in 1991/1992 to a little under 40% in 1998/1999. During the same period, the lower poverty line records a fall from 37% to 27%. Whilst this is a positive trend, the impact was not uniformly spread across the country. Whereas Accra and the rural forest ecological zones recorded a substantial decrease in poverty, the rural savannah areas experienced a rise in poverty when measured against the lower poverty line (Ghana Statistical Service, 1999). The pattern of poverty recorded in GLSS IV (1998/99) revealed sharp differences in poverty levels between geographically adjacent regions. Generally, poverty is lowest in Accra and highest in the Northern, Upper West and Upper East Regions, as shown in the mean annual income in table 1.

These poverty trends were linked to occupational patterns through the GLSS IV data, illustrating that in 1998/99 the poorest group was food crop farmers. Moreover, their contribution to the national incidence of poverty was

found to be greater than their population share, with almost 58% of those identified as poor coming from households whose main economic activity was food crop farming (Ghana Statistical Service, 1999). Whilst the incidence of poverty fell over the period 1991/92 to 1998/99 for those engaged in food-crop farming (by 6%), those engaged in export farming and wage employment in the private sector experienced the largest reductions in poverty (23% and 15% respectively). Poverty incidence of those engaged in non-farm self employment fell by 7% over the period, although this should be viewed in the context of increasing numbers of people engaging in this sector. As highlighted in Newman and Canagarajah's (1999) analysis of the GLSS data by gender, non-farm activities play an important role in yielding the lowest and the most rapidly declining rural poverty rates for women. Poverty trends highlighted in the 'Consultations With The Poor' (CWTP) exercise exhibited similar regional variations to those highlighted in the GLSS, with Northern Savannah and Ecological zones worst affected. The CWTP (1999) reflects on the nature of resource endowment, stating that the Northern Savannah region in particularly has the least natural productivity, and has thus drawn the least investment in human development terms (Kunfaa, 1999).

In contrast, the broad poverty trends highlighted through the CWTP suggested a downward trend in living conditions and an increase in hardship and poverty over the past decade, generally conflicting with the findings of the GLSS, which identified a reduction in poverty incidence even among those characterised as the poorest (food crop farmers). Problems identified through the CWTP in

urban areas included increasing unemployment, whist in rural areas inadequate food or food insecurity was perceived to have increased over the past 10 years. Increased population pressure and rapid environmental degradation were highlighted as some of the key causes of increased hardship, with rural dwellers mentioning inadequate water supply, poor cocoa yields and soils as increasingly problematic (Kunfaa, 1999).

Having highlighted the findings and differences between the GLSS and CWTP exercises, it is important to note that direct comparisons should not be drawn. The CWTP exercise aimed specifically to gain an in-depth understanding of poverty and 'the poor' through direct consultation. The methodologies used reflect a focus specifically on the poor, exemplified by "the fact that poverty is more pronounced and widespread in rural communities, [resulting in] more rural sites [being] chosen than urban sites" (Kunfaa, 1999). In contrast, the GLSS aims to provide a less detailed but more widespread picture of living standards across Ghana focusing particularly on consumption and expenditure patterns. Further detailed investigation of methodologies and results would be required to gain insight into whether specific findings are comparable.

In a nutshell, poverty in Ghana is a predominantly rural phenomenon. The majority (about 70%) of the poor in Ghana live in the rural areas with agriculture being their primary occupation. In 1989-1999, poverty was highest by far among food crop farmers. At the national level, almost 58% of those identified as poor are from households in which food production is the main economic activity.

More than 60% of these are women. The average per capita income of these farmers is about one third of the national average.

A major cause of the increased incidence of rural poverty in Ghana can in part be attributed to the sluggish growth of the agricultural sector, averaging about 2.5 percent over the last decade (Apraku, 2000). Thus while recent studies in Ghana suggest that overall poverty has declined, the decline has most been manifested for those working outside the agricultural sector.

CHAPTER THREE

METHODOLOGY

Introduction

The issues discussed under this chapter explain the methodology used to conduct the research. They cover research design, study population, source and type of data, instrumentation, sampling procedure and sample size, pre-testing of instrument, selection and training of field assistants, field data collection procedure, data analysis, and model specification.

Research Design

This study is not programme specific and therefore it would be biased to use baseline survey, which had been conducted by any specific MFO before its operation. Thus the concept of "before and after" programme interventions comparisons could not be appropriately applied to this study. Also the "before and after" approach, which had been the most common approach being used by researchers has serious weakness. This is because, in a generally growing economy when income of a large cross-section of people grows, reporting that programme beneficiaries' incomes have grown without comparison to appropriate control group would be meaningless (Coleman, 2001).

Therefore the study is designed to use "with and without" approach that compared beneficiary women with an appropriate control group (Gittinger 1995, Moser & Kalton, 1991), and ensures correction for selection bias. In this design, descriptive correlational survey of eligible beneficiary women and non-beneficiary women in beneficiary and non-beneficiary communities respectively was conducted. The women situations between the two groups were compared and any difference attributed to microcredit programme treatment after the

86

influences of all other possible explanatory variables have been fully controlled. The researcher intended to use this design following an approach used by Pitt and Khandker (1998) to estimate impact as below;

$$\text{Impact} = (Y_{EP} - Y_{IP}) - (Y_{EN} - Y_{IN})$$

Where:

Y_{EP} - is eligible beneficiaries in participating village,

Y_{IP} - is ineligible beneficiaries in participating village,

Y_{EN} - is eligible beneficiaries in non-participating village, and

Y_{IN} - is ineligible beneficiaries in non-participating village;

The assumption used here was that there is no spillover effect of the programme intervention. The basis of this assumption is that most studies (Dunn, Kalaitzandonakes, and Valdivia, 1996; Hyman and Dearden, 1996; Little, 1997) have compared beneficiaries with non-beneficiaries in the same communities where there is microcredit programme intervention and have found significant differences in the lives of the respondents studied.

The design as proposed in this study simplified the above equation as follows:

$$\text{Impact} = Y_{EP} - Y_{IP} - Y_{EN} + Y_{IN}$$

$$\text{Impact} = Y_{EP} - Y_{EN}$$

The assumption used here is that if there is no spillover effect, then

87

$$Y_{IN} - Y_{IP} = 0$$

This approach would have advantage of using lesser time, and being less expensive than the case of Pitt and Khandker (1998).

Population

The target population for the study was all eligible beneficiaries of microcredit programmes in the Central Region who are located both in the beneficiary and non-beneficiary rural farming communities. The eligibility criteria used was based on women in the households with total land holding below 0.5 acre before participating in microcredit programme in participating communities. In the non-participating communities, eligible beneficiaries were women in the households with total land holding below 0.5 acre three years before the survey was conducted.

By using land holding, women were asked to convert their wealth into land holding and those with land holding below 0.5 acre were found to be eligible to be involved in the study. According to Pitt and Khandker (1998), land holding is the commonness asset position that can be used to measure wealth in rural communities and land holding of above 0.5 acre implies that a rural folk has enough economic potential to invest in micro-income generating activity. In the study area, the average price of 0.5 acre of land was ¢1,900,000.00.

Source and Type of Data Collection

Primary data was used in the study. Cross-sectional information was obtained through a field survey of women in the study population who were selected to form the study sample. In the study, data was obtained on the socio-economic characteristics, socio-demographic characteristics, the economic activities of women, income and expenditure patterns, authority and decision-making structure, and facilities in the households.

Instrumentation

The main instrument that was used to collect data from the respondents was structured interview schedule. That instrument was considered most suitable for the research survey based on the following reasons: (i) it provided uniform information which assured the comparability of data (ii) it could easily be used to collect information from any respondent whether literate or illiterate (Kumar, 1999).

Also observations were made to obtain information on issues (e.g. materials used for the construction of respondents houses, toilet facilities, and material possessions) that are observable. The observed information was used to support or explain some of the results to be obtained.

Sampling Procedure and Sample Size

This section is divided into selection of study area and selection of respondents sub-section as follows.

Selection of Study Area

The selection of the study districts was based on the fact that microcredit programme had been introduced to the area over the past three years. Hence all the districts in the Central Region where microcredit programme had been introduced over the past three years were identified and those in which agriculture was the predominant economic activity were purposively selected. The lottery approach random sampling technique was used to select two districts (Asikuma-Odoben-Brakwa District, and Twifo-Hemang-Lower Denkyira District).

In each selected district, all the rural areas (towns/villages/communities) were identified and grouped into beneficiary and non-beneficiary communities depending on the availability of the microcredit programmes. Furthermore, the lottery random sampling technique was used again to select four areas (Fosuansa, Nwomaso, Kokoso, and Twifo Breman) from the beneficiary communities and six (Breman Nyamebekyere, Breman Nankese, Wawase, Krobo, Nyenase, and Mfuom) areas from the non-beneficiary communities. Thus in all ten rural areas were randomly selected with the multistage sampling procedure described above to represent the study area.

Selection of Respondents

With the help of key informants including opinion leaders, households in the selected communities were grouped into eligible and ineligible households. In order not to be biased in the selection of respondents, eligibility in the beneficiary communities was not just based on microcredit programme participation but also

on some common poverty assessment criterion used in this study (land holding below 0.5acre). This is because Pitts and Khandker (1998) having used land holding criterion, found in their survey that about 30% of programme participants in fact had wealth that should have excluded them from participating in microcredit programmes.

The eligible households were then labeled with numbers after which the lottery approach random sampling technique was used to sample 30 women from Twifo Breman and 20 each from the rest of selected beneficiary rural areas. In the non-beneficiary areas, 15 women were sampled from each of the selected rural areas. In this sampling procedure, the individual household numbers were written on pieces of paper and folded up. The folded papers were then put in a container, which was shaken vigorously to mix them up. Papers were randomly picked one after the other after each thorough shaking. To ensure equal chances of selection, every household that was picked, was noted and again put into the container before the next shaking was done for the subsequent selections. The women households whose numbers had been picked were contacted and interviewed to obtain the required data for the study. In all, a total of 180 respondents were drawn from the study population.

Pre-Testing of Instrument

Pilot-testing of the instrument was done as part of the field assistants' training. Small number (15) each of beneficiary and non-beneficiary women who were not part of the sample were interviewed. There was close monitoring and coaching of the field assistants by the researcher during the pre-test to ensure that

the questions were clearly understood by the data collectors and respondents, the survey was introduced properly, and responses were recorded properly.

The pre-test was expected to reveal problems with the items in the interview schedule that required changes. Thus after the pre-test, the interview schedule was fine-tuned where necessary, and finally photocopied for the main survey. The pre-test was carried out at Agona Duakwa and Gomoa Abonyi in the Agona and Gomoa districts respectively in February 2006.

Selection and Training of Field Assistants

Six research assistants were engaged in this survey to collect field data. Selection of these assistants was based on their previous experience, knowledge of the local language, ability to understand and write in the language used in the study, and their availability during the survey period.

After their selection, the research assistants were trained to understand the purpose and objectives of the survey. They were also trained on the best interview techniques and how to record the answers. They were then taught of how to introduce survey to respondents, and the meaning of each question. The researcher himself did the training of the field assistants. A two-day training workshop was organized for them at the University of Cape Coast, Cape Coast. The training took place in January 2006.

Field Data Collection Procedure

Having fine-tuned the interview questionnaire after the pre-test, the field assistants administered the interview schedule in the selected rural areas. In order to maximize response, the items in the interview schedule were explained in the local language of the respondents and their responses were transcribed into English language for easy used by the researcher during analysis and interpretation.

The researcher worked closely with the field assistants to constantly check entries to ensure consistency across and within instruments. The field data collection began on April 24 and ended June 14 2006.

Data Analysis

With the help of SPSS computer software, the field data was subjected to statistical analysis that was done by the researcher and two research assistants in the case of computer data entries.

For easy and fast comparison of beneficiary and non-beneficiary women, descriptive statistics were run to obtain the summary of the data, including frequencies, percentages, means and standard deviations.

In order to test for significant differences between groups' means and frequencies observed in the data, independent sample t-test and chi-square test respectively were done.

Furthermore, correlation coefficient statistics (Pearson moment, point biserial, and biserial correlation coefficient statistics) were done to examine

relationships between the dependent and independent variables on one hand, and also between the independent variables.

Model Specification

The study attempted to control the influence of the socio-economic and socio-demographic characteristics of women. It was assumed that these characteristics of women might also influence the dependent variables (income, level of living, and empowerment) in this study. The effort to control these independent variables was accomplished by running a regression model. In this study, K-variable step-wise OLS regression and Logit regression models were run for quantitative assessment of the impact/effect of the microcredit programme intervention on women in the study area. The models were expected to help the researcher to ascertain the percentage variation of the women income, level of living, and empowerment that was explained by the microcredit intervention (Pallant, 2001; and Gujarati, 1992). The models specified are represented as below:

OLS: $Y = X\beta + U$

LOGIT: $\log [Pi/ (1- Pi)] = Z\beta + E$

Where:

Y – represents the column vector of the observation of dependent variable (income, output, level of living, or empowerment);

X/Z – represents the matrix of observations of the explanatory variables (microcredit intervention, socio-economic characteristics, and socio-demographic characteristics of women);

β – represents the column vector of the coefficients; and

U/E – represents a vector of disturbances.

Pi – the probability that improvement in a particular condition occurs

From the above models mentioned, the researcher used the following model equations specifically to estimate the changes in the socio-economic life of the women (increased income, empowerment, and level of living) in the rural farming towns and villages in the Central Region. Hence the test of the estimated beta (β) coefficients in the model equations was used to draw conclusions on the hypothesized relationships.

$$Y_e = \beta_{0+1}D_1 + \beta_2 D_2 + \beta_3 D_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + U_e \qquad (1)$$

$$Y_l = \beta_0 + \beta_1 D_1 + \beta_2 D_2 + \beta_3 D_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + U_l \qquad (2)$$

$$Log[P_y/(1-P_y)] = \beta_0 + \beta_1 D_1 + \beta_2 D_2 + \beta_3 D_3 + \beta_4 Z_4 + \beta_5 Z_5 + \beta_6 Z_6$$

$$+ \beta_7 Z + E \qquad (3)$$

Where:

$\mathbf{Y_e}$ = empowerment (mean index of the extent of women involvement in decision making)

$\mathbf{Y_l}$ = mean index of women household's level of living

$\mathbf{P_y}$ = probability that increased income occurs

$\mathbf{D_1}$ = 1 if microcredit programme participant, and

= 0 if otherwise

$\mathbf{D_2}$ = 1 if woman has some formal education, and

= 0 if otherwise

$\mathbf{D_3}$ = 1 if woman has presence of husband in the household, and

= 0 if otherwise

X/Z_4 = age of the woman

$X/\mathbf{Z_5}$ = size of household

$X/\mathbf{Z_6}$ = number of children

$X/\mathbf{Z_7}$ = specific type of economic activity (e.g. farming, trading, and dressmaking)

CHAPTER FOUR

RESULTS AND DISCUSSIONS

Introduction

This chapter presents the results of the study. The results presented are categorized with headings that make the sub-headings in the chapter. Among the sub-topics discussed are: social and demographic characteristics of women, women households' income use, economic and production activities of women, women empowerment, women level of living, and specified model results and interpretation.

Social and Demographic Characteristics of Women

The study focused the age distribution of women respondents for two primary reasons which were to find out whether age is a factor in explaining changes in the socio-economic life of women, and to ascertain the age group of women who have benefited most from formal microcredit programmes in the study area. Table 1 has the details of results from the study on ages of women.

The table reveals that both beneficiary and non-beneficiary women have similar distribution in their ages. The majorities (65.5% and 62.1% respectively) of both women beneficiaries and non-beneficiaries have ages beyond 40 years. Also the mean ages (45.4 and 42.5 years) of the two groups depict similarities in their age distributions. However, the modal ages indicate that most of the women beneficiaries are 53 years as compared to non-beneficiary women most of them have 29 years. This implies that formal microcredit interventions might have not reached more women under the age of 40 years in the study area. Perhaps, for

97

such women who might be enthusiastic to migrate from rural area, it might be difficult to organize them into vibrant groups that would meet on schedules to see to the welfare of members; and group formation is a pre-requisite and a guarantee for accessing most of the formal microcredit.

Table 1: Age distribution of women involved in the study

Age (Years)	Beneficiary women		Non-beneficiary women		Total	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
<21	0	0.0	1	1.1	1	0.6
21-30	2	2.2	16	17.8	18	10.0
31-40	29	32.2	18	20.0	47	26.1
41-50	22	24.4	34	37.8	56	31.1
51-60	37	41.1	17	18.9	54	30.0
>60	0	0.0	4	4.4	4	2.2
Total	90	100.0	90	100.0	180	100.0
	Mean = 45.4		Mean = 42.5		Mean = 44.0	
	SD = 8.9		SD = 10.8		SD = 9.9	
	Mode = 53.0		Mode = 29.0		Mode = 41	

Source: Field Data, 2006

Table 2 presents details of the educational background of the respondents. The table shows that generally, the level of education of the women involved in the study is low since only 11.2% of the women interviewed have had education up to and beyond secondary school level.

Table 2: Level of education of the respondents

98

Qualification	Beneficiary women		Non-beneficiary women		Total	
	Freq.	Percent	Freq.	Percent	Freq.	Percent
No formal education	37	41.1	38	42.2	75	41.7
Primary/MS/JSS	38	42.2	47	52.2	85	47.2
Sec School	14	15.6	5	5.6	19	10.6
Post Sec/Tertiary	1	1.1	0	0.0	1	0.6
Total	90	100.0	90	100.0	180	100.0

Source: Field Data, 2006

The low level of education as realized among the women might not influence microcredit programme participation since rural poor women are not characterized by their educational background to decide on their eligibility to access microcredit.

Marital status may exert a strong influence on the likelihood of integration of women into economic activity. The study therefore considered the marital status of the respondents as one of the socio-demographic characteristics studied and the result is presented in Table 3.

Table 3: Marital status of the women respondents

Marital	Beneficiary women		Non-beneficiary women		Total	

Status	Freq.	Percent	Freq.	Percent	Freq.	Percent
Married	61	67.8	70	80.5	116	65.5
Single	4	4.4	4	4.6	8	4.5
Divorced	19	21.1	8	9.2	42	23.7
Separated	4	4.4	5	5.7	9	5.1
Widow	2	2.2	0	0	2	1.1
Total	90	100.0	87	100.0	177	100.0

Source: Field Data, 2006

As Table 3 depicts, only 4.5% of the women respondents had never been married. The rest are either still marrying, divorced, separated, or widowed. The table also reveals a high divorced rate of 21.1% among the beneficiary women as compared with relatively low rate of 9.2% among the non-beneficiaries. This high divorced rate among the beneficiary women might be as a result of the fact that they were not happy with their marriage most of which were described to be polygamous. Most women explained that they accepted their marriage just to please their parents and also reduce financial burden on their families to continue taking care of them since they were not doing anything meaningful economically. But having been given the opportunity to engage in income generating activities through participation of microcredit programmes, through which they could take care of themselves and their children, they see no reason to stay in unhappy marriage while their polygamous husbands share their attention and little resources with their rival families. This seems to suggest that microcredit programmes encourage divorce and separation of marriages but they assist

100

women to hold on to their rights to work, and deliver them from any circumstance in life that will keep them in poverty.

With believe that the presence of husbands may influence women socio-economic situations in their households, the study investigated how many women had husbands living with them. Table 4 shows the results of the frequencies and percentages of respondents who are living with their husbands.

From Table 4, it is obvious that most (72.4%) of women non-beneficiary have husbands living with them in their households compared with 56.7% of the beneficiary women who live with their husbands. This implies that most of the non-beneficiary women in the study area may not be economically active because they might expect their husbands to work and bring money home to take care of their households' financial responsibilities. Such women normally seek to do households activities as housewives, and hence, with the absence of a hard working husband, the entire household is likely to be in need.

Table 4: Presence/absence of husband in the sample households

Women respondents	Presence of husband		Absence of husband		Total	
	Freq.	Percent	Freq.	Percent	Freq.	Percent
Beneficiary women	51	56.7	39	43.3	90	100.0
Non-beneficiary women	63	72.4	24	27.6	87	100.0
Total	102	57.6	75	42.4	177	100.0

As shown in the Table 5, majority (94.4%) of the women sampled had household sizes ranged from 3 to 9 members with a mean size of about 6 members. This indicates that both beneficiary and non-beneficiary women in the study area on average have significant number of people in their households (i.e. mean household sizes of about 7 and 6 in the beneficiary and non-beneficiary women households respectively). This implies that the dependency ratio in the women sampled households might be high since every household member's basic needs (food, clothing, health care, education of children) ought to be met. In this regard, to be able to meet such large-member size needs to improve on households welfare requires hard work to increase economic gains. Thus the role microcredit would play in strengthening economic position of beneficiary women would no doubt be vital to assist the women to contribute immensely towards improving the welfare of their household members.

Table 5: Household sizes of the rural women in the beneficiary and non-beneficiary communities

Size of household	Beneficiary women		Non-beneficiary women		Total	
	Freq.	Percent	Freq.	Percent	Freq.	Percent
< 3	0	0.0	7	7.8	7	3.9
3 – 5	34	37.8	38	42.2	72	40.0

6 – 9	53	58.9	45	50.0	98	54.4
> 9	3	3.3	0	0.0	3	1.7
Total	90	100.0	90	100.0	180	100.0
	Mean = 6.21		Mean = 5.41		Mean =5.58	
	SD = 2.11		SD = 1.90		SD = 1.96	
	Mode = 4, 6		Mode = 5		Mode = 5, 6	

Source: Field Data, 2006

As Table 6 portrays, the majority (67.8%) of beneficiary women compared with 35.6% of non-beneficiary women have all of their children of school-going age attending school. Furthermore, the table shows that a significant number (23.3%) of non-beneficiary have none of their children that suppose to be in school attending school. This may mean that the households of the beneficiary women are more capable to afford educating their children than that of non-beneficiaries.

Perhaps, by forming groups which might have been introduced to many educational training programmes through participation in micro credit programmes, most beneficiary women would appreciate the essence of sending their children to school rather than engaging them in labour activities to help generate/raise income for household upkeep. This stands to reason that income generation might not be a difficulty to such beneficiary women with the microcredit programme interventions and hence could either complement or take full responsibilities of household needs including children education.

103

Table 6: Women's children of school-going age who were in school

Children in school	Beneficiary women		Non-beneficiary women		Total	
	Freq.	Percent	Freq.	Percent	Freq.	Percent
None	4	4.4	21	23.3	25	13.9
Some	25	27.8	34	37.8	59	32.8
All	61	67.8	32	35.6	93	51.7
Not applicable	0	0.0	3	3.3	3	1.7
Total	90	100.0	90	100.0	180	100.0

Source: Field Data, 2006

Women Income Use in Their Households

Women in the rural areas were found in the study to be involved in diverse income generating activities. The study therefore investigated their income and how it might influence their household spending situations.

Table 7 presents women assessment of changes in their household food consumption. From the table, it may be observed that generally, most of the beneficiary women households have attained improvement in their food consumption than non-beneficiary households. About 67%, 51% and 42% of the beneficiary women relative to 43%, 41% and 14% of non-beneficiary women gave a response that they had observed an increased change in the number of meals taken in a day, quantity of food taken and quality of food taken respectively. It was, thus, not surprising to find out that the approximate annual income earnings of the non-beneficiary women were comparatively low (Table 8). As Table 8 shows, the majority (74%) of the non-beneficiary women have

income earnings below ¢1,050,000.00. On the contrary, over half (69%) of the beneficiary women have income earnings greater than ¢ 5,000,000.00 per annum.

Table 7: Women's assessment of changes in their household food consumption over the 3-year period

Respondent		Observed change					
		Decrease		Same		Increase	
		Freq.	percent	Freq.	percent	Freq.	Percent
Beneficiary women (n= 90)	Number of meals taken in a day	4	4.4	26	28.9	60	66.7
	Quantity of food taken	4	4.4	40	44.4	46	51.1
	Quality of food taken	8	8.9	44	48.9	38	42.2
Non-beneficiary women (n=90)	Number of meals taken in a day	11	12.2	40	44.4	39	43.3
	Quantity of food taken	3	3.3	50	55.6	37	41.1
	Quality of food taken	16	17.8	61	67.8	13	14.4

Total (n=180)	Number of meals taken in a day	15	8.3	66	36.7	99	55.0
	Quantity of food taken	7	3.9	90	50.0	83	46.1
	Quality of food taken	24	13.4	105	58.3	51	28.3

Source: Field Data, 2006

Generally, comparing the women income situation as presented in Table 8 with the national poverty line of ¢900,000.00 per annum (GSS, 2000), it becomes obvious to note that the majority (about 60%) of the respondents have been able to rise out of poverty. The mean income of ¢ 3,763,178.8079 per annum is well above the national poverty line of ¢900,000.00.

Table 8: Approximate annual income earnings from the economic activities of the women understudied

Average income (¢000)	Beneficiary women		Non-beneficiary women		Total	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
<750,	0	0.0	11	15.1	11	7.3
750 -1000	7	9.0	43	58.9	50	33.1
1050–5000	17	21.8	9	12.3	26	17.2
5050–8500	50	64.1	9	12.3	59	39.1
>8500	4	5.1	1	1.4	5	3.3
Total	78	100.0	73	100.0	151	100.0

Mean=¢5,474,230.77 Mean=¢1,934,931.51 Mean =¢3,763,178.81

SD = ¢2344385.68   SD = ¢2170950.97   SD =¢2869266.19

Source: Field Data, 2006

The result in Table 8 further portrays that on average, the mean proxy income of beneficiary women is relatively greater than the mean proxy income of the non-beneficiary women (i.e. ¢5,474,230.77 and ¢1,934,931.51 respectively). The difference of ¢3,539,299.26 in the mean incomes of beneficiary and non-beneficiary women was subjected to statistical test to ascertain if it was statistically significant. As shown in Table 9, the mean difference with a t-ratio of 9.632 tested significant at an alpha level of 0.05 implies that the proxy annual income of beneficiary women is statistically greater than the annual average income of non-beneficiary women.

Table 9: Independent sample t-test comparing difference in the mean incomes of beneficiary and non-beneficiary women

Test variable	Levene's test for equality of variance		t-test for equality of means		
Proxy annual income (¢)	F	t	Sig.	Mean difference	Std Error Difference
	0.917	9.632[**]	0.00	3539299.262	367458.05

[**] **Significant at 0.01 alpha level**   **Source: Field Data, 2006**

Table 10 presents details of the proportion of women income that is consumed. The table shows that beneficiary women spend up to 60p of every cedi

income earned with the majority (about 70%) spending at most 20p of their income. Comparing this with the non-beneficiary women, it can be seen from the table that they spend as high as 80p of every cedi income earned. Also relatively, most (about 88%) of the non-beneficiary women spend more than half of their income on consumption. This result implies that there is relatively low propensity to consume among the beneficiary women as compared with non-beneficiary women, which may mean that the non-beneficiary women spend more of their income on consumption than the beneficiary women.

Perhaps, the beneficiary women incomes have increased and are relatively higher than non-beneficiary women income. It has been suggested that all other things being equal, as ones income is increasing and becoming higher, the smaller may be the proportion of the person's income that will be consumed and vise versa (McConnell and Brue, 1999); and the result found in the study supports this assertion.

Table 10: Proportion of women income that is consumed

Income consume	Beneficiary women		Non-beneficiary women		Total	
	Freq.	Percent	Freq.	Percent	Freq.	Percent
< 0.20	62	68.9	0	0.0	62	34.4
0.20 – 0.40	25	27.8	11	12.2	36	20.0
0.45 – 0.60	3	3.3	45	50.0	48	26.7
0.65 – 0.80	0	0.0	34	37.8	34	18.9
Total	90	100.0	90	100.0	180	100.0

Once there are enhanced economic activities and improvement in income generation, it is expected that women in the study area improve upon their savings for future financing and management. Women respondents were observed making savings in several ways to include savings at home, banks, susu collectors, associations, and credit unions. Hence, the study investigated the marginal propensity to save among the women and the results in Table 11 are presented. It may be observed that 61% and 73% of beneficiary and non-beneficiary women respectively saved up to 20p of every cedi income earned from their economic activities.

However in Table 11, some (about 7%) of the beneficiary women saved up to 60p of every cedi income earned whereas none of the non-beneficiary women saved up to that proportion of their incomes. Obviously, the results show that some women beneficiaries' savings have been quite improved as compared with non-beneficiary women. This assertion, which is in line with the result of Adafio-Scandorf et tal (1995), might be because some of the beneficiary women have sustained financial support for investment in their businesses and thus stand relatively better chance of saving significantly from their income earnings against future financing and management of their businesses than non-beneficiaries whose major means of sustenance in business might be to re-invest their immediate incomes earned.

Table 11: Proportion of income that goes into savings

Income saved	Beneficiary women		Non-beneficiary women		Total	
	Freq.	Percent	Freq.	Percent	Freq.	Percent
< 0.20	55	61.1	66	73.3	121	67.2
0.20 – 0.40	29	32.2	24	26.7	53	29.4
0.45 – 0.60	6	6.7	0	0.0	6	3.3
Total	90	100.0	90	100.0	180	100.0

Source: Field Data, 2006

Table 12 presents assessment of women's current income compared with 3 years ago. The table shows that as majority (88.9%) of beneficiary women assessed their current income to have increased, while majority (41.1%) of non-beneficiary women, on the other hand, claimed their current income had decreased, though over one third also had experienced an increase in their income. The result in Table 12 confirms that of some other impact studies (Latifee, 2000; Ardafio-Schandorf et tal, 1995; and Freedom from Hunger, 2000) which also found positive change in the income of clients of microcredit programmes and attributed the change to microcredit programmes participation.

Table 12: Assessment of changes in women income over the past three years

Assessed income	Beneficiary women		Non-beneficiary women		Total	
	Freq.	Percent	Freq.	Percent	Freq.	Percent
Decrease	4	4.4	37	41.1	41	22.8
Same	6	6.7	21	23.3	27	15.0
Increased	80	88.9	32	35.6	112	62.2
Total	90	100.0	90	100.0	180	100.0

Source: Field Data, 2006

Latifee (2000) conducted an impact study of KASHF foundation in Pakistan and revealed that 94% of clients had experienced positive economic and social changes. Furthermore, 75% of his respondents felt that it was the microcredit participation which made it possible for them to undertake business activities to generate employment and increased their income. Furthermore, similar studies in Ghana have reported that beneficiaries of microcredit were found to have increased their incomes compared with non-beneficiaries (Ardafio-Schandorf et tal, 1995; and Freedom from Hunger, 2000). Thus the findings of this study, in line with other studies findings including those discussed, confirm the positive role of microcredit in poverty alleviation.

When women respondents were asked to compare their current contributions to their households' expenditure 3 years ago, generally, over half of them reported an increase contribution (Table 13).

Table 13: Assessing of women current contribution to household's expenditure compared with 3 years ago

Current contribution	Beneficiary women		Non-beneficiary women		Total	
	Freq.	Percent	Freq.	Percent	Freq.	Percent
Decrease	8	8.9	16	17.8	24	13.3
Same	10	11.1	39	43.3	49	27.2
Increased	72	80.0	35	38.9	107	59.4
Total	90	100.0	90	100.0	180	100.0

Source: Field Data, 2006

From the table, whilst 80% of the beneficiary women had increased their contribution, only about 39% of the non-beneficiary women had increased their contribution to households' expenditure. The results imply that with or without presence of husband in the clients' households, most women beneficiaries could contribute significantly towards their households' needs compared with 3 years ago. Therefore, even in the absence of a working husband in households, women may have worked harder to take responsibilities of their households' needs. The strength of women to increase their contributions to household spending may not have been possible without them being economically empowered to generate self employment and income.

Table 13 further shows that about 67% out of 107 women involved in the study who had increased their contributions to households' expenditure were microcredit beneficiaries. Therefore, it worth to note that microcredit is playing a

significant role to effect positive changes in the lives of its clients. This finding is consistent with finding of the impact study of women who were clients of Society for Helping Awakening Rural Poor through Education (SHARE) microcredit programme in India. The report said that SHARE operations yield positive results on the lives of its borrowers in terms of increased employment, increased income, and increased expenditure on non-food basic needs (Gaile, 2005).

Most of the microcredit clients are expected to play a significant role in the provision of their family needs compared with non-clients. This is assertion is supported by the evidence in Table 14 apparently that about 40%, 61% and 63% compared with 11%, 26%, and 17% of beneficiary women and non-beneficiary women, respectively, play major roles in provision of health, nutrition and children education needs. The table shows further that in the non-beneficiary women households, even children have major role to play in the provision of some family needs (4.4% of the non-beneficiary women gave a response that their children play major role in meeting the health needs of their families).

Table 14: Major role players in the provision of women's family needs within the last 3 years

Family needs	Women group	Need provider					
		Self	Husband	Both spouse	Relatives	Children	Total
		Freq (%)	Freq (%)	Freq. (%)	Freq. (%)	Freq. (%)	Freq (%)
Health needs	Ben	36 (40.0)	13 (14.4)	41 (45.6)	0 (0.0)	0 (0.0)	90 (100.0)
	Non-ben	10 (11.1)	32 (35.6)	37 (41.1)	7 (7.8)	40 (4.4%)	90 (100.0)
Nutrition needs	Ben	55 (61.1)	20 (22.2)	15 (16.7)	0 (0.0)	0 (0.0)	90 (100.0)
	Non-ben	23 (25.6)	26 28.9)	32 (35.6)	9 (10.0)	0 (0.0)	90 (100.0)
Children education needs	Ben	57 (63.3)	12 (13.3)	19 (21.1)	2 (2.2)	0 (0.0)	90 (100.0)
	Non-ben	15 (16.7)	27 (30.0)	37 (41.1)	11 (12.2)	0 (0.0)	90 (100.0)

Source: Field Data, 2006

The results in the Table 14 imply that in the household of non-clients of microcredit schemes, pressure is on every individual in the households to contribute so as to complement what husbands provide to meet family needs. This may reason that comparatively, most children in the non-beneficiary women

114

households might have been involved in child labour activities in their effort to meet family obligations. Such children in the rural areas, usually instead of attending school, may engage in labour activities like selling on the street, carrying people's load ("kayayo"), and weeding people's farm land either on contract or 'by day' basis all in the quest to send money home to play a role in meeting family needs.

The researcher further took a specific look at the payment of children school fees in the households of the women respondents and the results are presented in Table 15. As may be observed in Table 15, 60% of beneficiary women compared with 21.1% of non-beneficiary women indicated that they were responsible for school fees of their children. This means that beneficiary women are financially stronger to invest in their children education than non-beneficiary women. This may be the resultant effect of beneficiary women organized and have received training and education to include the need to educate children as part of the packages of most of the microcredit programmes introduce to them; or they might have learnt from each other, the need to invest in children education and therefore would not hesitate to spend their incomes on children education whenever the need arises.

Table 15: Ability to pay children school fees in the women households

School fees pay by	Beneficiary women		Non-beneficiary women		Total	
	Freq.	Percent	Freq.	Percent	Freq.	Percent

Self	54	60.0	19	21.1	73	40.6
Husband	19	21.1	35	38.9	54	30.0
Both spouse	17	18.9	28	31.1	45	25.0
Relatives	0	0.0	8	8.9	8	4.4
Total	90	100.0	90	100.0	180	100.0

Source: Field Data, 2006

The result in Table 16 indicates that changes in the beneficiary women family needs have been observed to be better than changes in the family needs of the non-beneficiary women. From the table, 82.2%, 71.1%, and 77.8% of beneficiary women have observed a better change in their families' health, nutrition, and children education needs relatively to 52.2%, 36.7%, and 45.6% respectively of non-beneficiary women who have experienced positive change in the health, nutrition, and children education needs of their families. This is not surprising because with increased income from economic activities, most of the beneficiary women could contribute significantly to bring better change in the provision of health, nutrition, and education needs of their families.

Table 16: Women assessment of change in the provision of family needs compared with 3 years ago

Family	Women	Changes observed		
needs	group	Worse	Same	Better

		Freq.	Percent	Freq.	Percent	Freq	Percent
Health needs	Ben	5	5.6	11	12.2	74	82.2
	Non-ben	13	14.4	30	33.3	47	52.2
Nutrition needs	Ben	12	13.3	14	15.6	64	71.1
	Non-ben	26	28.9	31	34.4	33	36.7
Children education needs	Ben	4	4.4	16	17.8	70	77.8
	Non-ben	15	16.7	34	37.8	41	45.6

Source: Field Data, 2006

Economic and Production Activities of Women in the Study Area

The economic and production activities of women in the study area were examined and the results are presented as follows. In Table 17, major economic activities of women are presented. As the table shows, women in the study area are engaged in various occupational activities including farming, processing (palm oil, coconut oil, palm kernel oil, gari, and kenkey), trading, sewing, and baking.   From the table, more non-clients (about 54%) than clients (about 31%) of microcredit programmes were engaged in farming as the major economic activity. This buttresses the point that the majority (68.9%) of beneficiary women

117

compared with 46.1% of non-beneficiary women were engaged in processing and

marketing economic activities in the rural communities (Table 18).

Table 17: Major economic activities of women in the study area

Economic Activity	Beneficiary women		Non-beneficiary women		Total	
	Freq.	Percent	Freq.	Percent	Freq.	Percent
Farming	28	31.1	48	53.9	76	42.5
Processing (oil)	11	12.2	9	10.1	20	11.2
Trading	36	40.0	24	27.0	60	33.5
Processing (other products)	10	11.1	7	7.9	17	9.5
Sewing	3	3.3	1	1.1	4	2.2
Baking	2	2.2	0	0.0	2	1.1
Total	90	100.0	89	100.0	179	100.0

Source: Field Data, 2006

Perhaps, most of the microcredit programme packages promoted post

harvest activities in their outreach to women in the rural areas to reduce food post-

harvest losses. This is because in rural farming areas, food production from the

farm may be excess and go waste if nothing was done to process, store, and

distribute to marketing centers at times needed to warrant good prices to ensure

increased income. Hence there might be the need to encourage some of the

women to get involve in non-farm economic activities that will help them to generate self employment and increased income in a more diversified way.

Table 18: Description of the women's main occupational activities in the study area

Description Of activity	Beneficiary women		Non-beneficiary women		Total	
	Freq.	Percent	Freq.	Percent	Freq.	Percent
Production	28	31.1	48	53.9	76	42.5
Processing	27	30.0	17	19.1	44	24.6
Marketing	35	38.9	24	27.0	59	33.0
Total	90	100.0	89	100.0	179	100.0

Source: Field Data, 2006

Table 19 shows the result of the women assessment of change in technology used in their economic production activities. The table indicates that though in general, less than half (about 39%) of the women respondents assessed the change in the technology used in their production activities to be better, 52.2% of beneficiary women relative to 25.6% of non-beneficiary women stated they experienced a better change in the technology they used in their economic production activities. Among the technology change reported by most of the women were use of improved planting materials, fertilizer application, integrated pest management and row planting for those involved in farming; use of machine to ooze water from cassava dough for gari processors. With increasing access to financial assistance, women would be able to afford and use improved technology

119

to enhance their income generating potentials. In this regard, the beneficiary women have an advantage since microcredit plays a significant role in financing their economic activities.

Furthermore, when women were asked to assess the change in their abilities to obtain input materials needed in their economic activities, more than half (about 57%) of beneficiary women compared with 28.9% of non-beneficiary women gave a respond of "better" change (Table 20).

Table 19: Assessing change in technology used by women in their economic production activities

Change in technology	Beneficiary women		Non-beneficiary women		Total	
	Freq.	Percent	Freq.	Percent	Freq.	Percent
Worse	6	6.7	12	13.3	18	10.0
Same	37	41.1	55	61.1	92	51.1
Better	47	52.2	23	25.6	70	38.9
Total	90	100.0	90	100.0	180	100.0

Source: Field Data, 2006

The result in Table 20 implies that beneficiary women might have had higher purchasing power in their input markets than the non-beneficiary women. This is because the investment capabilities and opportunities of the beneficiary women, due to financial support of their businesses by microcredit schemes, would be increasing and that might be reflected in their abilities to obtain input materials needed in their economic production activities.

120

Table 20: Assessing change in women's abilities to obtained input materials needed in their economic activities

Change in Ability	Beneficiary women		Non-beneficiary women		Total	
	Freq.	Percentage	Freq.	Percentage	Freq.	Percentage
Worse	16	17.8	38	42.2	54	30.0
Same	23	25.6	26	28.9	49	27.2
Better	51	56.7	26	28.9	77	42.8
Total	90	100.0	90	100.0	180	100.0

Source: Field Data, 2006

In Table 21, women were made to assess the current nature of marketing of their products compared with three years ago. The table reveals that out of the 180 women respondents, 113 representing 62.8% have experienced a better change in the marketing of their produce. This could be due to a number of factors among which are: improved transportation systems, availability and adequacy of storage facilities, improved packaging techniques, and regulatory conditions set by the government (Kahan, 2004). Of course, it is ones ability to afford transaction within a market where all or some of these factors work that will let her take advantage of the positive ways these factors work.

Comparing changes in the current nature of marketing of beneficiary and non-beneficiary women respondents, Table 21 shows that more women beneficiaries than non-beneficiaries have realized a better change in the marketing of their products compared with three years ago (76.7% of beneficiaries relative

to 48.9% of non-beneficiary women). Most of the factors that could result in an improvement in marketing (especially, those involving transport cost, storage, grading and sorting, and packaging) require good finances of ones micro-enterprise.

Table 21: Women assessment of current nature of marketing their products compared with 3 years ago

Change Observed	Beneficiary women		Non-beneficiary women		Total	
	Freq.	Percent	Freq.	Percent	Freq.	Percent
Worse	7	7.8	25	27.8	32	17.8
Same	14	15.6	21	23.3	35	19.4
Better	69	76.7	44	48.9	113	62.8
Total	90	100.0	90	100.0	180	100.0

Source: Field Data, 2006

Thus, with external aid from microcredit programmes and all other things being equal, the beneficiary women had a better opportunity to improve their ability that could make the majority of them experience a better change in their current nature of marketing compared with three years ago. According Khander (1998), most microcredits are disbursed in a group setting to poor borrowers, with some amount of non-credit assistance also being made available. The non-credit assistance typically ranges from skills training to marketing assistance which help improve upon the beneficiary women marketing performance.

Table 22: Assessment of respondents' access to credit/loan compared with 3

years ago

Change Observed	Beneficiary women		Non-beneficiary women		Total	
	Freq.	Percent	Freq.	Percent	Freq.	Percent
Worse	2	2.2	47	52.2	49	27.2
Same	4	4.4	23	25.6	27	15.0
Better	84	93.3	20	22.2	104	57.8
Total	90	100.0	90	100.0	180	100.0

Source: Field Data, 2006

According to Ellsasser (2006), in recent years, there has been a growing recognition that lack of access to savings, loans, transfer of funds and insurance represents a major barrier to development, especially in the rural areas. As a rule, commercial banks either do not provide financial services to rural areas at all, or do not provide sufficient services. Moreover, access to financial services especially, credits is an instrument powerful to ensure good business investments in the rural areas by women to generate employment and increase income since most of these women are poor and lack financial resources to invest. The study therefore saw the need to examine the accessibility of credit by women interviewed and the result is presented in Table 22.

From Table 22, as the majority (93.3%) of beneficiary women of microcredit programmes assessed the change in their ability to access credit over years ago to be 'better', majority (77.8%) of non-women beneficiaries observed worse and no change in their ability to access credit compared with three years

ago. The result implies that most non-beneficiary women respondents might have failed in their effort to obtain credit either at all times or after failing to repay the previous credit collected. This is better explained by Table 23 which entails the result of women assessment of their ability to repay credit compared with three years ago.

Table 23: Women assessing their ability to repay credit/loan compared with 3 years ago

Change Observed	Beneficiary women		Non-beneficiary women		Total	
	Freq.	Percent	Freq.	Percent	Freq.	Percent
Worse	3	3.3	42	46.7	45	25.0
Same	11	12.2	26	28.9	37	20.6
Better	76	84.4	22	24.4	98	54.4
Total	90	100.0	90	100.0	180	100.0

Source: Field Data, 2006

From Table 23, only 22 (representing 24.4%) of non-beneficiary women respondents out of the 90 interviewed, gave a respond that they had seen a better change in their ability to repay credit compared with three years ago. With the prime aim of making profit and staying in business, it becomes obvious that formal financial institutions would not want to invest in any business activity of most of the non-beneficiary women because such women might have had credit and default repayment before.

When women respondents were interviewed to know whether they had paid back credit collected from various sources, it was revealed that only 18 out of the 90 non-participants of microcredit programmes had received credit before. Among the various sources of credit revealed in the women responses were

124

commercial banks, money lenders, NGOs, and District Assemblies Common Funds (Poverty Alleviation Fund).

Table 24 depicts a relatively high repayment rate of about 97.6% among beneficiary women respondents who gave a response that they had paid back the credit collected from their lenders. On the contrary, out of the 18 non-beneficiaries, 10 representing 55.6% gave negative response ('no') which indicates a high default rate of about 56%. The implication of the low repayment rate among the women non-beneficiaries is that most of them may face difficulties in accessing credit henceforth and this is supported by the results in Tables 22 and 23. The revealed differences in repayment rates and for that matter, repayment capabilities of the two women groups studied, could be explained by the differences in the interest charged on credits as well as the strategies used by the lenders to collect credit repayment from the women. Most of the beneficiaries were made to make repayment by installments either weekly or fortnightly at their regular meetings until both principal credit and its interest were paid, an opportunity which the non-beneficiary women were denied due to the terms and conditions of the credits they obtained.

Table 24: Repayment of credit obtained by women respondents

Respond	Beneficiary women		Non-beneficiary women		Total	
	Freq.	Percentage	Freq.	Percentage	Freq.	Percentage
Yes	87	96.7	8	44.4	95	88.0
No	3	3.3	10	55.6	13	12.0

Total	90	100.0	18	100.0	108	100.0

The different sources of credit have different terms and conditions. For example, the study revealed differences in the interest rate charged to women borrowers by these sources and analyzed. Table 25 shows that the highest interest rate paid by beneficiary women for the credit they obtained was 20% while the majority (49 representing 57.6%) paid 10%. In the case of non-beneficiary women, some (12.5% and 25.0%) paid 10% and 20% interest rates respectively, 50% of them paid not less than 50% interest on credit they obtained from their lenders. These results suggest and support the assertion that microcredit terms and conditions are more flexible and set in the interest rate of the rural poor women to work without pressure and fear (Hallen, 1996).

Table 25: Interest rate charged on the credit obtained by the women respondents

Interest (%)	Beneficiary women		Non-beneficiary women		Total	
	Freq.	Percent	Freq.	Percent	Freq.	Percent
10	49	57.6	1	12.5	50	53.8
20	36	42.4	2	25.0	38	40.9
25	0	0.0	1	12.5	1	1.1
$\geq$50	0	0.0	4	50.0	4	4.3
Total	85	100.0	8	100.0	93	100.0

Assessment of Women Production/Output Levels

Table 26 contains the results of women assessment of their production/output levels compared with three years ago. The table shows that 83.3% of the beneficiary women compared with only one third (33.3%) of non-beneficiary women had observed increase in their production/output levels. This implies that more microcredit beneficiary women than non-beneficiary women have seen an improvement in their economic production/output levels.

The results in Table 26 buttress the findings and reports by North (2005) that through their significant progress in providing credit and savings facilities to the poor, MFIs enable the poor to build strong microenterprises to increase their production or output levels thereby increasing income, and to participate in economic growth (North, 2005).

Table 26: Women assessing their production/output levels compared with 3 years ago

Change Observed	Beneficiary women		Non-beneficiary women		Total	
	Freq.	Percent	Freq.	Percent	Freq.	Percent
decrease	3	3.3	27	30.0	30	16.7
Same	12	13.3	33	36.7	45	25.0
increase	75	83.3	30	33.3	105	58.3
Total	90	100.0	90	100.0	180	100.0

Source: Field Data, 2006

Test of Hypothesis One

The hypothesis one was to test whether beneficiary women's income had significantly improved more than their non-beneficiary counterparts. The hypothesis was tested at the alpha level of 0.05 using chi-square test statistic. The result from the statistical analysis and discussion regarding the test of hypothesis one are presented as follow.

Respondents were then made to assess the changes they have observed in their income generation from their economic activities over three years ago, and the survey results in Table 27 indicate that the majority (84.4%) of the beneficiaries compared with 34.4% of non-beneficiaries had observed increase in their incomes. Perhaps, with an increase in income from economic activities, women might also realized increased profit some of which could be re-invested and the remaining used in meeting households' basic needs. Hence, microfinance helps poor households meet basic needs and protects them against risks through improvement in income. This will make the use of financial services by low-income households lead to improvements in household economic welfare, and enterprise stability and growth (Hulme and Mosley, 1996).

Table 27: Women assessing their income compared with 3 years ago

Change Observed	Beneficiary women		Non-beneficiary women		Total	
	Freq.	Percent	Freq.	Percent	Freq.	Percent
Worse	4	4.4	23	25.6	27	15.0
Same	10	11.1	36	40.0	46	25.6

128

Better	76	84.4	31	34.4	107	59.4
Total	90	100.0	90	100.0	180	100.0

Chi-Square test of change in income

	value	df	Sig.
Pearson Chi-Square	46.991	1	0.000

Source: Field Data, 2006

In Table 27, the Pearson chi-square of 46.991 tested significant (p-value = 0.000) for change in income as observed by women understudied. This suggests that microcredit beneficiary women had observed significantly better change in their income levels compared with women who were not microcredit programme beneficiaries. In light of this, the null hypothesis that income levels of beneficiary women of microcredit programmes had not significantly improved more than the income levels of non-beneficiary women of microcredit programmes is failed to be accepted. Thus, the beneficiary women income had been significantly improved than their non-beneficiary counterparts.

Empowerment of Women in the Study Area

As enshrined in the literature review, microfinancing movement has empowering effect that goes beyond increased economic returns. Thus the study was aimed at knowing to what extent microcredit programme participation had empowered women beneficiaries. This was investigated using different variables

129

with a prime concern of the women's position in decision-making that affect their households.

Table 28: Headship role play in the households of women involved in the study

Household Head	Beneficiary women		Non-beneficiary women		Total	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Self	43	57.3	27	31.4	70	43.5
Husband	32	42.7	53	61.6	85	52.8
Son	0	0.0	2	2.3	2	1.2
Daughter	0	0.0	0	0.0	0	0.0
Others	0	0.0	4	4.7	4	2.5
Total	75	100.0	86	100.0	161	100.0

Source: Field Data, 2006

As head of household, an individual is expected to be significantly involved in decision-making to influence living situations of household members including his/her self. Tables 28 and 29 respectively, show results of heads of women respondents' households and their sex distribution. Seventy (70) out of

130

161 women households representing 43.5% are headed by some of the women themselves and the remaining households were headed by husbands, sons, and brothers and uncles of other women respondents (Table 28). This in general, depicts a male-female ratio of household headship in the study area being 1.3:1 as presented in Table 29 (i.e. 91:70). Since recognition of ones view in households' decision-making is dependent on the person's status and contribution to household's needs, it worth to emphasize that most women in the study area had been doing well to contribute significantly to the care and management of their households.

Table 29: Sex distribution of respondents' households' heads

Household Head	Beneficiary women		Non-beneficiary women		Total	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Male	32	42.7	59	68.6	91	56.5
Female	43	57.3	27	31.4	70	43.5
Total	75	100.0	86	100.0	161	100.0

Source: Field Data, 2006

To compare the two groups of women status from the Table 29, 57.3% of the beneficiary women play headship role in their households relatively to 31.4% of non-beneficiary women heads of their households. This stands to reason that more beneficiary women than non-beneficiary women in the study area may contribute a lot to the welfare of their family members.

When women respondents were asked if they had a significant say in decisions that affect their households, 90% of the beneficiaries and 74.4% of no-

131

beneficiaries gave a positive response of 'Yes'. This summed-up in a positive response from about 82% of the sampled women (Table 30).

Table 30: Assessing if women have significant say in decisions that affect their household

Response	Beneficiary women		Non-beneficiary women		Total	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Yes	81	90.0	67	74.4	148	82.2
No	9	10.0	23	25.6	32	17.8
Total	90	100.0	90	100.0	180	100.0

Source: Field Data, 2006

The result in Table 30 implies that most of the women in the study area might have gained recognitions in their households and communities; perhaps their confidence to contribute in deciding about the welfare of their households. Women were found to be involved and contribute in their households' decision-making on: domestic needs, children education, income generating activities, spending personal income and spending household income (Table 32).

The result in Table 30 also declines the traditionally accepted adage that rural women are inferior and thus their views and contributions are not recognized in decisions that affect households and communities in which they live (Mensah, 2001).

132

Table 31: Women assessing change in their involvement in decision-making

compared with 3 year ago

Change	Beneficiary women		Non-beneficiary women		Total	
Observed	Freq.	Percent	Freq.	Percent	Freq.	Percent
Decrease	4	4.4	28	31.1	32	17.8
Same	12	13.3	16	17.8	28	15.6
increase	74	82.2	46	51.1	120	66.7
Total	90	100.0	90	100.0	180	100.0

Source: Field Data, 2006

As Table 31 portrays, further assessment of women involvement in decision-making revealed that about 82% of beneficiary women relative to 51% of non-beneficiary women had experienced an increased involvement in decision-making that affect their households compared with three years ago. Because the participation in microcredit programmes had made beneficiaries more economically empowered compared with non-beneficiaries which could be seen in their income generating capabilities, the results in the Tables 30 and 31 stand to reason that all other things being equal, it is the microcredit programme participation that has resulted in the majority of the beneficiary women having a say in their households decision-making, and experienced increased change in their involvement in households decision-making.

Test of Hypothesis Three

Hypothesis three was formulated to be tested to verify if the extent of involvement in decision-making microcredit beneficiary women is significantly greater than the extent of involvement in decision-making by the non-beneficiary women. The study used independent sample t-test to statistically compare the mean extent of in decision-making by the two women groups. This test statistic was computed at the alpha level of 0.05.

In Table 32, result of the extent of women involvement in their households' decision-making is presented. The extent of women involvement in decision-making in their households was measured with weighted indexes ranging from 0 – 4 (meaning no involvement, very little involvement, little involvement, much involvement, and very much involvement respectively).

As the Table 32 depicts, generally, the extent of beneficiary women's involvement in decision-making ranged from 2.88 – 3.88 (about much and very much involvement in decision-making) compared with that of the non-beneficiary women, which ranged from 1.98 – 3.13 (about little and much involvement in decision-making). With this, the overall weighted mean involvement of the beneficiary women in decision-making is comparatively greater than that of the non-beneficiary women (3.52 compared with 2.42; their standard deviations are 0.76 and 1.12 respectively). Furthermore, the standard deviation figures as shown in the table, implies that the variation in the beneficiary women extent of involvement in decision-making is small as compared with the variations in the extent of involvement of non-beneficiary women in decision-making.

134

Table 32: Mean extent of women involvement in decision-making in their households

Decision-making on;	Beneficiary women		Non-beneficiary women	
	Mean	Standard deviation	Mean	Standard deviation
Domestic needs	3.78	0.44	2.38	1.38
Children's education	3.29	1.06	1.98	1.59
Income generating activities	3.88	0.61	2.57	1.45
Spending personal income	3.80	0.66	3.13	1.21
Spending household income	2.88	1.56	2.03	1.52
Total	3.52	0.76	2.42	1.12

Weighted indexes: 0= no involvement, 1= very little involvement, 2=little involvement, 3= much involvement, 4 = very much involvement

Source: Field Data, 2006

Comparing the women extent of involvement in decision-making in their households, it could be realized that there were some differences in the means presented in the Table 32. For instance, an overall weighted mean difference of 1.10 could be computed (Table 33). Hence to be able to test and draw conclusion on hypothesis 3, the mean differences were subjected to statistical test (independence sample t-test statistic) and the result is presented in Table 33.

Table 33: Independent sample t-test comparing differences in mean extent of women involvement in decision-making in their households

Decision-making on;	Levene's Test for Equality of Variances		t-test for Equality of Means			
	F	Sig.	t	Df	Mean difference	Std Error Difference
Domestic needs	85.44	0.00	9.17*	107.23	1.40	0.15
Children's education	44.93	0.00	6.50**	155.09	1.31	0.20
Income generating activities	98.85	0.00	7.95*	120.49	1.31	0.16
Spending personal income	40.82	0.00	4.59**	137.23	0.67	0.15
Spending household income	1.45	0.22	3.69*	177.88	0.84	0.23
Overall mean	18.012	0.00	7.76**	155.88	1.10	0.14

(*, **) -Sig. at 0.05 and 0.01 alpha levels respectively. Equal variance not assumed

Source: Field Data, 2006

As shown in the Table 33, the test of equality of means resulted in a significant difference in the mean extent of involvement in decision-making by the two women groups understudied on domestic needs, children's educations, income generating activities, spending personal income, and spending

household's income (t = 9.17*, 6.50*, 7.95*, 4.59*, and 3.69* respectively) . On a whole, the t-ratio of 7.76* showed that the overall weighted mean extent of involvement in decision-making by the beneficiary women is statistically higher than their non-beneficiary women counterparts. Thus the null hypothesis that involvement of beneficiary women in decision-making is not significantly higher than the involvement of non-beneficiary women in decision-making is rejected.

In assessing changes in the time use by women over three years period, Table 34 shows that except time spent on economic activities, in which case, 64.4% and 41.1% of beneficiary and non-beneficiary women respectively have observed increased in time use, most of the women respondents have realized decreased and no change in time use on: domestic chore, recreational activities, child care and sleeping. From Table 34, 53.3% and 44.4% of beneficiary and non-beneficiary women respectively have had decrease in time use for domestic chores; and 57.8% of beneficiaries relative to 52.2% of non-beneficiaries have also had decrease in time use for recreational activities. However, with the time use for child care and sleeping, majority (53.3% and 67.8% of beneficiary women compared with 50.0% and 67.8% of non-beneficiaries) have experienced no change in their time use. The results suggest that women engagement in occupational activities have increased relatively to other household's activities. This might be as a result of the women role in contributing to households' expenditure.

137

Table 34: Assessing changes in time use by women compared with 3 years ago

Time-spent activity	Women group	Observed change					
		Decreased		Same		Increased	
		Freq.	Percent	Freq	Percent	Freq.	Percent
Domestic chores	Ben	48	53.3	36	40.0	6	6.7
	Non-ben	40	44.4	31	34.4	19	21.1
Child care	Ben	33	36.7	48	53.3	9	10.0
	Non-ben	19	21.1	45	50.0	26	28.9
Economic activities	Ben	8	8.9	24	26.7	58	64.4
	Non-ben	22	24.4	31	34.4	37	41.1
Recreational activity	Ben	52	57.8	25	27.8	13	14.4
	Non-ben	47	52.2	36	40.0	7	7.8
Sleeping	Ben	11	12.2	61	67.8	18	20.0
	Non-ben	24	26.7	61	67.8	5	5.6

Source: Field Data, 2006

Level of Living of Women in the Study Area

The next area of concern that was deemed relevant in the study was to compare the level of living by the two groups of women. Women and their households' level of living was operationalized using source of drinking water, facility used as place of convenience, material used for the construction of houses/compounds, and source of energy for cooking. These variables were measured using weighted indexes ranging from 1 – 4 (very low level of living to

138

very high level of living). In Table 35, the result of the women major source of their households' drinking water is presented. About 78% of beneficiary women compared with 63.3% of non-beneficiary women have pipe borne water as their major source of drinking water. This result which is in line with the finding of Ardayfio-Schandorf et al, (1995), implies that, all other things being equal, most of the beneficiary women households compared with non-beneficiary women households could afford to pay for pipe-borne water which is treated and good for their health.

Table 35: Major source of women households' drinking water

Source of Water	Beneficiary women		Non-beneficiary women		Total	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Surface water	3	3.3	7	7.8	10	5.6
Well water	1	1.1	5	5.6	6	3.3
Bore hole	16	17.8	21	23.3	37	20.6
Pipe borne	70	77.8	57	63.3	127	70.6
Total	90	100.0	90	100.0	180	100.0

Source: Field Data, 2006

With regard to facility use as place of convenience, 64.4% of beneficiary women use household owned pit latrine/KVIP (which represents high level of living) whereas 45.6% of non-beneficiary women use community owned pit latrine/KVIP/WC (which also represents low level of living). However, more (3.3%) of non-beneficiary women compared with 1.1% of beneficiary women had

139

water closets (WC) in their houses to be used as place of convenience which indicate their level of living being very high.

Table 36: Major facility use as place of convenience by women households' members

Facility	Beneficiary women		Non-beneficiary women		Total	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Bush	0	0.0	6	6.7	6	3.3
Community owned (pit latrine/KVIP/WC)	31	34.4	41	45.6	72	40.0
Household owned (pit latrine/KVIP)	58	64.4	40	44.4	98	54.4
Household owned WC	1	1.1	3	3.3	4	2.2
Total	90	100.0	90	100.0	180	100.0

Source: Field Data, 2006

Main Materials used in the Construction of Houses/compound Occupied by the Women

Table 37 entails the result of materials used for the construction of walls of houses/compounds occupied by women studied and their households. About 73% and 49% of beneficiary and non-beneficiary women respectively had their houses/compounds walls constructed with burnt bricks and cement blocks. Thus

140

most of the beneficiary women than non-beneficiary women levels of living are high and very high.

Table 37: Main material used for the construction of walls

Material	Beneficiary women		Non-beneficiary women		Total	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Mud/earth	7	7.8	9	10.0	16	8.9
Lancrete	17	18.9	38	42.2	55	30.6
Burnt bricks	20	22.2	0	0.0	20	11.1
Cement blocks	46	51.1	43	47.8	89	49.4
Total	90	100.0	90	100.0	180	100.0

Source: Field Data, 2006

Furthermore, the material used for the construction of roofing result portrays that about 94.4% of beneficiary women compared with 43.3% of non-beneficiary women used iron/alluminium sheets and cement/concrete to construct their roofing (Table 38). Expressing this in the level of living, it implies that most of the beneficiary women have high level of living than the non-beneficiary women. Also about 94.4% of the beneficiary women relatively to 75.6% of non-beneficiaries used cement and terrazzo for the construction of the floor of their compounds which then reason that beneficiary women level of living is relatively high.

Table 38: Main material used for the construction of roofing

Material	Beneficiary women		Non-beneficiary women		Total	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Thatch	2	2.2	19	21.1	21	11.7
Asbestos	3	3.3	32	35.6	35	19.4
Iron/alluminium	83	92.2	39	43.3	122	67.8
Cement/concrete	2	2.2	0	0.0	2	1.1
Total	90	100.0	90	100.0	180	100.0

Source: Field Data, 2006

Table 39: Main material used for the construction of floor

Material	Beneficiary women		Non-beneficiary women		Total	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Mud/earth	4	4.4	5	5.6	9	5.0
Clay	1	1.1	17	18.9	18	10.0
Cement	83	92.2	68	75.6	151	83.9
Terrazzo	2	2.2	-	-	2	1.1
Total	90	100.0	90	100.0	180	100.0

Source: Field Data, 2006

The study further considered source of energy use for cooking by women in their households and the result is presented in Table 40. The table reveals that 67.8% of beneficiary women use kerosene as their main source of energy for cooking, whereas 41.1% of non-beneficiaries use charcoal as main source of energy for cooking. Also, over one-third (37.8%) relatively to 15.6% of non-beneficiary and beneficiary women respectively mainly use fire wood for cooking in their households. On average, the level of living based on source of energy for cooking, reveals that beneficiary women had a lower mean (2.61) level living compared with the mean (2.86) level of living of non-beneficiary women (Table 41).

Table 40: Main source of energy for cooking by women in their households

Energy Source	Beneficiary women		Non-beneficiary women		Total	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Fire wood	14	15.6	34	37.8	48	26.7
Charcoal	11	12.2	37	41.1	48	26.7
Kerosene	61	67.8	17	18.9	78	43.3
Gas/electricity	4	4.4	2	2.2	6	3.3
Total	90	100.0	90	100.0	180	100.0

Source: Field Data, 2006

Test of Hypothesis Two

The null hypothesis two which stated that the level of living of microcredit programmes beneficiary women was not significantly greater than the level of living of the women who were not beneficiaries of microcredit programmes was tested with independent sample t-test at 0.05 alpha level.

The means and standard deviations in the Table 41 indicate that the level of living of the beneficiary women is comparatively better than the non-beneficiary women level of living. The beneficiary women mean level of living of 3.70 (indicating very high level of living), is relatively better than the non-beneficiary women mean level of living of 3.42 (which indicates high level of living). Also in terms of toilet facility use in their households and material use to construct house/compound, the beneficiary women mean level of living is about high compared with the mean level of living of non-beneficiary women which is about low.

However, though there are differences in the levels of living of the two women groups studied, the overall weighted mean level of living in Table 41 implies that on average, both beneficiary and non-beneficiary women level of living is about high (3.00 and 2.70 respectively).

Table 41: Mean level of living of women and their households in the study area

	Beneficiary women		Non-beneficiary women	
	Mean	Standard deviation	Mean	Standard deviation
Indicator variable				

Source of drinking water	3.70	0.66	3.42	0.91
Toilet facility use	2.67	0.50	2.44	0.67
Material use to construct house/compound	3.01	0.33	2.22	0.78
Source of energy for cooking	2.61	0.80	1.86	0.80
Total	3.00	0.33	2.58	0.21

Weighted indexes: 1= very low, 2=low, 3=high, 4= very high

Source: Field Data, 2006

Furthermore, Table 41 depicts that the standard deviations for the mean levels of living for both beneficiary and non-beneficiary women are <1 in the cases of source of drinking water, toilet facility use, and material use to construct house/compound, and source of energy for cooking as well as the overall weighted mean level of living standard deviation. This reasons that generally, the level of living of the women understudied might be about the same (there is no wider variations in the levels of living of the women respondents. Hence there may not be greater differences in the levels of living among the women respondents and their households.

The concerns for the differences in the mean level of living among the two women groups compelled the researcher to statistically test the differences in the mean levels of living presented in Table 41 and the result is shown in Table 42. The results show that the mean differences of 0.28, 0.22, 0.42, 0.76, and 0.42 between beneficiary and non-beneficiary women levels of living for source of drinking water, toilet facility use, material used to construct house/compound,

source of energy for cooking, and the overall weighted mean level of living respectively, are all statistically significant. Hence the researcher fails to accept the null hypothesis 2 which states that the level of living of microcredit programmes beneficiary women is not significantly greater than the level of living of the women who are not beneficiaries of microcredit programmes. Perhaps, all other things being equal, it is the participation in microcredit programmes that have made the beneficiary women and their households being able to afford relatively better level of living than the non-beneficiary women and their households.

Table 42: Independent sample t-test comparing differences in mean level of living of women and their households in the study area

Indicator variable	Levene's Test for Equality of Variances		Test of equality of mean		
	F	Sig.	t	Sig.	Mean difference
Source of drinking water	12.50	0.00	2.34[*]	0.02	0.28
Toilet facility use	13.79	0.00	2.52[**]	0.01	0.22
Material use to construct house/compound	33.49	0.00	4.53[**]	0.00	0.42
Source of energy for	0.00	0.95	6.32[**]	0.00	0.76

cooking					
Total	4.86	0.03	10.26**	0.00	0.42

(*, **) - Sig. at 0.05 and 0.01 alpha levels respectively   Equal variance assumed

Source: Field Data, 2006

Correlation Results Showing the Relationships between Dependents and Independents Variables ($X_1, X_2, X_3, X_4, X_5, X_6, X_7$): Test of Hypothesis Five

The study examined the relationships between dependent and independent variables operationalized in the study by running correlation coefficient. That was done to test and draw conclusion on the hypothesis 5. In the correlation matrixes presented in Tables 43, 44, and 45, education and living with husband were artificially dichotomized. With regards, the biserial correlation coefficient was run to examine the relationships between these variables and involvement in decision-making, level of living, and increased income. Point besiarial correlation was also run to examine the relationships between microcredit programme participation and involvement in decision-making, level of living, and increased income. In the case of age, household size, and number of children living with mother, Pearson moment correlation was run to examine their relationships with involvement in decision-making, level of living, and increased income whiles Spearman's rho correlation was run to examine the relationships between description of occupation and involvement in decision-making, level of living, and increased income.

147

Y in the Tables 43, 44, and 45 represents dependent variables (increased income, mean extent of women involvement in decision-making and mean level of living of women respectively). The independent variables in the Tables 43, 44, and 45 are X_1 = age of respondent, X_2 = some formal education, X_3 = living with husband X_4 = household size, X_5 = number of children living with mother X_6 = description of main occupation, X_7 = microcredit programme participation. The strength of association between the dependent and independent variables as shown in the correlation results are interpreted using 'Davis Convectional Interpretation'. Also in the tables of correlation results, the figures in the parenthesis are p-values which show whether the correlation coefficients (r) are significant or not.

In Table 43, the associations between increased income of women and age of women, household size, number of children living with mother and description of main occupation respectively are positive (i.e. r = 0.075, 0.221, 0.096, and 0.197 respectively). However, although increased income association with women age was negligible, its association with household size, number of children living with mother and description of main occupation was low. Microcredit programme participation also had positive and very high relationship (r = 0.710) with increased income of women. Furthermore, increased income of women had positive but insignificant relationship (r = 0.029) with level of education. It however, had a negatively low relationship (r = -0.105) with presence of husband. The p-values (i.e. p=0.009, 0.04, 0.00) in the Table 43 portray that among the seven independent variables, increased income of women

148

had significant positive relationship with only household size, description of main occupation, and microcredit programme participation ($D_1=1$ if women beneficiary and $D_1=0$ if non-beneficiary women). Hence, the null hypothesis 5 is rejected in the case of relationship between women increased income and household size, description of main occupation, and microcredit programme participation.

Table 43: Correlation matrix showing the relationships between increased income and explanatory variables (Sig. 1-tailed)

	Y	X_1	X_2	X_3	X_4	X_5	X_6	X_7
Y	1.000	0.075	0.029	-0.105	0.221^{**}	0.096	0.197^{**}	0.710
	(.)	(0.158)	(0.352)	(0.082)	(0.009)	(0.157)	(0.004)	(0.000)
X_1		1.000	-0.237^{**}	0.055	0.055	0.186^{*}	0.008	0.148^{*}
		(.)	(0.001)	(0.233)	(0.233)	(0.024)	(0.459)	(0.024)
X_2			1.000	0.075	-0.257^{**}	-0.258^{**}	-0.289	0.011
			(.)	(0.162)	(0.003)	(0.003)	(0.000)	(0.440)
X_3				1.000	0.675^{**}	0.565^{**}	-0.154^{*}	-0.294^{**}
				(.)	(0.000)	(0.000)	(0.021)	(0.000)
X_4					1.000	0.852^{**}	0.032	0.166^{*}
					(.)	(0.000)	(0.368)	(0.039)
X_5						1.000	0.085	0.123
						(.)	(0.186)	(0.097)
X_6							1.000	0.201^{**}
							(.)	(0.003)
X_7								1.000
								(.)

** . Correlation is significant at the 0.01 level (1-tailed).

* . Correlation is significant at the 0.05 level (1-tailed).

X_1 = age of respondent

149

$X_2 =$ some formal education

$X_3 =$ living with husband

$X_4 =$ household size

$X_5 =$ umber of children living with mother

$X_6 =$ description of main occupation

$X_7 =$ microcredit programme participation

Moreover, with regards to the $p = 0.158, 0.352, 0.082,$ and 0.157 in Table 43 that test the association between increased income and age of respondent, level of education, living with husband and number of children living with mother respectively the researcher accept the null hypothesis that there is no significant positive relationship between increased income of women and age of respondent, level of education, living with husband and number of children living with mother.

Table 44 also presents the results of the relationship between mean extent of women involvement in decision-making and age of respondent, level of education, living with husband, household size, number of children living with mother, description of main occupation, and category of respondent (microcredit programme participation). The table shows that with the exception of presence of husband, which had negative relationship (i.e. $r = -0.274$) with women involvement in decision making, age, education, household size, number of children living with mother, main occupation, and microcredit programme participation all had positive relationships with women involvement in decision making. The result implies that like all other variables that haves positive relationship with women involvement in decision-making, an increased

150

participation in microcredit programmes will result in an increased involvement in decision-making by women in the study area. Also the negative relationship between women involvement in decision-making suggests that as women get married and live in the same house with their husbands their role play in taking decision to effect the welfare of their households is overshadowed.

Table 44: Correlation matrix showing relationships between extent of women involvement in decision-making and explanatory variables

	Y	X_1	X_2	X_3	X_4	X_5	X_6	X_7
Y	1.000							
	(.)							
X_1	0.056	1.000						
	(0.226)	(.)						
X_2	0.258	-0.239**	1.000					
	(0.062)	(0.001)	(.)					
X_3	-0.274**	0.071	0.075	1.000				
	(0.000)	(0.173)	(0.162)	(.)				
X_4	0.412**	0.181*	-0.257**	0.675**	1.000			
	(0.000)	(0.027)	(0.003)	(0.000)	(.)			
X_5	0.246*	0.186*	-0.258**	0.565**	0.852**	1.000		
	(0.004)	(0.024)	(0.003)	(0.000)	(0.000)	(.)		
X_6	0.135*	0.008	-0.289**	-0.154*	0.032	0.085	1.000	
	(0.036)	(0.459)	(0.000)	(0.021)	(0.368)	(0.186)	(.)	
X_7	0.667**	0.138	0.011	-0.294	0.132	0.087	0.205	1.000
	(0.000)	(0.033)	(0.440)	(0.000)	(0.081)	(0.181)	(0.003)	(.)

** . Correlation is significant at the 0.01 level (1-tailed).

*Correlation is significant at the 0.05 level (1-tailed).

X_1 = age of respondent

151

$X_2 =$ some formal education

$X_3 =$ living with husband

$X_4 =$ household size

$X_5 =$ number of children living with mother

$X_6 =$ description of main occupation

$X_7 =$ microcredit programme participation

The results in the Table 44 then indicate that women involvement in decision-making has negligible association with age whereas its association with level of education, presence of husband, number of children living with mother, and description of main occupation is low (i.e. r = 0.258, -0.274, 0.246, and 0.135 respectively). More so, extent of women involvement has moderate and substantial association respectively with number of children living with mother and microcredit programme participation (r = 0.412, and 0.667).

Table 44 also depicts that while age of respondent, and education do not show significant relationship (p= 0.226 and 0.062 respectively) with extent of women involvement in decision-making, living with husband, household size, number of children living with mother, description of main occupation, and microcredit programme participation have statistically significant relationships (p= 0.000, 0.000, 0.004, 0.036, and 0.000 respectively) with extent of women involvement in decision-making. Depending on the test of significance of the relationships in Table 44, the null hypothesis that there is no significant positive relationship between women extent of involvement in decision-making and age, and education, and living with husband is failed to be rejected. On the contrary, the null hypothesis that the relationship between women involvement in decision-making and household size, number of children living with mother, description of

main occupation, and microcredit programme participation is statistically not positively significant is rejected.

Table 45: Correlation matrix showing the relationships between women level of living and explanatory variables

	Y	X_1	X_2	X_3	X_4	X_5	X_6	X_7
Y	1.000	0.006	-0.167^{**}	0.029	0.211^{**}	0.174^{*}	0.234^{**}	0.662^{**}
	(.)	(0.468)	(0.013)	(0.349)	(0.012)	(0.033)	(0.001)	(0.000)
X_1		1.000	-0.239^{**}	0.071	0.181^{*}	0.186^{*}	0.008	0.138^{*}
		(.)	(0.001)	(0.173)	(0.027)	(0.024)	(0.459)	(0.033)
X_2			1.000	0.075	-0.284^{**}	-0.284^{**}	-0.291^{**}	0.011
			(.)	(0.162)	(0.001)	(0.001)	(0.000)	(0.440)
X_3				1.000	0.653^{**}	0.551^{**}	-0.170^{**}	-0.294^{**}
				(.)	(0.000)	(0.000)	(0.012)	(0.000)
X_4					1.000	0.852^{**}	0.032	0.132
					(.)	(0.000)	(0.368)	(0.081)
X_5						1.000	0.085	0.087
						(.)	(0.186)	(0.181)
X_6							1.000	0.205^{**}
							(.)	(0.003)
X_7								1.000
								(.)

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

X_1 = age of respondent

X_2 = some formal education

X_3 = living with husband

X_4 = household size

X_5 = umber of children living with mother

X_6 = description of main occupation

X_7 = microcredit programme participation

Further examination of relationships was done to explore the correlation between the level of living of women and age of respondent, level of education, living with husband, household size, number of children living with mother, description of main occupation, and microcredit programme participation. As shown in Table 45, the level of education showed negatively significant but low correlation ($r = -0.167$) with level of living. However, age, presence of husband, household size, number of children living with mother, description of main occupation, and microcredit programme participation all had positive relationship with women level of living. The correlation coefficients of 0.006 and 0.029 respectively between level of living of women and age and presence of husband indicates negligible association whereas $r = 0.211, 0.174$, and 0.234 for household size, number of children living with mother, description of main occupation respectively as against level of living suggest low association and $r = 0.662$ as correlation between women level of living and microcredit participation indicates substantial association.

The test of significance of correlation in Table 45 also reveals that level of education, household size, number of children living with mother, description of main occupation, and microcredit programme participation had significant relationships with the level of living of women and their households in the study area (i.e. $p = 0.013, 0.012, 0.033, 0.001$, and 0.00 respectively). Thus based on the

test of the significant result, the null hypothesis that there is no significant positive relationship between women level of living and household size, description of main occupation, and microcredit programme participation is rejected. However, the study accepts the hypothesis that there is no statistically positive significant relationship between level of living of women and their households in the study area and age, education, and presence of husband.

Regression Results and Interpretation: Test of Hypothesis Four

In ascertaining the quantitative impact of the microcredit programmes intervention on women in the study area, the Ordinary Least Squares (OLS) and Logit regression models were estimated; and the results are presented.

Table 46 shows OLS regression results with the dependent variable being extent of women involvement in decision-making in their households. All the variables in the model equation entered to predict extent of women involvement in decision-making. The Adjusted R-square of 0.362 in the model summary result implies that the independent variables in the regression model explain 36.2% of the variation in the extent of women involvement in decision-making in their households. The result in Table 46 also shows that the regression model is significant with an F ratio of 9.772 and a p-value of 0.000 tested at an alpha level of 0.05. Furthermore, the test of the beta coefficients in the model portrays in Table 46 that microcredit programme participation as well as household size makes a significant impact in explaining extent of women involvement in decision-making (i.e. t = 1.707; p-value = 0.051 and t = 2.142; p-value = 0.035

respectively for microcredit programme participation and household size). Interestingly, presence of husband with a t-ratio of -3.733 and p-value of 0.000 makes a negative impact in explaining women extent of involvement in decision-making in their households. This suggests that as women continue to stay in the same house with working husbands, their level of involvement in decisions that affect households declines.

Table 46: Ordinary Least Squares (OLS) regression – dependent variable is mean extent of involvement in decision-making (empowerment)

Explanatory variables	β coefficient	t-value	Sig. (p-value)
(Constant)	2.455	4.747[**]	0.000
Microcredit programme participation	0.380	1.707[*]	0.051
age of respondent	-0.012	-1.544	0.126
level of education	0.258	1.290	0.200
living with husband	-0.851	-3.733[**]	0.000
Household size	0.175	2.142[*]	0.035
number of children living with mother	-0.151	-1.513	0.133
description of main occupation	-0.326	-3.256	0.062

Model summary

R Square	Adjusted R square	F	Sig. (P-value)
0.404	0.362	9.772	0.000

[*]: significant at 0.05 alpha level   [**]: significant at 0.01 alpha level

Source: Field Data, 2006

Estimated regression model equation – dependent variable: mean extent of women involvement in decision-making

$$\hat{Y}_e = 2.455 + 0.380X_1 + 0.258X_2 - 0.851X_3 - 0.012X_4 + 0.175X_5 - 0.151X_6 - 0.326X_7$$

Table 47 also presents OLS regression model result in which the dependent variable is level of living. The model summary result in Table 47 depicts that microcredit programme participation, age, level of education, presence of husband, household size, number of children living with mother, and occupation together explain 46.6% of variation in the level of living of women in the understudied. This regression model tested significant (i.e. $F = 14.456$ and p-value of 0.000). Beta coefficients test results in Table 47 also show that microcredit programme participation with a t-ratio of 8.437 and p-value of 0.000 makes a significant positive impact in explaining the level of living of women in the study area. This might mean that after sustaining their various businesses through participation in microcredit programmes; women spend greater part of their increased income to help raise the living levels of their households.

Table 47: Ordinary Least Squares (OLS) regression – dependent variable is mean level of living

Explanatory variables	β coefficient	T	Sig. (P-value)
(Constant)	2.578	20.021[**]	0.000
Microcredit programme participation	0.467	8.437[**]	0.000
Age of respondent	-6.069E-04	-0.303	0.763
Level of education	-4.833E-02	-0.970	0.334
Living with husband	-1.810E-03	-0.032	0.975
Household size	-5.812E-03	-0.286	0.775
Number of children living with mother	1.980E-02	0.798	0.427
Description of main occupation	2.228E-02	0.894	0.374
Model summary			
R Square	Adjusted R Square	F	Sig. (P-value)
0.500	0.466	14.456	0.000

[*]: significant at 0.05 alpha level   [**]: significant at 0.01 alpha level

Source: Field Data, 2006

Estimated regression model equation – dependent variable: women mean level of living

$$\hat{Y}_1 = 2.578 + 0.467 X_1 - 0.061 X_2 - 0.048 X_3 - 0.002 X_4 - 0.006 X_5 + 0.020 X_6 + 0.022 X_7$$

As presented in Table 48, the Nagelkerke R Square of 0.413 indicates that 41.3% of the variation in increase income is significantly explained by microcredit programme participation, age, level of education, presence of husband, household size, number of children living with mother, and occupation of women. The test of beta coefficients of the predicting variables in the model shows that microcredit programme partcicpation makes a positive significant contribution (i.e. Wald = 8.482; p-value = 0.004) in explaining increase in income of the women (Table 48).

In the table, the Odd ratio of 9.483 for microcredit participation implies that a woman participant is 9.483 times more likely to experience an increase in income from her economic activity than not experiencing increased income. The odds can be converted to probability as in the following equation:

$$\hat{Y} = \frac{ODDS}{1+ODDS} = \frac{9.483}{10.483} = 0.90$$

Hence the model predicts that 90% of the women participants will experience improvement in their income from economic activities. Table 51 also shows that presence of husband makes a positive impact in explaining income of women. This is not surprising because husbands might serve as sources of encouragement to their wives and assist them with valuable ideas that will positively affect the returns from women income generating activities.

159

Table 48: Logistic regression – dependent variable is increased income

Explanatory variables	β coefficient	Wald	Sig. (P-value)	Exp(B)/ Odd ratio
(Constant)	-2.709	2.284	0.131	0.067
Microcredit programme participation	2.249	8.482[**]	0.004	9.483
Age of respondent	-0.007	0.075	0.785	0.993
Level of education	0.351	0.285	0.593	1.421
Living with husband	2.951	8.604[**]	0.003	19.117
Household size	0.214	0.634	0.426	1.239
Number of children living with mother	-0.480	1.935	0.164	0.619
Description of main occupation	-0.230	0.496	0.481	0.794

Model summary

-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square	Chi-square	Sig. (P-value)
103.176	0.301	0.413	38.99	.000

[*]: significant at 0.05 alpha level   [**]: significant at 0.01 alpha level

Source: Field Data, 2006

Estimated regression model equation – dependent variable: increased income of women

160

$$\text{Log } [P_y/ (1- P_y)] = - 2.709+2.249X_1 +0.351X_2 +2.951X_3 -0.007 X_4 +0.214 X_5 - 0.480 X_6 - 0.230 X_7$$

In a nutshell, the regression results as discussed indicate that microcredit programme participation has made a positive impact in improving women extent of involvement in decision-making in their households, level of living, and income changes. Thus the hypothesis that microcredit programme participation does not significantly explain socio-economic life of women was rejected.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Introduction

This chapter is the concluding chapter of the thesis report. It summarises the report, and presents the conclusions on the findings found from the analysis and discussions. The chapter also presents policy recommendations that might help to improve microcredit operations.

Summary

According to the 2002 Ghana Poverty Reduction Strategy (GPRS) document, rural women are poor and for that matter, most vulnerable in their societies. The document reveals that most rural women are unable to support the proper up-keep of their families in terms of better nutrition, good health care, clothing, good housing, and education. It is in the light of women's disadvantaged situation in their societies that policy makers, International Development Agencies (IDA), and NGOs, have devised various development approaches aimed at poverty reduction with micro income-generating projects as a booster to women especially in the rural areas. As a result, microcredit programmes which provide financial services and focus on poverty reduction and economic survival of the poor especially the disadvantaged women, have been promoted and introduced to help solve the problem of poverty especially among rural women.

Thus the study was conducted to assess the impact of microcredit on socio-economic life of women in the rural farming communities in the Central Region of Ghana. Specifically, it assessed and compared changes in the socio-economic situations of beneficiary and non-beneficiary women and their households; investigated the extent to which microcredit programme interventions have empowered women; examined the relationship between the socio-economic situation of women and (a) microcredit programme interventions, (b) socio-demographic characteristics of the women (age, marital status, household size, educational level, and presence of husband), and (c) type of economic activity; and ascertained how microcredit programme interventions explained/affected changes in the socio-economic situations of women, and their empowerment.

The study employed 'with and without' impact study approach through descriptive correlational design involving a cross-sectional survey of beneficiary women of microcredit programmes and non-beneficiaries in the study area. The results for the study were obtained (from the data collected from the field with the help of SPSS computer soft ware) using descriptive statistics including frequencies, percentages, mean and standard deviation; independent sample t-test and chi-square test statistics; correlations; and OLS and Logit regressions.

The study results revealed the following findings:

- Generally, more beneficiary women's households had realized improvement in their food consumption than non-beneficiary households.

- The mean annual income earning of ¢5474230.7692 by beneficiary women was found to be significantly greater than mean annual income of

¢1934931.5068 from the non-beneficiary women. It was further found from the assessment of changes in women income compared with three years ago that 88.9% of beneficiary women compared with 35.6% of non-beneficiary women had experienced an increase in their income.

- Changes in the output/production levels results indicated that 83.3% of beneficiary women compared with 33.3% of non-beneficiary women had observed an increase in their output/production levels.

- With regard to women position in decision-making in their households, it was found that 90% of the beneficiary and 74.4% of non-beneficiary women gave a positive response that 'Yes' – they had a significant say in decisions that affect their households. Further assessment of women involvement in decision-making revealed that about 82% of beneficiary women compared with 51% of non-beneficiary women had increased their involvement in decision-making that affected their households compared with three years ago.

- The majority (about 78%) of the beneficiary women compared with 63.3% of non-beneficiary women had access to pipe borne water as their major source of drinking water. With regard to facility use as place of convenience, 64.4% of beneficiary women used household owned pit latrine/KVIP (which represents high level of living) whereas 45.6% of non-beneficiary women used community owned pit latrine/KVIP/WC (which also represents low level of living).

- Results of the correlation study indicate that microcredit programme participation had positive and significant relationship with increased income of women and women involvement in decision making. Furthermore, apart from the level of education which shows negative and significant but low correlation (r = -017) with level of living; age, presence of husband, household size, number of children living with mother, description of main occupation, and microcredit programme participation all had positive relationship with women level of living.

- According to the regression model results, microcredit programme participation had significant positive influence in explaining the extent of women involvement in decision-making, level of living of women and women income changes.

Conclusions

Depending on the results obtained from the survey data as presented and discussed in chapter four, the following conclusions can be drawn from the study:

1. It was found that generally, microcredit had had positive impact on the socio-economic life of women beneficiaries. The result revealed that microcredit programme participation had significant and positive impact in explaining the extent of women involvement in decision-making, level of living of women and women income changes.

165

2. There was low level of education among women involved in the study. Only 11.2% of the women interviewed had education up to and beyond secondary school level.

3. The study revealed a high divorced rate of 21.1% among beneficiary women as compared with 9.2% among non-beneficiaries. Most (72.4%) of women non-beneficiary had husbands living with them in their households compared with 56.7% of the beneficiary women who live with their husbands

4. 67.8% of the beneficiary women compared with 35.6% of the non-beneficiary women had all of their children of school-going age attending school. Furthermore, a significant number (23.3%) of the non-beneficiary had none of their children who were supposed to be in school attending school.

5. Most of the beneficiary women's households had seen an improvement in their food consumption than non-beneficiaries' households. About 67%, 51% and 42% of the beneficiary women compared with 43%, 41% and 14% of non-beneficiary women respectively gave a response that they had observed an increased change in the number of meals taken in a day, quantity of food taken and quality of food taken respectively.

6. About 60% of the women sampled had been able to rise out of poverty. The estimated overall mean income of ¢ 3,763,178.8079 per annum was well above the national poverty line of ¢900,000.00. However, the mean proxy income of beneficiary women was relatively greater than the mean

proxy income of the no-beneficiary women (i.e. ¢5,474,230.77 and ¢1,934,931.51 respectively).

7. About 61% and 73% of beneficiary and non-beneficiary women respectively saved up to 20p of every cedi income earned from their economic activities. However, the results revealed that some women beneficiaries' savings had been quite enhanced as compared with that of non-beneficiary women.

8. While the majority (88.9%) of beneficiary women had observed an improvement in their current income compared with three years ago, significant proportion (41.1%) of non-beneficiary women, on the other hand, had experienced reduction in their current income compared with three years ago.

9. Eighty percent (80%) of the beneficiary women relative to 39% of the non-beneficiary women had increased their contribution to households' expenditure.

10. Most microcredit clients and non-clients play significant role in the provision of their family needs. About 40%, 61% and 63% compared with 11%, 26%, and 17% of beneficiary women and non-beneficiary women, respectively, play major roles in provision of health, nutrition and children education needs respectively.

11. Sixty percent (60%) of beneficiary women compared with 21.1% of non-beneficiary women gave a response that they could afford to pay school fees of their children.

12. Eighty-two percent (82.2%), 71.1%, and 77.8% of beneficiary women had observed a better change in their families' health, nutrition, and children education compared with 52.2%, 36.7%, and 45.6% respectively of non-beneficiary women who also experienced better change in the health, nutrition, and children education of their families.

13. More non-clients (about 54%) than clients (about 31%) of microcredit programmes were engaged in farming as major economic activity. Hence, 68.9% of beneficiary women compared with 46.1% of non-beneficiary women were engaged in processing and marketing in the rural communities

14. Although in general, less than half of the women respondents assessed the change in the technology use in their production activities to be better, 52.2% of beneficiary women relative to 25.6% of non-beneficiary women had experienced an improvement in the technology they used in their economic production activities

15. Over half (about 57%) of beneficiary women compared with 28.9% of non-beneficiary women had improvement in their abilities to obtained input materials needed in their economic activities

16. Ninety-three percent (93.3%) of beneficiary women of microcredit programmes compared with 22.2% of non-beneficiary women assessed the change in their ability to access credit over three years ago to be 'better'.

17. Relatively, high repayment rate of about 97.6% was found among beneficiary women respondents and a high default rate of about 56% was also found with the non-beneficiary women

18. While most of the women beneficiaries paid interest at rate as low as 10% on formal microcredit obtained, majority of non-beneficiary women paid interest at rate as high as 50% and over on credit they obtained from their lenders.

19. Majority (84.4%) of the beneficiaries compared with 34.4% of non-beneficiaries have observed an improvement in their income.

20. About 44% of women interviewed assumed headship responsibilities in their households. In general, male-female ratio of household headship in the study area was found to be about 1.3:1 (i.e. 91:80). About Fifty-seven percent (57%) of beneficiary women played headship role in their households relative to 31% of non-beneficiary women.

21. Ninety percent (90%) of the beneficiaries and 74.4% of non-beneficiaries were significantly involved in decisions that affect their households. That summed-up in a positive response from about 82% of the respondents having a say in decisions-making to effect their households

22. About 82% of beneficiary women relative to 51% of non-beneficiary women had experienced an increased involvement in decision-making that affect their households compared with three years ago.

23. There was a significant difference between current status of beneficiary women in households' decision-making and the current status of non-

beneficiary women in households' decision-making. Generally, the extent of beneficiary women's involvement in decision-making ranged from 2.88 – 3.88 (about much and very much involvement in decision-making) compared with that of the non-beneficiary women, which ranged from 1.98 – 3.13 (about little and much involvement in decision-making).

24. With the exception of time spent on economic activities, in which case, majority (64.4% and 41.1%) of beneficiary and non-beneficiary women respectively had increased change, most of the women respondents had realized decreased and or no change in time use on: domestic chore, recreational activities, child care and sleeping

25. Majority (about 78%) of beneficiary women compared with 63.3% of non-beneficiary women had pipe borne water as their major source of drinking water.

26. With regards to facility use as place of convenience, majority (64.4%) of beneficiary women used household owned pit latrine/KVIP (which represents high level of living) whereas significance proportion (45.6%) of non-beneficiary women used community owned pit latrine/KVIP/WC (which also represents low level of living).

27. About 73% of beneficiary women compared with 49% of non-beneficiary women had their houses/compounds walls constructed with burnt bricks and cement blocks. Thus most of the beneficiary women than non-beneficiary women levels of living are high and very high.

28. The material used for the construction of roofing result indicates that about 94.4% of beneficiary women compared with 43.3% of non-beneficiary women used iron/alluminium sheets and cement/concrete to construct their roofing.

29. Whereas most of the beneficiary women used kerosene as their main source of energy for cooking, most of the non-beneficiaries used charcoal as main source of energy for cooking.

30. Level of living of the beneficiary women was comparatively better than the non-beneficiary women level of living. t-test result concludes that microcredit programmes beneficiary women level of living was significantly different from the level of living of the women who were not beneficiaries of microcredit programmes. s

Recommendations

The study makes the following recommendations based on the findings, and conclusions drawn.

1. Existing microcredit programmes in the study area and other parts of the country must continue to extend services to their clients and also try to expand the microcredit facility to women non-clients.

2. Other NGOs and rural financial institutions which do not run microcredit schemes are encouraged to consider extending microfinance services in their development activities as a tool for poverty alleviation.

3. If government aims to reduce poverty, it should focus on the expansion of its microcredit schemes to the poor especially rural women. This can be done by identifying credible and capable partner organizations and institutions to expand its facility of loan disbursement and guidance of the deprived group for utilization of their resources.

4. Along with the expansion of microcredit services to the poor, there is the need to monitor and examine the impact of existing schemes on the living standards of the poor.

5. Ghana Microfinance Institutions Network (GHAMFIN) must support the microfinance sector to provide financial services to the poor by:

   • Enhancing the capacity of retail MFIs through specialized training and strategic planning

   • Establishing a use of performance measure and promotes financial transparency through which members can self report their performance indicators to be published

   • Helping to create a policy environment that is conducive for retail MFIs. This can be done by arranging policy seminars, workshops and conferences which provides opportunity for a range of stakeholders to present their views at a common platform.

6. MFIs including NGOs should have Rural Support Programmes (RSPs) which must have poverty alleviation as a focus of all development activities. The RSPs must create, promote and support effective and

disciplined community organizations to manage rural development and work toward self-reliance and poverty alleviation.

7. Rural women should organized themselves into effective and disciplined groups; and these groups are encouraged to have 'microbank' to promote and accept micro-savings from members. Members can rely on such savings for soft and small loans in time of needs for investment to ensure business sustainability

8. NGOs and other MFIs are encouraged to complement microcredit schemes with support services such as health, sanitation, nutrition, and HIV/AIDS education to women.

9. Microcredit Practitioners (MPs) including donor community must ensure that microcredits are timely disbursed to recipients. This will facilitate timely execution of economic activities to ensure higher returns which will results in increasing income and possibly, improvement in taking care of health, nutrition, and children education needs.

10. Since most dwellers in the rural farming areas engage in farming and allied businesses, agribusiness management skills of the organized women groups need to be developed especially by NGOs and MOFA with modern food production, processing and marketing strategies

11. Agricultural extension services to women farmers need to be improved in terms of availability and content by MOFA. Also some NGOs should come in to provide agricultural and other extension education to farmers

by hiring and training their own extension agents to provide services to their clients.

12. For financial self-sufficiency and sustainability,

- MFIs are encouraged to charge interest on microcredit to the poor but interest must be relatively low and reasonable not to deter poor women from benefiting microcredit schemes.

- MFIs are also encouraged to adopt strategies to collect loan repayment in installments from their clients to ensure higher loan recovery. Women should be allowed to make loan repayment weekly, fortnightly with any amount acceptable as part payment until loan and interest are fully paid.

REFERENCES

Afrane, S. (2001). Impact Assessment of Microfinance Interventions in Ghana and South Africa: A Synthesis of Major Impacts and Lessons. Journal of Microfinance. 3, 31-38.

Amin S and A Pebley (1994). Gender Inequality Within Households: The Impact of a Women's Development Programme in 36 Bangladeshi Villages. In E.P. Dakelman and J. Falconer, (Eds.), Bangladesh Development Studies Special Issue on Women, Development and Change 22 (2&3). Dhaka: BIDS.

Andah, D. O. and Steel, W. F. (2003). Rural and Micro Finance Regulation in Ghana: Implications for Development and Performance of the Industry. Africa Region Working Paper Series 49. Accra: University of Ghana.

Anin, T. E. (2001). Banking in Ghana. Accra: Woeli Publishing Services.

Apraku, K. (2000). Challenging the Professions: Frontiers for Rural Development. London: Intermediate Technology Publications Limited

Ardayfio-Schandorf, E., Brown, C. K., and Aglobitse, P. B. (1995). The Impact of PAMSCAD on the Family: A study of the (ENOWID) Intervention in the Western Region of Ghana. Fedap Technical Series 6. Accra, Legon: University of Ghana.

Aryeetey, E. (1994). A Study of Informal Finance in Ghana. Working Paper 78. London: Overseas Development Institute.

175

Aryeetey, E. (1995). Rural Finance in Africa: Institutional Development and Access for the Poor. Accra: ISSER, University of Ghana,

Atta-Agyepong S. and Weidinger L. (2000). Small Holder Business Support. Proceedings of the National Grasscutter Workshop. Sunyani: MOFA, GTZ-SFSP.

Baker, J. L. (2000). Evaluating the Impact of Development Projects on Poverty: A Hand Book for Practitioners. Washington D.C.: World Bank.

Bank of Ghana (2000). Non-Bank Financial Institutions Business, (BOG) Rules. Accra: BOG

Barnes, J. (1996). Small Industries and Decentralization in Ghana. Legon, Accra: University of Ghana Press.

Batse, S. Buchy, M., Ross, H. and Proctor, W (1999). Strategies for Poverty Alleviation: An Integrated Approach, Agricultural Credit. London: Longman.

Bennet, R. (1997). Evaluation Frameworks for Development Programs and Projects. New Delhi: Sage Publications, India Pvt. Ltd.

Buvinic, M. (2004). Projects for Women in the Third World: Explaining their Misbahaviour. World Development 14(5), 123-131. USA: Harvard University.

Cartar, C. and Edgecomb, E. (1999). Practitioner-Led Impact Assessment: A Test in Honduras. AIMS Paper. Washington D.C: The Small Enterprise Education and Promotion Network.

Chen, F. N. and Dunn, D. (1996). Finance, Entrepreneurship and Growth: Theory and Evidence. Journal of Monetary Economics (32), 513-542.

Chord, D. (2000). Inventory of Ghanaian Micro-Finance Best Practices. (Report for Ministry of Finance, Non-Banking Financial Institutions Project). Accra: University of Ghana.

Cohen, M. and Gary, G. (1998). Highlights and Recommendations of the Second Virtual Meeting of the CGAP Working Group in Impact Assessment Methodologies. April 14-28, 1998. USA: Harvard University.

Coleman, B. E. (2004). Measuring Impact of Microfinance Programmes: ADB Finance for the Poor. Quarterly Newsletter of the Focal Point for Microfinance. Retrieved September 2005, from http://www.adb.org/documents/periodicals/microfinance

Coleman, B. E. (2001). Microfinance in Northeast Thailand: Who benefit and how much? Mimeo, Manila: Asian Development Bank

DFID (2003). Rural Finance. Key Sheets for Sustainable Livelihoods. pp. 13-14. London: DFID.

Doung, P. and Izumida, R. (2002). Growth, Development and Poverty. Bangkok, Thailand: Asian Institute of Technology.

Dunn, E., Kalaitzandonakes, N. and Valdivia, C. (1996). Risk and the Impacts of Microenterprise Services. Washington DC: Management Systems International

Ellsasser, K. (2006). Sustainable Microfinace for Rural Areas. In Gary, G. (Ed.), Agricultural and Rural Development, 13, 95 -101. London: Oxford University Press.

177

Freedom From Hunger (2000). Impact of Credit with Education Programme on the Beneficiaries. Legon: University of Ghana Press.

Fuglesang, K. N. and Chandler, G. (1993). Overview of Studies on the Impact of Microenterprise Credit. Washington DC: Management Systems International.

Gaile, G L (2005). The state of Pakistan economy. Rockhampton: central Queensland University.

Gaile, G L (1997). Highlights and Recommendations from the Microenterprise Impact Virtual Meeting (Draft). Washington DC: Management Systems International

Gaile, G L and Foster, J (1996). Review of Methodological Approaches to the Study of the Impact of Microenterprise Credit Programs. Washington DC: Management Systems International

Germanov, D. Sharma, S. R. and Nepal (2004). Strengthening of Credit Institutions /Programs for Rural PovertyAlleviation in Nepal. Bangkok, Thailand: United Nations, Economic and Social Council (ECOSOC) for Asia and Pacific.

Ghana Microfinance Institutions Network (GHAMFIN) (2003). Census of Micro Credit NGOs, Community-Based Organizations and Self Help Groups in Ghana (Draft Report). Accra: Asamoah & Williams Consulting.

Gitinger, P. J. (1995): The Economic Analysis of Agricultural Projects. New York: Economic Development Institute, World Bank.

Goetz, A. M. and Sen Gupta, R. (1996). Who Takes the Credit? Gender, Power and Control Over Loan Use in Rural Credit Programs in Bangladesh. World Development 24 (1), 45-64.

Gujarati, D. (1992). Essentials of Econometrics. USA: McGraw-Hill Book Company.

GSS (2000). 1998/99 Ghana Living Standards Surveys. Accra: Ghana Statistical Service

Hashemi S, S Schuler and I Riley (1996). Rural Credit Programs and Women's Empowerment in Bangladesh. In A. Napier, M. blaxter (Eds.), World Development, 24 (4). Sydney: Allen and Unwin.

Hallen, T. (1996). Women at the Center: Grameen Bank Borrowers after One Decade. USA: Colorado Westview Press.

Hashemi, S. M., Schuler, S. R., and Riley, A. P. (1996). Rural Credit Programs and Women's Empowerment in Bangladesh. World Development, 24(4). 635-654. Washington DC: IFPRI.

Hossain, M (1988) Credit for Alleviation of Rural Poverty: the Grameen Bank in Bangladesh. Washington DC: IFPRI

Hulme, D. (1997). Impact Assessment Methodologies for Microfinance: A Review. Paper Prepared in Conjunction with the IAMS Project for the Virtual Meeting of CGAP Working Group on Impact Assessment Methodologies. April 17-19, 1997.

Hulme, D. and Mosley, P. (1996). Finance Against Poverty. London: Routledge.

Husain, S., Wehnert, U. and Shakya, R. (1998). Microfinance and Armed Conflict in Nepal: The Adverse Effects of the Insurgency on the Small

Farmer Cooperatives Ltd. (SFCLs). Rural Finance Nepal (RUFIN), Working paper 3. 1 – 46. Kathmandu, Nepal: National Printing Press.

Hyman, E. and Dearden, K. (1996). A Review of Impact Information Systems of NGO Microenterprise Programmes. Washington DC: Management Systems International

ISSER (2005). The State of the Ghanaian Economy in 2004. Accra: Institute of Statistical, Social and Economic Research (ISSER), University of Ghana, Legon.

Johnson, S. and Rogaly, B. (1997). Microfinance and Poverty Reduction. London: ACTIONAID, OXFAM, UK.

Kahan, D. (2004). Farm Economics Handbook: Working With Market-Oriented Farmers. AGSF Working Document. USA: FAO

Khandker, S. (1998). Fighting Poverty with Microcredit: Experience in Bangladesh. London: World Bank. Oxford University Press.

Kilgour, D. (1998). The Challenges of Microcredit. Paper for the Meeting of Microcredit Summit Councils, June 25-27, 1998. New York: NY.

Kowubaa, L. (2000). Rural Finance Review Study (Report prepared for Ministry of Finance/World Bank NBFI Project). London: World Bank.

Kumar, R. (1999). Research Methodology: A Step-by-Step Guide for Beginners: Sage Publications Edition. London: Thousand Oaks, New Delhi.

Kunfaa, P. K. (1999). Sustainable Development: Economics and Policy. Malden, Massachusetts, USA: Blackwell Publishers Inc.

Latifee, R. (2000). Rural Development: Putting the Last First. London: Longman.

Lindenberg, M. (2004). Public Sector Program Evaluation I: Summary Note for Students. John F. Kennedy School of Government, Harvard University. USA: Harvard University Press.

Lipold, K. and Mknelly, B. (1998). Practitioner-Led Impact Assessment: A test in Mali. AIMS Paper. Washington D.C.: Freedom from Hunger and Management Systems International.

Little, P (1997). Background Paper on Income and Assets as Impact Indicators. Washington DC: Management Systems International

Lundberg, S. and Pollak R. (1993). Separate Spheres Bargaining and the Marriage Market. In D. Poore, and J. Sayer (Eds.), Journal of Political Economy, 101 (6). Milton: John wiley & Sons.

Mayoux, L. (1997): The Magic Ingredient? Microfinance and Women's Empowerment. Briefing paper for the Micro Credit Summit. Washington. Retrieved June 2005, from

http://gdrc.org/icm/wind/magic.html

McConnell, C. R. and Brue, S. L. (1999). Macroeconomics: Principles, Problems, and Policies. USA: Irwin McGraw-Hill.

Meade, J. (2001). An Examination of Microcredit Movement. Oxford, U. K: Claredom Press.

181

Mensah, A. O. (2001). Rural Sociology and agricultural Extension. Cape Coast: University Printing press.

Microcredit Summit Campaign (2001). The Microcredit Summit Challenge: Building Financially Self-Sufficient Institutions While Maintaining a Commitment to Reaching the Poorer. Retrieved September, 2005 from http:// www.microcreditsummit.org.

MkNelly, B. and Dunford, C. (1996). Are Credit and Savings Services Effective Against Hunger and Malnutrition? — A Literature Review and Analysis. Freedom From Hunger Research Paper 1, February 1996. New York: Van Nostrand Reinhold.

MkNelly, B. and McCord, M. (2001): Credit with Education Impact Review No. 1: Women's Empowerment. London: Academia Press.

Montgomery, R., Davies, R., Saxena, N. C. and Ashley, S. (1996). Guidance Materials for ImprovedProject Monitoring and Impact Review Systems in India. Swansea: Centre for Development Studies, University College Swansea

Morduch, J. (1998). Does Microfinance Really Help the poor? New Evidence from Flagship Programmes in Bangladesh. Mimeo, Princeton: Princeton University.

Morduch, J. (1999). The Microfinance Promise. In P.M. Sigh (Ed.), Journal of Economic Literature, 37. 1569-1614. Phoenix: Oryx Press.

MOFA (2003). Food and Agriculture Sector Development Policy. Accra: Ministry of Agriculture.

182

Moser, C. A. and Kalton, G. (1991). Survey Methods in Social Investigation.
London: Heinemann Educational Books.

Naved, R. (1994). Empowerment of Women: Listening to the Voices of Women.
In S. Amin (Ed.), Bangladesh Development Studies 'Special
Issue on Women, Development and Change. 22 (2&3). Dhaka:
BIDS.

National Development Planning Commission (2002): Ghana Poverty Reduction
Strategy Document. Accra: University of Ghana.

Newman, J. and Canagarajah, S. (1999). What is Microfinance. Unitus: Global
Microfinance Accelerator. Retrieved December, 2005 from
http://www.unitus.com/wwd_whatismf.asp

Nissanke, M. and Aryeetey, E. (1998). Financial Integration and Development.
London: Routledge.

Nkum and Ghartey (2000). Regional and District level consultations on poverty.
London: Longman.

North, M. (2005). Microcredit: A Greenstar Research Brief. Retrieved Novembr,
2005 from http://www.greenstar.org/microcredit/microcredit-
brief.pdf

Nsiah-Gyabaah, S. (1998). Sustainable Financial Services for the Poor. London:
Longman.

Ntseane, G. P. (2000). A Botswana Rural Women's Transition to Urban Small
Business Success: Collective Struggles, Collective Learning;
http://www.edst.educ.ubc.ca/aerc/2000/ntseaneg-web.htm

Offei, C. (1995). Rural Credit in Ghana. Unpublished Master's thesis. University of Ghana, Legon.

Owusu-Acheampong, J. (1986). Micro-finance Evangelism, 'Destitute Women', and the Hard Selling of a New Antipoverty Formula. Development in Practice 6(2), 100-112.

Pal, K. (1995). Marketing in Microfinance Institutions: Agricultural Credit. London: Longman.

Pallant, J. (2001). SPSS Survival Manual: A Step-by-Step Guide to Data Analysis Using SPSS for windows (version 10). Australia: Allen and Unwin.

Pathak, W. (2004). Sustainable Rural Development: Semantics or Substance? USA: University Press of America.

Peace, G. and Hulme, D. (1994). Microenterprise and Children: What are the Intra-household Impacts of Income-generating Programmes. Small Enterprise Development 5 (1), 21-29

Pitt, M., and Khandker, S. (1998). The Impact of Group-Based Credit Programmes on Poor Households in Bangladesh: Does the Gender of Participants Matters? Journal of Political Economy, 5 (106), 958-996.

Sebstad, J., Neill, C., Barnes, C. and Chen, G. (1995). Assessing the Impacts of Microenterprise Interventions: A Framework for Analysis. Washington DC: USAID.

Schuler, S. R. and Hashemi, S. M. (1996). Credit Programs, Women's Empowerment and Contraceptive Use in Rural Bangladesh: Studies in Family Planning. Sydney: Allen and Unwin.

Scully, N. D.(2000). Micro-credit no Panacea for Poor Women. Retrieved December, 2005. http://www.igc.apc.org/dgap/micro.html

Shalidur, R. and Khandker, S. (1998). Fighting Poverty with Microcredit: Experience in Bangladesh. New York: Oxford University Press.

Srinivas, S. (2005). Credit for Alleviation of Rural Poverty. Washington DC: IFPRI.

UN (1999): United Nations Development Program Human Development Report. Rome: BHP Ltd.

Virtual Library on Microcredit (2005): Defining Microcredit. Retrieved September, 2005 from the Virtual Library on Microcredit database.

Weiss, J. and Montgomery, D. (2004). The Prevention of Debt Bondage with Microfinance-Led Services. London: Longman.

White, S.C. (1992). Arguing with the Crocodile: Gender and Class in Bangladesh. London: Zed Books.

Wiig, A. (1997). Credit Expansion in Microcredit Programmes: Dilemmas and Feasible Methods for Studying Them. Washington DC: Consultative Group to Assist the Poorest (CGAP).

World Bank (2000). World Development Indicators. Washington D.C.: World Bank.

World Bank (2004). Country Assistance Strategy (CAS) for Ghana 2004 – 7. Washington D.C.: World Bank.

www.ghanadistricts/region/central. Districts in the Central Region of Ghana.

www.ids.ac.uk/impacts/stateart/. Improving the Impact of Microfinance on Poverty. Action Research Programme.

Yaron, Benjamin, and Piprek (1997). Rural Finance: Issues, Design and Best Practices. Washington DC: Agriculture and Natural Resources Department, World Bank.

Zaman, H. (2000). Assessing the Poverty and Vulnerability Impact of Micro-Credit in Bangladesh: A case study of BRAC. Washington D.C.: World Bank

Zeller, M., and Meyer, R. L. (2002). The Triangle of Microfinance: Financial Sustainability, Outreach, and Impact. Baltimore: John Hopkins for the International Food Policy Research Institute.

APPENDICES

Appendix 1

Davis Convention for Describing Magnitude of Correlation

Coefficients

Pearson Product Moment Correlation (r)	Description
1.0	Perfect
0.70 – 0.99	Very High
0.50 – 0.69	Substantial
0.30 – 0.49	Moderate
0.10 – 0.29	Low
0.01 – 0.09	Negligible

Source: Davis, 1971

Appendix 2

UNIVERSITY OF CAPE COAST

DEPARTMENT OF AGRICULTURAL ECONOMICS AND EXTENSION

IMPACT ASSESSMENT OF MICROCREDIT PROGRAMMES ON SOCIO-ECONOMIC LIFE OF WOMEN IN THE RURAL FARMING COMMUNITIES IN THE CENTRAL REGION OF GHANA

STRUCTURED INTERVIEW SCHEDULE FOR FIELD DATA COLLECTION

Introduction

You have been selected to be involved in this survey, which is aimed at assessing the impact of microcredit programmes on the socio-economic life of women in the rural farming communities in the Central Region of Ghana.

Please help the respondents to fill in the blank spaces and/or tick **(√)** where applicable the answer of her choice. Kindly write N/A where question is not applicable.

It is hoped that responses will be sincere and objective as possible. Any information sought will be treated confidentially hence your anonymity is highly guaranteed.

Thank you.

Section I: Social and demographic

1. Name of the Village/Community…………………………………

2. Name of the district…………………………………………………

3. Category of the respondent. (i) beneficiary women [ ] (ii) non-beneficiary

   women [ ]

4. Age of respondent……………………..

5. Level of education of respondent.(i) no formal education [   ] (ii) Informal

   literacy [   ] (iii) Primary/ JSS [   ] (iv) Secondary   school [   ] (v) post

   secondary/ Tertiary[   ]

6. Marital status (i) Married [   ]   (ii) single [   ]   (iii) divorced   [   ] (iv)

   separated [   ]

7. If married, please do you live in the same house with your husband?

   (i) Yes [ ] (ii) No[   ]

8. What is the size of your household?

   (a) Number of children living with biological mother………….

   (b) Number of children living elsewhere ……………………

   (c) Number of dependents other than your own children living in the

   household………

9. Give the number of your children of school-going age……………………

10. How many of your children of school-going age are in school?

     (i)   all [ ]   (ii) some [ ]   (iii) none [ ]

11. Why have you been or not been able to look after your children in school

    within the last 3 years

    (i) ability …………………….....………………………

(ii) inability…………………………………………………………………

12. What is your household's staple food……………………………………

13. How do you assess changes in your household food consumption compared with three years ago.

	Assessment of change		
	Decrease	Same	Increase
Number of meals a day			
Quantity of food			
Quality of food			

14. Indicate the proportion of your current income that is consumed

(i) ≤ 20% {1/5} [ ] (ii) 20 – 40 % {2/5} [ ] (iii) 40 – 60 % {3/5) [ ]

(iv) 60 – 80 % {4/5} [   ]   (v) ≥ 80% {5/5}   [   ]

15. Indicate the proportion of your income that goes into savings.

(i) ≤ 20% {1/5} [ ]   (ii) 20 – 40 % {2/5} [ ]   (iii) 40 – 60 % {3/5) [ ]

(iv) 60 – 80 % {4/5} [ ]   (v) ≥ 80% {5/5} [ ]

16. Indicate on average how much income your household earn from the sources below

Income source	Average earning per month/year
Major economic activity	
Complementary economic activities (if any)	
Dividends	
Total	

17. On average what is your household's total expenditure per day/week/month/year. ¢………

18. On average what is your household's total savings per day/week/month/year. ¢………

19. Give assessment of your current income compared with 3 years ago.

    (i) decreased [ ]   (ii) same [ ]   (iii) increased [ ]

20. Give assessment of the proportion of your current contribution to your household expenditure as compared to 3 years ago.

    (i) decreased [ ]   (ii) same [ ]   (iii) increased [ ]

21. Give assessment of your current level of savings compared with 3 years ago.

    (i) decreased [ ]   (ii) same [ ]   (iii) increased [ ]

22. Who is solely responsible for providing of the following needs of your family?

Need provider	Health needs		Nutritional needs		Children educational needs	
	Before intervention	Within the last 3 years	Before intervention	Within the last 3 years	Before intervention	Within the last 3 years
Self						
Spouse/ husband						
Both spouses						
Own relatives						
Husband's relatives						
Child/ children						
Others,(spe cify)						

23. Indicate specifically who is responsible for school fees……………………

24. Has there been any change in the provision of your family's needs compared with 3 years ago?

Change	Health needs	Nutritional needs	Children educational needs
Worse			
The same			
Better			

25. What could be the possible reason(s) for the observed change in your family's needs provision?

Change in health needs	Change in nutritional needs	Change in children educational needs

Section II: Economic and Production Activities

26. What is your main occupation/work…………………………………….

27. Which of the following areas best describe your main occupational activity? Production [ ]   (b) Processing [ ]   (c)Marketing [ ]

28. Do you employ the services of laborers in carrying out your economic activities?

193

(i) Yes [ ]   (ii) No [ ]

29. Give reason(s) for your response…………………………………….

……………………………………………………………………………

……………………………………………………………………….

30. Indicate the major source of labour that you engage (i) Family labour [ ]
(ii) Hired labour [ ] (iii) Cooperative/reciprocal labour service [ ] (iv)
Others [ ]

31. Indicate the change in type of technology you use in your economic
production

(i) Worse [ ]   (ii) the same [ ]   (iii) better [ ]

32. Provide any possible reason(s) for the observed change in technology
above…………………………………………………………………….

33. What has been the change in your ability to obtain input materials for your
economic production over the last 3 years? (i) Worse [ ]   (ii) the same [
]   (iii) better [ ]

34. What changes have taken place in your activities now as compared with 3
years ago?

Item	Worse	The same	Better
Current nature of marketing			
Access to credit			
Ability to repay credit/loan			

Economic production/output level			
Income			
Savings			

35. Have you receive any kind of credit before? (i) Yes [ ]   (ii) No [ ]

36. Source of credit.. ………………………………………….

37. Have you pay back the credit you obtained? (i) Yes [ ]   (ii) No [ ]

38. If yes, how much? (i) some [   ] (ii) principal amount only [   ] (iii)

    principal amount and interest charged [ ]

39. Indicate the interest rate charged on the credit you took ………………

40. What has caused these changes in your level of living? ………………….

41. What have caused the changes in your ability to repay loan/credit?

 …………………………………………………………………………

Section III: Empowerment

42. Indicate who the head of your household is. (i) self [ ] (ii) husband [ ]

    (iii) son [ ] (iv) daughter [ ] (v) others (specify) …………………..

43. What is the sex of the household head? (i) Male [ ] (ii) Female [ ]

44. Do you have a say in decision-making that affect your household?

     (i) Yes [ ] (ii) No [ ]

45. Indicate any change in your involvement in decisions that affect your

    household compared with 3 years ago. (i) decrease [ ] (ii) same [ ] (iii)

    increase [ ]

46. What reason(s) may have account for such change?……………………….

…………………………………………………………………………

…………………………………………………………………………

…………………………………………………………………………..

47. Indicate the extent of your involvement in decision-making in your household with reference to the table below.

Decision-making on:	Self only 4 (very much)	Self and husband 3 (much)	Self and children 2 (little)	Self and relatives 1 (very little)	Husband only 0 (no involvement)	Others (specify) ………… 0 (no involvement)
Domestic						

needs						
Children's education						
Income generating activities						
Spending personal income						
Spending household income						

48. Indicate any changes in your time use compared with 3 years ago?

Time-spent activity	Observed change		
	Decreased	Same	Increased
Domestic chores			
Child care			
Economic activities			
Recreational activities			
Sleeping			

Section IV: Level of Living

49. Which of the following is the major source of your household's drinking water (i) surface water (river, dug outs, streams etc.) {1} [ ] (ii) well water {2} [ ]   (iii) bole hole water {3} [ ] (iv) pipe water {4} [ ]

50. Indicate the kind of toilet facility that your household members use as place of convenience. (i) bush {1} [ ] (ii) community owned (pit latrine/KVIP/water closet) {2} [ ] (iii) household owned (pit latrine/ KVIP) {3} [ ] (iv) household owned water closet {4} [ ]

51. Indicate the main materials used in construction of your house/compound.

  (a) Materials for the walls (i) cement [ ] (ii) burnt bricks [ ] (iii) lancrete [ ]   (iv) mud/earth [ ] (v) others (specify)……………..

  (b) Materials for roofing (i) cement/concrete [ ] (ii) iron/alluminium [ ] (iii) asbestos [ ] (iv) thatch [ ]

  (c) Materials for floor (i) cement [ ] (ii) terrazzo [ ] (iii) mud/earth [ ] (iv) others (specify)…………………..

52. What is the source of energy for cooking in your household?

  (i)   fire wood [ ] (ii) charcoal [ ] (iii) kerosene [ ] (iv) gas/electricity [ ]

53. Indicate how you acquire the type of energy you use for cooking in your household. (i) purchase [ ] (ii) freely collected [ ] (iii) others………….

54. Give reason(s) for using the energy source for cooking other than the rest…………………………………………………………………

198

55. List any material possession of your household………………………

End of Schedule; Again, I Thank You!