

IMPACT ASSESSMENT OF GDCP MICROFINANCE SERVICES ON LIVELIHOOD IN THE SAVELUGU / NANTONG DISTRICT OF NORTHERN REGION, GHANA

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Abstract

The study investigated the impact of the microcredit scheme of Ghanaian-Danish Community Development Programme (GDCP) on the socio-economic livelihood of beneficiaries in the Savelugu / Nantong district. Information was solicited from both primary and secondary sources. Primary data was sourced from the microcredit beneficiaries through a field survey. Secondary data was obtained from the Ghana Statistical Service (Ghana Living Standard Survey- GLSS 4) and from the reports of GDCP. The study used the “control group” approach to assess the impact of the microcredit on beneficiaries. The study suggests that increased net revenue is more likely to occur with programme participation than without. The likely impacts on clients of microfinance services can be financial and non-financial. The financial impact of microfinance services is that it increases client productivity, output, incomes, and asset ownership and helps clients accumulate savings. The non-financial impact of service provided by microfinance institutions include knowledge and skills training and women empowerment.

Keywords: Impact, microcredit, control group, Livelihood, women empowerment

INTRODUCTION

This paper discusses some of the emerging evidence of the impact and effectiveness of microfinance institutions on their clients with specific focus on poverty alleviation and wealth creation. The spectacular growth by the microfinance industry has been fueled by deliberate actions of national governments, non-governmental organizations and donors who view microfinance as an effective tool for alleviation of poverty. This view, in turn, is based on the assumption that poor households have worthy projects that could potentially raise their living standards but that do not come to fruition because of severe financial constraints, among other factors.

Several studies have attempted to evaluate the impact and effectiveness of participation in credit programs using different indicators. Those studies basically used multi-period data to compare household or individual-level outcomes over time between those that have access to credit and those that do not, in respect of the chosen indicators. In a series of studies, Mosley and Hulme (1998) use a “difference in difference” approach, using as the control group households that have not yet borrowed but that are scheduled to begin borrowing. Additionally, the studies by Diagne and Zeller (2001) and Kochar (1997) collected information on lender characteristics in order to identify the impact relationship. Other studies (for example, Berger 1989) and Goetz and Sen Gupta (1996) analysed loan processes and/or loan use in detail to infer possible impact.

In a number of studies, the impact of microfinance on clients is a proxy for effectiveness of the microfinance institutions delivering the services. Common indicator variables for measuring impacts and effectiveness of microfinance services are productivity, income, and asset ownership of beneficiaries, food security and nutritional status, gender accessibility to credit, microfinance sustainability, client savings potential and health and educational status of beneficiary families. The Ghana Living Standard Survey (GLSS) with its focus on the household as a key social and economic unit, provides valuable insights to living conditions in Ghana. The GLSS uses the following indicators as yardsticks for measuring living condition (welfare): health, education, employment, housing, agricultural activities, the operation of non-farm establishment, remittances, savings, credits and asset ownership. However, since it will be cumbersome measuring each and every indicator, this study focuses on some of these indicators

IMPACT ASSESSMENT

Impact on Productivity, Income and Asset Ownership

A study undertaken by Pitt and Khandker (1996, 1998) using data from eighty-seven (87) villages in Bangladesh in 1991 – 92, estimated the marginal impact of credit on a number of welfare indicators. The study showed that household income (proxied by total household expenditure) increased by eighteen (18) taka for every hundred taka lent to a woman. Pitt and Khandker also found positive net impacts of credit programs on both human and physical assets. In the case of non-land assets, they found substantial increase when borrowing was by women but not men. When labour supply was considered, women's labour supply was only somewhat affected, but men tended to take more leisure. Zeller et al (2001) applied Morduch's framework to household data from five (5) programs and two (2) control villages in Bangladesh. Their results indicate a positive impact of loans on monthly total consumption expenditures (a good proxy for income). Similarly, McNelly and Dunford (1998) found in their evaluation of freedom from hunger's 'credit with education' program in Ghana that, over the period of program implementation (1993-96), the increase in net non-farm monthly income for participant women was twice as high as that for both non-participants and the control group.

Mosley and Hulme (1998) estimated the impact of thirteen(13) microfinance intermediaries in seven (7) developing countries. The study found that, for each of the intermediaries, the impact of lending on the recipient household's income tended to increase and asset position improved. They were quick to point out that the impact frontier varies with the institutional design of the intermediaries. The frontier of "well designed" schemes is well above that of "ill designed" schemes.

Regarding the impact of micro credit on asset ownership, the GLSS uses ownership of various assets and consumer durables such as furniture, electrical appliances, bicycles, etc to measure welfare across the country. This study considers assets acquired by beneficiaries with earnings from microfinance activity profit. All such assets were converted to monetary value, based on the prevailing market prices.

Impact on Food Security

Several studies have attempted to measure the effect of participation in microfinance programs on food security and nutritionally status. Zeller and Sharman (1998) reported that, in many countries, the poor spend as much as 91% of their income on food. Furthermore, most loans, especially in the informal sector, are for the purpose of financing consumption-related expenditures. However, when the effect of program participation on food security and nutrition was measured, the results were mixed. Positive effects on household caloric availability were

found in studies conducted in Bangladesh, China and Madagascar (Zeller and Sharman, 1998). On the other hand, studies in Malawi (Diagne and Zeller, 2001) and Cameroon (Schrieder 1996) did not indicate a significant impact. Pitt and Khandker (1996) also examined the effect of program participation on seasonality in consumption and found that the largest consumption effect of credit occurs in the hungry season of Aus, just before the crops are harvested. They also found that households with low consumption in the Aus seasons are more likely to participate in credit programs. McNelly and Dunford (1998) found that in Ghana the nutritional status of participants' one year-old children had significantly improved between 1993 and 1996 relative to the children of non-participants. However, the extent to which these differences can be attributed to improved access to microfinance is not clear from the results reported.

Gender Based Impact Assessment

More than half the poor citizens of heavily indebted developing countries are women (Cagatay 2001). Cagatay observes 'Gender-based power relations mean that women experience poverty differently and more forcefully than men do' and 'women are more vulnerable to chronic poverty because of gender inequalities in the distribution of income, as well as gender biases in labour markets' (Cagatay 2001). Because women make up such a significant number of poor people, if national governments are to reduce poverty, they must address women's poverty by empowering women through gender sensitive policies. Gender is used so pervasively in targeting in both Africa and Asia. Gender-based differences in impact are echoed in a number of studies. Hashemi, Schuler, and Riley (1996) report that the Grameen Bank and BRAC in Bangladesh had positive effects on eight (8) different dimensions of women's empowerment, including contraceptive usage. Osmani (1998) also observed improvement in the bargaining position of women in Bangladesh because of their access to microfinance. Schreder (1996) presents evidence from Cameroon that giving credit to women results in resources and profits being ploughed back for purposes of business expansion intended to develop the immediate household. This leads to better protection of the health and safety of household members – particularly the more vulnerable household members such as women and children, Pallen (1997). In spite of the positive role of microfinance on gender and women empowerment, its effects cannot always be taken for granted. Osmani (1998) for example, points out that, because of women's low absorptive capacity (limited ability to use larger amount of credit in the prevailing cultural conditions and in the absence of economic opportunities), many women are likely to lean on their husbands to make better use of the loans. Goetz and Sen Gupta (1996) provide some evidence of this even though 94 per cent of Grameen Banks borrowers are female, only 37 per cent of them are able to exercise control over loan use. Khandker (1998)

findings are similar: only 3 percent of the borrower women out of the 150 he surveyed used money on their own, the others simply gave it to their husbands or other male relatives. Nonetheless, Goetz and Sen Gupta (1996) note; the mere fact that resources now flow through women may accord some power to them.

The Gender and Development network of the UK makes the following recommendations to the various stake holders involved in Poverty Reduction Strategy Paper (PRSP) processes around the world as a way of empowering women:

- Analysis on which a PRSP is based must fully demonstrate the gender dimensions of poverty – highlighting the embedded gender biases in macro-economic and structural policies.
- PRSPs should be based on a multidimensional view of poverty, better integrating the non-economic dimensions of poverty such as Vulnerability, Powerlessness and voicelessness.
- All stakeholders within the PRSP process need to ensure that gender is mainstreamed within their own institutions to an extent that International Financial Institutions (IFIs) should consider whether a PRSP treats poverty as a gendered phenomenon and seeks to tackle the gender dimensions of it.
- Capacity building support on gendered poverty analysis and gendered policy solution should be put in place by most national government ministries, especially, ministries of finance and planning which generally lead PRSP processes. Ministries of gender/women need capacity support to develop their economic analysis and advocacy skills, in order to influence PRSP processes to fully mainstream gender.
- Women and women's groups should be given specific help to overcome traditional and institutional barriers and become more involved in policy making and implementation.

Impact on Health and education Status of beneficiaries

Using data from eighty-seven (87) villages in Bangladesh in 1991-1992, Pit and Khandker (1996,1998) found mixed results when measuring the Impact of the credit programmes on education. The education of boys increased irrespective of whether the borrower was male or female, but the education of girls increased only when women borrow from the GrameenBank. Indeed, studies undertaken by Quisumbing et al (1995) found women control of resources important in achieving positive welfare outcomes for children and their families in food, nutrition, education and health.

Education (School Attendance)

This measures two aspects of formal schooling.

1. Current school attendance of people who are more likely to be in school at all the levels of educational ladder in Ghana, and
2. Educational attainment in Ghana for all adults.

According to Taabzuing (1997) school attendance rate is the percentage of population within the school going age (6-25 years) that is enrolled in school or has completed Basic or Senior Secondary education and awaiting results. It is expected that a household with high rate of school attendance, all factors held constant, has a relatively better (or potentially better) standard of living than a household with lower rate of school attendance. Therefore, higher education depicts higher living standards and for that reason, positive impact.

Health

The GLSS uses health conditions of all sampled household members as a proxy for living standard. Data on general health situation of all household members within the two weeks preceding the interview was collected. Information was also gathered on preventive health care. This study seeks to collect information on expenditure incurred by each sample households on medical care within the last two weeks preceding the interview. It is expected that household which are capable of seeking medical consultation and perhaps purchase medicine during the previous two weeks enjoy better living than those who resort to self-medication. Additionally, lower frequency of visits to health centers are to high level of nutrition among clients and dependants is an indication of higher standard of living.

Impact on client savings

Due to the vicious cycle of poverty in most developing countries, savings potential of the rural folks is woefully inadequate to finance investment in new technology. As a result, other sources of capital are necessary to facilitate changes in technology and modernization of agriculture. In this regard, financial services delivery is seen to be appropriate for lifting agriculture to greater heights, Von Pischke(1996). Singh and Roman (1981) observed from empirical findings that financial services play a crucial role in small farmers' adoption of new technology. Credit is very vital for diversification of crops.

In financial terms, savings are defined as the net changes in equity between periods. This definition includes changes in monetary and non-monetary assets, such as food, jewellery and other consumption and production durables. Savings and investment in human capital such

as education and improved health status of family members are also crucial. Such savings and investment not only increase available human capital and income in the current period but could also have a beneficial effect on human capital and income available in future periods. Savings with micro credit institutions are particularly demanded by farmers who earn lumpy and risky incomes from crop production and livestock sales. Such savings are equally important for the poorest of the poor, who rely largely on their own savings, on informal credits, and on their luck in the labour market to avoid food shortages and hunger, Wright, Hossain, and Rutherford, (1997).

Grameen bank experience shows that micro credit has been effective in improving the livelihood of the low-income households, Hossain and Diaz, (1997). Increased access of women to productive resources helps empower them and contribute significantly to increase income and secure households with food and nutrition (Bhandari, 2001).

Yunus, the founder of Grameen banking system sees micro credit as a fundamental human right. According to him everyone has the right to borrow to improve their lot is only the loan conditions would be satisfied (Yunus, 1987).

This study measures impact of microfinance services in relation to living standards of beneficiaries in particular.

RESEARCH METHODOLOGY

Data Sources

Data was solicited from both primary and secondary sources. Primary data was obtained from GDCP micro credit beneficiaries within the catchment area through a structured questionnaire. Secondary data was obtained from staff of GDCP in the study area.

Sampling

First and foremost a reconnaissance survey of the area of study was undertaken. Loan officials of GDCP in the study area were interviewed. Request was made for a list of districts and villages covered by the micro credit scheme following an evaluation of a local community credit needs. Simple random sampling was used to select sample of micro credit beneficiaries of GDCP. In all, one hundred (140) GDCP microfinance beneficiaries were interviewed. To really examine whether participation in a microfinance programme leads to improvements in socio-economic welfare of beneficiaries households, a control group of sixty (60) non-micro credit clients were interviewed.

Comparison

Simple t-test was used to test for differences in socio-economic welfare between microfinance beneficiaries of GDCP and that of non-microcredit clients.

Hypotheses

Given that H_0 is the null hypothesis and H_1 is the alternative hypothesis, the following hypotheses have been tested.

Impact of Financial Services

H_0 : There is no difference between the living standard of clients of GDCP and non-micro credit clients.

H_1 : There is a higher living standard for clients of GDCP than non-micro credit clients.

Education (School Attendance)

H_0 : there is no difference between the average school attendance rate of the dependents of the clients of GDCP and that of the dependents of non-micro credit clients.

H_1 : the average school attendance rate for the dependents of the clients of GDCP is higher than that of the dependents of non-micro credit clients.

Health

H_0 : There is no difference between the fortnightly expenditure on health care of dependents of clients of GDCP and that of the dependents of non-micro credit clients.

H_1 : The fortnightly expenditure on health care of dependents of GDCP clients is higher than that of the dependents of non-micro credit Clients.

Assets Ownership

H_0 : There is no difference between the asset ownership of the clients of GDCP and that of non-micro credit clients.

H_1 : There is higher asset ownership among clients of GDCP than that of non-micro credit clients.

ANALYSIS & DISCUSSION

Socio-economic Impact of GDCP Microfinance Services on Beneficiaries

Identification of programme impact involves making a case that participation in the programme has led to the possible differences between clients and non-client respondents on key impact indicators. The main objective of this assessment is to determine the impact of GDCP microfinance programme on clients, their enterprises and perhaps their households.

For the purpose of this study, the key indicators for assessing impact of microfinance services on beneficiaries as already mentioned are health status of microfinance beneficiaries, level of school enrolment among beneficiary households and ownership of various assets and consumer durables.

Findings and discussions

The assessment found that participation in GDCP microfinance programme had led to clients spending more on inputs than did non-clients. The participation has empowered clients who are mainly women to gain more control over financial resources thereby increasing their productivity levels.

Results of mean monthly productivity levels of beneficiaries and members of the control group

Table 1 demonstrates the mean productivity levels of the beneficiaries of the programme as compare with that of the control groups. Mean monthly outputs of beneficiaries of GDCP microfinance services as well as non-clients are used as proxy for mean productivity levels. The table shows that micro entrepreneurs who have not received any form of assistance from any intervention programme recorded a mean monthly income of GHC25 (table 1).

However with microfinance programmes, a mean monthly income of GHC110 (table 1) was realized. Since the difference between the mean monthly incomes of clients and non-client groups are statistically significant, the results are unlikely to be due to chance. These differences can be linked with the participation in microfinance programmes. The results do not however mean that the changes always occur among clients, but that they are more likely to occur with participation in microcredit programme.

Table 1: Mean monthly output levels of GDCP clients and control group

Variable	GDCP Clients	GDCP Control Group	t-Statistics
Value of mean monthly output	GHC110	GHC25	2.912

Results of programme participation on health, education and asset ownership status of microfinance beneficiaries

From table 2, GDCP clients spent more money per household member in seeking professional medical care monthly than non-clients. This suggests that GDCP clients had higher expenditures on health than non-clients. It is possible that the non-client could resort to self-medication and other forms of un-professional methods of treatment due to their low level of incomes.

On education, GDCP clients recorded a higher mean school enrolment rate over the period than non-clients (table 2). This is perhaps due to the intensive education on women and girl child education embarked upon by GDCP. Besides, GDCP has over the years built a number of basic schools in its catchment areas to attract children of school going age. Also, ability to meet the basic needs of school children is apparently higher among GDCP clients than their non-client counterparts. That is, Microfinance clients were more capable of meeting higher school fees from their profits than non-clients.

The GLSS 4(2000) recorded a school attendance rate of 49% for the Northern Region. This is higher than the observed results for the study area which stands at 41%. The reason could be that larger cities in the north such as Tamale, Damongo, Salagaetc might have recorded higher school attendants rate than the 49% thereby increasing the northern average. Given the national average of school attendance rate (58%), more needs to be done to encourage school enrolment in the north. It is sad to note that before GDCP launched the crusade on girl child education in the catchment area, the school attendance rate in the Savelugu/Nantong district was as low as 37.6% on average with girl child enrolment recording 34.7% between 1990 and 2005 (Abukari 2009).

On asset ownership, GDCP clients recorded a mean value of GHC2050 as opposed to GHC 981 for non-clients. The higher mean value on asset ownership of GDCP clients may be positively correlated to their mean productivity levels. Thus, higher productivity may translate itself to higher profits and thereby higher asset accumulation. The type of assets acquired by both GDCP clients and non-clients included consumer durables such as: jewelry, clothing, cooking utensils, animals, and bicycles for children.

Even though comparison between microfinance clients and non-clients is based on unequal sample size, the use of mean values of the variables makes such comparisons statistically acceptable. The comparison of indicators of well-being between clients and non-clients is shown in table 2 below:

Table 2 Comparison of Indicators of Well-being between Microfinance Clients and Non-Clients (Control Group).

Variables	Microfinance Clients (GDGP)	Non-Clients (GDGP)	t-Statistic
Mean monthly expenditure on health	GHC112	GHC 59	3.108
Mean percentage of school enrolment	47.2%	38%	2.817
Mean value of asset ownership	GHC2050	GHC 981	4.011

Other observed positive impacts resulting from the microfinance programmes include expansion of enterprises with its associated benefits of economic of large-scale, product and market diversifications leading to spread of risk and above all clients acquiring skills and knowledge in addition to increased habit of savings.

CONCLUSION

An important aspect of poverty reduction strategies is the emergence of microfinance institutions. In order to reduce poverty in the Northern region in particular, Ghanaian – Danish Community Development Programme (GDGP) has for the past two decades embarked on poverty alleviation, through which several deprived communities have gained access to microfinance at reasonable rate of interest and without collateral security. By the close of 2012, GDGP had reached out to over 32,100 microfinance clients including small holder farmers spread over one hundred and eight (108) communities.

The study suggests that increased net revenue is more likely to occur with programme participation than without. The likely impacts on clients of microfinance services can be financial and non-financial. The financial impact of microfinance services is that it increases client productivity, output, incomes, asset ownership and helps clients accumulate savings. The non-financial impact of service provided by microfinance institutions include knowledge and skills training and women empowerment.

LIMITATIONS

Geographically, the study was limited to the Savelugu/Nantong district out of about thirty six (36) districts in the northern Region of Ghana, therefore the findings cannot be applicable to the generality of Shea nut operators in either the region or country. Resource constraint was a huge factor militating against a broader scope of study. The high rate of illiteracy in the study area also imposed some challenges in data collection. In some cases, women sought permission to consult their husbands before responding to questions. Nonetheless, the study adds to existing body of literature in the Shea nut industry.

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