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The Impact of Microfinance in Rural Households in the Western Region of Ghana

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Abstract

In spite of the growth of microfinance programs by both governmental and non-governmental organizations currently going on in the rural areas of Ghana, there has been little attempt to assess the impact of microfinance at the rural household level. The aim of the study was to evaluate the impact of microfinance on households of women living in the rural communities of Western Region of Ghana. Specifically, the impact assessment was based on the effect of microfinance on: the accumulation of basic household assets such as radio and furniture, female autonomy which can be referred to as female empowerment, and the number of children women have. Data were collected from 384 rural households in the Western Region of Ghana. Using t-test and multiple regression analysis, it was found that microfinance participation increases female autonomy, increases number of household possessions and not contribute directly to reduced family size. The study recommends the continuation and expansion of the provision of microfinance to the women in the Region as it will facilitate the development in the lives of the village women as well as their households.

Keywords: Ghana; Women; Microfinance participation; Female Autonomy; rural household.

1. Introduction

There is a growing debate as to how best to intervene to alleviate global poverty. This has resulted in the introduction of a number of anti-poverty policies and programs in the developing world in the last three decades one group of these interventions are microfinance schemes [1, 2].

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According to [3], “micro finance refers to small scale financial services for both credits and deposits that are provided to people who farm or fish or herd; operate small or micro enterprise where goods are produced, recycled, repaired or traded; provide services; work for wages or commissions; gain income from renting out small amount of land, vehicles, draft animals, or machinery and tools; to other individuals and local groups in the developing countries in both rural and urban areas”. Microfinance has emerged as a growing industry to provide financial services to very poor people. The term microfinance in principle relates to the lending of very small loans to poor people in order to establish a means of alleviating poverty by given the poor the opportunity to begin a business or to improve an existing business [4]. This is often considered an important route to development and improved wellbeing particularly for women and is considered to lead to increased autonomy and to fertility reduction. This form of giving loans has been in existence for some time; however it was in 1970’s that Mohammed Yunus which according to [5] formalized it in Bangladesh. He used this formalized form of lending to provide financial resources to poor women in Bangladesh through the Grameen Bank to combat poverty. His effort was recognized by the international community and was subsequently rewarded with Nobel Peace Prize in the 2006.

History has it that before microfinance came into prominence there existed some form of informal lending mechanisms used in various part of the world. The most common example in Africa is the rotating savings and credit associations (ROSCAs) [6]. This is a ‘pooled saving’ method which demands that each member of the association belongs to a social circle in order to be well known and trusted, before allowed to participate. The mode of operation ROSCAs is such that each participant contributes a specific amount every month into a fund. The total amount is then given to one member chosen at random at the end of the first year and another member the following year and then year after year until each member receives his or her turn. In addition to ROSCAs there have existed informal lending institutions such as moneylenders providing credit the poor on very strict terms.

Until recently, microfinance institutions in Africa and the developing world in particular focused primary on providing micro credit for micro enterprises. Now, however, there is recognition that poor people need a variety of financial services, not just credit. Microfinance has now become a household term in the field of development and has achieved positive results from trials around the world [7]. These outcomes have often been measured in terms of outreach of microfinance activities and repayment rates. However, using loan recovery or repayment as a measure of success of microfinance programs can be misleading in the sense that although participants are able to repay loans given to them it does not necessarily mean their income has increased. According to [8], this method of accessing the impact of microfinance programs is problematic because microfinance institutions apply at times different forms of pressure, such as social and group pressure to sustain high repayment rate. In addition participants have to find every possible means to pay loans given them in order to enable them receive future loans. One of the benefits of microfinance as declared by the Microcredit Summit is that microfinance encourages savings and helps the poor accumulate assets. Access to microfinance is expected to help the poor to increase their household incomes, acquire basic household assets and to minimize their vulnerability to crisis. These expected advantages should enable the poor to access healthcare, overcome vulnerability and also meet other financial requirements [9]. Therefore accessing the impact of microfinance using repayment rates will not indicates whether or not the poor has benefited from microfinance. This study uses quantitative and qualitative methods to accesses the impact of microfinance programs on rural women in Ghana.

The study focused on rural women because they form the bulk of the poor communities in Ghana and are often venerable to many risks. When substantial income is given to women it is invested in health, education and housing which contributes in creating an additional demand for goods and services and hence economic development is fostered [10]. It is a consequence of this development that microfinance has been associated with a move to smaller family sizes.

The main aim of this study is to assess how microfinance activities have benefited the rural poor women in Ghana at the family/household level and whether or not microfinance participation has led to their empowerment. Specifically, the objectives of this study are to find out whether or not participation in microfinance programs affect; building of household assets, the number of children clients have and female empowerment.

2. Background

Microfinance, according to [11], is “the provision of financial services to low-income poor and very poor self-employed people”. These financial services according to [12] generally include savings and credit but can also include other financial services such as insurance and payment services. According to [13], microfinance can be defined as “the attempt to improve access to small deposits and small loans for poor households neglected by banks.” Therefore, microfinance involves the provision of financial services such as savings, loans and insurance to poor people living in both urban and rural setting, Mohammed Yunus, according to [5] used the microfinance model to disproved the conventional wisdom of the 1970s and showed that with new lending strategies, the rural poor who were otherwise excluded from the formal banking system because of lack of collateral can repay loans on time. He also demonstrated that the poor can in fact be a target group for innovative banking services that are profitable and sustainable. As a result of the work done by him current microfinance has a made a drastic shift from subsidized microfinance programs of the past which at most serve a few people, to the development of sustainable financial institutions specialized in serving the poor.

Microfinance activities around the world have shown that microfinance has the potential of reducing poverty and contributing to the general wellbeing of the poor, especially by empowering poor women [14,15].

However, irrespective of the potential of microfinance in alleviating poverty globally, there have only been a small number of rigorous studies which access the actual impact of microfinance in alleviating poverty and empowering the poor. Knowledge about the achievements of microfinance initiatives remains only partial and is contested [16].

A research by [17] , using longitudinal data obtained from survey work in Bangladesh which was first carried out in 1991/1992 and then repeated in 1998/1999 found that microfinance participation impacted positively on household income and food consumption. His work was one of the early systematic studies on the impact assessment of microfinance. He used the three major microfinance institutions in Bangladesh (Grameen Bank; Bangladesh the Rural Advancement Committee, BRAC; and the Bangladesh Rural Development Board’s

(BRDB) RD-12 programme). He concluded that microfinance makes a significant difference to the poor by increasing per capital income and household food consumption in the participating household. Similarly, [18] , using the same data found out that participation in microfinance programs help the poor to have enough cash throughout the year to reduce the effect of economic shocks and the yearly hungry season. They also found that credits given to women have higher relative impacts than loans given to men. The results of the study were consistent with the view that women's participation in micro-programs helps to increase female empowerment. The study concludes that the participation of women in credit programs lead to women taking a greater role in household decision making.

Following these studies [19], showed that participation in microcredit schemes impacted positively on income, production and employment in the rural areas where farming is not the main source of employment. Similarly, [20], who studied group- based financial institutions for the rural poor in Bangladesh and presented evidence that credit access has a significant and strong effect on the income generation and food. According to this study every unit of currency of credit access creates an additional 37 units of currency of annual household income for the participants. They also found that the quality and quantity of food consumed by clients as well as, health of household members and the education of the children of the participants improved. On social attitudes and capital, they found an improvement especially in the areas of intra-household decision making. Also using data from Bangladesh [21] and [22] found that women affiliated to micro finance schemes tended to practice contraception more and have smaller families than those who were not affiliated.

According to [23], in his paper examining microfinance and poverty, which he used a selection of microfinance institutions in Bolivia, to access the impact of microfinance, indicated that microfinance makes a substantial contribution to poverty reduction through its impact on income of participants and also by impacting positively on asset level of participants. He also stated that the mechanism through which this reduction in poverty works varies between institutions, with institutions that on the average give smaller loans reducing poverty significantly by lifting the poor above the poverty line, whereas institutions who give larger loans on the average reduce poverty significantly more by expanding the demand for labour among the poor population. He further stated that across the institutions involved in his case-studies participants (borrowers) have higher levels of education and higher expenditure on health than non-participants which may be an indication of some form of benefit from the loans they received.

The results of a research in 36 villages Bangladesh conducted by [24] indicated that membership in BRAC impact positively on women's decision making role, control over resources and mobility. They also indicated that participants felt that being a member of credit programs is important from the standpoint of minimizing their likelihood of being deserted by their husband. In addition, [25], found that participants in her sample of women in credit programs felt that their status had improved within the household due to the fact their families now see them as income earners via access to credit. She stated that the women conceptualized their status improvement by indicating that they were actively participating in household decision-making and had authority over household income especially the portion of the household income which was directly derived from their own income.

According to [26], on his study on two microfinance institutions in Ghana and South Africa concluded that participation led to an improvement in the living conditions of the participants. He also indicated that participation in microfinance led to an increase in incomes of clients and enhancement in self-esteem.

However, [27] questions the optimism of microfinance suggesting these are too superficial to cause fundamental change in socioeconomic conditions. A research by [28], using the same data as [16] and [17], but using different analysis techniques, established that the estimates assigned as evidence of impact of microfinance by previous researchers were nonexistent or very small. He found no increase in income and household consumption but a slight increase in employment [29], also found mixed evidence as to the effectiveness of micro credit in contributing to improved development and [21] found that micro credit affiliation was not a factor which contributed to lowering infant mortality amongst the poor in rural Bangladesh. [30] found that many microfinance programs advocate that members have to practice family planning thus resulting in shift in attitudes which can be restrictive. Reference [31] stated that microfinance programs create underemployment in the communities where they operate. References [32] and [33] indicated that microfinance services have not been successful in reducing inequalities and smoothing hierarchies in gender. Also [34] indicated that microfinance participation leads to multiple debts which result in over-debtedness. This has also been observed by [7]. They have commented that many microfinance programs are not fashioned to suit the actual needs of the users.

3. Data Collection

Data were collected by interviewing 384 randomly selected women from different households face-to-face from nine villages in the Western Region of Ghana with the use of structured questionnaires. Women who are engaged in some form of business activity were interviewed from selected household in each of the villages.

The selected villages were categorized as; farming, fishing or mining community. The villages were selected on the basis of the representativeness of the region, accessibility and access to local contacts and supports.

Each of the selected women were given a structured interview by an interviewer, either by the lead researcher or by some locally recruited assistants who had been trained by the lead researcher and spoke the local dialect and helped the research gain access to women in the communities.

The answers were recorded onto questionnaires by the interviewer and then entered by the lead researcher in to SPSS (Statistical Package for the Social Sciences) for analysis.

In addition eighteen focus group discussions were held in the study. In each of the selected village two separate focus group discussions were held separately with users and non-users of microfinance. Each group was made up of 4 women and each discussion lasted for an hour. The outcome of the focus group discussions gave some insights into appropriate variables and revealed some unanticipated issues.

From the data gathered in the interviews three variables were constructed, these were; possession Index, housing Index and female autonomy score. The Possession index was created from the summation of assets held in the household i.e. if they owned a television, furniture, watch/clock, machine, motorcycle, radio, refrigerator, telephone and bicycle the possession of each asset was scored a one if the item was possessed and these were then summed. The housing index was created from the summation of variables to make roof, wall and floor materials. Each of these variables was scored on how modern the material was. For example a house with a cement floor, mud wall and bamboo roof received a score of 4 + 2 +1 = 7. The female autonomy score was created by computing the principal component of frequency of decision making about the following variables: raising children including their education, health, family size, family finances and buying of household materials. Each of these was on a five point scale from never to always. This component accounted for 71% of the original variation.

The variables used in the study are summarised in Table 1

Table 1: Variables Used

Variable	Description
Demographic	
Age	Age of respondents
Number of Children	Number of Children a respondent has
Educational Level	Respondent's highest level of education
Microfinance Participation	Whether a respondent participates in microfinance or not
Socio Economic	
Possession Index	Household assets accumulation
Housing Index	Quality of respondent's house
Female Autonomy score	Decision-making ability

4. Discussion of Results

In Table 2 summary statistics of the three communities are presented.

From Table 2 it is observed that the farming community has on average women of younger age, with more children than those of the other communities. It is also observed that the measures of economic wellbeing (housing and possession index) are much higher for the mining and the fishing communities than the farming community. To explore these further variations in number of children, the indices to measure economic well-being and female autonomy score are analyzed at the community level. In Table 3 the results of t tests on the comparisons of the means of these variables of those who participate in microfinance and those who do not are presented

Table 2: Variable summary for participants of microfinance by communities

Community	Age	Number of Children	Housing Index	Possession Index	Female autonomy Score	Microfinance Participation
Mining	42	3.2	8.660	4.480	0.659	80.0
Fishing	38	2.9	7.480	3.860	0.298	78.0
Farming	35	3.9	6.580	1.820	-0.957	32.8

Table 3: Differences in mean levels of key variables for each community with micro finance participation.

Differences in Means (microfinance participants – non microfinance participants)

Number of Children	-0.875*	-0.711	-0.545
Household index	-0.675	-0.200	1.424**
Possession Index	2.350***	0.520	1.424***
Female Autonomy Score	1.646***	0.965***	0.545**

* significant at the 10% level
** significant at the 5% level
*** significant at the 1% level

It is clear that within the communities that the levels of female autonomy are significantly associated with microfinance participation. Also the tendency with regard to the possession index is that there is more ownership amongst those who participate in microfinance. The number of children is not closely related to microfinance participation. However, the general trend is that those who participate have fewer children.

Clearly the direction of causality is important between micro finance participation and economic wellbeing and female autonomy. Women might well take part in microfinance because they are more independent decision makers or being better off economically might simulate involvement in microfinance. However, if one assumes that the stated purpose of the microfinance schemes is to increase possession holding and increase female autonomy then the effect of microfinance on these can be determined while controlling for the community effect and education level by applying least squares regression.

The three OLS models were of the form:

$$Y_i = \alpha + \beta_1 Microfinance\ Participation + \beta_2 Age + \beta_3 \Pr imary\ Education + \\ \beta_4 Junior\ or\ beyond\ \ Education + \beta_5 Mining + \beta_6 Fishing + \beta_7 House\ Index + \varepsilon$$

Where i = 1 = Female autonomy score, i = 2 = Possession index and i = 3 = number of children and all independent variables, except age and house index are dummies.

The results of the regression models formed are displayed in the table 4 below

Table 4: Regression models results

	Female Autonomy Score			**Possession Index**			**Number of Children**		
Variable	**Coefficient**	**Std. Error**	**P value**	**Coefficient**	**Std. Error**	**P value**	**Coefficient**	**Std. Error**	**P value**
(Constant)	-1.448	0.309	<0.001	0.138	0.731	0.850	-0.027	0.564	0.962
Microfinance Participation	1.120	0.124	<0.001	1.431	0.294	0.000	-0.195	0.226	0.391
Age	0.006	0.006	0.338	0.031	0.014	0.027	0.108	0.011	<0.001
Primary education	0.149	0.124	0.230	0.300	0.2 93	0.307	-0.303	0.226	0.183
Junior education or beyond	0.165	0.062	0.009	0.289	0.148	0.053	-0.178	0.114	0.121
Mining	0.791	0.160	<0.001	1.406	0.379	0.000	-1.496	0.292	<0.001
Fishing	0.475	0.147	0.001	0.963	0.347	0.006	-1.298	0.268	<0.001
Housing Index	0.009	0.030	0.751	0.035	0.070	0.613	0.052	0.054	0.341
Adjusted R^2	0.665	0.579	<0.001	0.461	1.370	<0.001	0.500	1.056	<0.001

From Table 4 it is clear that microfinance participation is significantly positively associated with female autonomy and possession index. Interestingly housing index is not significant for any of the dependent variables. Result from OLS models do not show a significant association between number of children and microfinance participation, the results indicate that it is not significant with regards to microfinance participation

5. Conclusion and Recommendation

Participation in microfinance programme in the rural communities in the Western Region appears to have positive impacts on clients, especially rural women who are mostly poor and would not have had access to credit but for microfinance. Results from the statistical analysis suggest that participants or users of microfinance have higher possession and housing index which is the measure of accumulated household assets than non-participants. Also, results from the statistical analysis suggest that participation in microfinance has no effect on the number of children. Female autonomy also seems to be positively influenced by microfinance participation**.** The results of the linear multiple regression analysis and the interview conducted support the hypothesis that participation in microfinance increases economic wellbeing and female autonomy. This finding is in line with the findings of a similar research conducted in the Eastern Region of Ghana which among the findings indicated that microfinance participation increases the economic wellbeing and female autonomy of rural women [35]. A consequence of microfinance promoting female autonomy and the accumulation of possession may well lead to reduced family size and long term development. But the reduction in the number of children is not a direct one and the findings in this paper do not support the literature such as [36] which found that microfinance directly acted to reduce family size.

From this study it is recommended that there should be continuation and expansion of the provision of microfinance to rural women in the Western Region and all the rural communities in Ghana as it will facilitate development in the rural households. Also, economic well-being as well as female autonomy is promoted by participation in these schemes. However, to ensure these benefits are realised the schemes must be carefully regulated to control interest rates and prevent undue pressure to repay.

6. Limitations of the study

This study only assessed the impact of microfinance on: the accumulation of basic household assets, female autonomy, and the number of children participants have. In the future, other researchers could also look at how microfinance has affected the lives of rural women economically with regards to capital accumulation and the ability to repay loans collected. Also, the scope of the study could be extended to cover more villages in the Western Region.

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