ASSESSING THE IMPACT OF MICROFINANCE ON GARI PROCESSING IN NORTHERN REGION: A THEORY OF HOUSEHOLDS IN THE WEST GONJA DISTRICT

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Abstract

Cassava processing plays significant roles in reducing the poverty levels of women through job provision and increase in income levels. Available evidence shows that little research has been done particularly on assessing the impact of microfinance on gari processing focusing on a single approach. Cognizant of the various methodologies of impact assessment, this particular study used eight indicators to assess the impact of microfinance on households engaged in gari processing. Data were obtained from a random sample of 124 household respondents and 4 microfinance institutions. Empirical findings indicate that microfinance increases income levels of participants and thus their ability to acquire productive assets, save, expand and diversify production. The implication is that they have improved on their basic needs. However, participants indicate high interest rates on loans, lack of grace period on loans collected, lack of access to market information and poor processing equipment as the major setbacks. It is recommended that interest rates on loans should be reviewed so that more people can have access to loans to help them expand their production levels so as to escape the vicious cycle of poverty.

Key words: Cassava, micro finance, impact assessment, women and household.

1.0 Introduction

With the advent of microfinance program, there is hope for rural dwellers who see it as an opportunity to be part of the credit system in order to expand their capacities for growth and escape the vicious circle of poverty. Gari processing is one area that is attracting the attention of many microfinance institutions. The reason is that it holds the best prospects for growth and thus a great potential of lifting poor women out of poverty due to better returns resulting from value addition. Microfinance is the practice of providing financial services (loans, savings, insurance, etc) to people who live in extreme poverty and may not have access to traditional banking services. The Micro credit Summit Campaign Report (2000) indicates that more than 82.5 percent of microfinance clients are female, and this is because they are regarded as more trust worthy than males. Some scholars of impact assessment studies have neglected important component of households' variables and naively based their assessment or yardstick on savings and income mobilization alone. This paper attempts to fill this gap by providing information using eight indicators. The paper is divided into three sections. The first section looks at the background studies. The second is on empirical studies, and the last section is on findings of the study.

1.1 Background studies

Different approaches to assessing the impact of microfinance have been developed according to the objectives the evaluation tries to serve. The need for an impact assessment is that it offers the opportunity to review, reflect and analyse the experiences, achievements or successes and failures for decision-making purpose. Rossi and Freeman (1989) documented that;

'Establishing impact essentially is making a case that the program led to the observed or stated changes. This means that the changes are more likely to occur with program participation than without program participation. It does not imply that the changes always occur from program participation. Rather, it increases the probability that the changes will occur'.

Among the different methods are those developed under the AIMS and Imp-Act programs. The tools and indicators developed under AIMS used to undertake a cross-national study on the impact of microfinance embraced both economic and non-economic dimensions of the well-being of poor people in India, Peru and Zimbabwe at the household, enterprise and individual levels. Chen and Dunn (1996) indicate that using a Household Economic Portfolio Model (HEPM) seeks to assess impacts at household, enterprise, individual and community levels and thus produce a fuller picture of the overall impacts. It does have the profound disadvantage 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 (Hulme, 1997).

Mayoux (1997), Goetz and Sen Gupta (1996), Schuler and Hashemi (1994) and Hashemi et al (1995) also assessed impacts using non-economic/social indicator variables such as educational status, access to health services, nutritional levels, contraceptive use, etc. These social indicators became popular in the early 1980s and have recently been extended into the socio-political arena in an attempt to assess whether microfinance can promote empowerment.

1.2 Problem statement

In recent times, there has been an upsurge in the provision of microfinance services to micro entrepreneurs, especially those from poor households and Self Help Groups. To appreciate development and empowerment of marginalised women in the decision making process, their real disposable income needs to increase on continuous basis through productive and profitable investments. This suggests that their investments will have to be financed either through own savings/equity or credit. Previous studies by Sanzidur (2003) and Adesina et al (1996) show that access to credit increases farm efficiency and profit.

The extent to which the advantages of microfinance are achieved by any project cannot be determined unless an impact assessment is carried out with much attention. The little empirical evidence on this important subject serves as a hindrance for any meaningful policy intervention on microfinance.

In the context of microfinance, it is worthwhile to assess its role in income diversification, stabilization and consumption smoothing, and whether it promotes self-insurance through savings mobilization and wealth accumulation. The critical research questions that need answers are: *what are the socio- economic and demographic characteristic of gari processors? How much is loaned to gari processors? Have microfinance programs helped gari processors gain more control over their resources and improve the household welfare? And what is the level of satisfaction of the beneficiaries?*

The priority of the research was to assess the impact of microfinance with the view of providing policy recommendation for microfinance institutions and perhaps donors. The purpose of the assessment was to identify the socio-economic features of gari processors, provide information on the amount of loans given to clients, examine whether participation in a microfinance programme leads to improvement in the socio-economic welfare of households, and also present information on clients level of satisfaction.

Khandker (2003), for instance, indicates that 90% of the microfinance program participants in Bangladesh in the 1991/92 survey and 70% in the 1998/99 survey are poor. Montgomery (2005) found that 70% of microfinance clients of the Khushhali Bank in Pakistan are poor. This justifies the need to carry out this particular study in order to enable donors/microfinance institutions draw strategic

management information to better orient themselves to either sustain their programs or quit. Secondly, it is to inform donors or microfinance institutions to know if their resources are being used for the intended objective in order to evaluate the social return on their investment.

This paper assesses the impact of microfinance on gari processing using a household theory (considering income, assets, expenditure, livelihood, etc) in the West Gonja District of Northern Region. Goetz and Gupta (1995) and Peace et al (1994) pointed out that assessing the impact of microfinance is to assess the impact at an individual/household level because it is relatively rare. Bliss (1993) expressed that individuals are better able to evaluate small changes in their well-being directly related to their current status. The assessment centres on clients of Bonzali Rural Bank, Damongo Cooperative Credit Union, Manteso Friends of the Earth Center and Susu groups.

1.3 Methodology

The most effective approach was Participatory Rural Appraisal approach which involved the combination of several methods and techniques. Purposive and simple random samplings, case studies, quasi-experiment (this seeks to compare the outcomes of the intervention with a situation of what the outcomes would have been, had there been no intervention) and control group method (it involved a before and after comparison of a population that received a specific loan (clients) and an identical population (non-clients) that did not receive the loan in the past four years) were used.

Data was obtained from 128 respondents. Specifically, quantitative data was collected on demographic features such as age of the respondent, residential status, household size, years of education, years of experience in gari processing and other household characteristics viz household income, assets, returns, loans and interest rates. Data was also obtained on the number of contacts made to microfinance institutions and duration for loan repayment. Other significant areas that data collection covered were on the changes emerging from program participation (by examining purchases and involvement in political participation) and the level of clients' satisfaction (looking at savings mobilization and valued skills acquired).
The impact assessment is based largely but not exclusively on a quantitative approach hence data was analysed with the use of SPSS computer software. The statistical presentations include mean values and measures of dispersion.

SECTION 2: EMPIRICAL STUDIES

2.1 Cassava in the economy

Cassava is one of the most important root crops in the tropics and subtropics ranking the fifth in the world production. It is food for more than 800 million people, (FAO, 1998), and more than 200,000 people mostly Senior High students, eat gari daily especially during the night after preps. Cassava is widely grown in Cote D'Ivoire, Ghana, Nigeria, Tanzania, Uganda, Zaire and many parts of Latin America. In Ghana, for instance, it is cultivated in 8 out of 10 regions. According to ISSER (2000), output per hectare of cassava has increased from 7.1 million metric tonnes in 1998 to 10.2 million metric tonnes in 2002. The per capita consumption index of cassava is 148 kg/yr and contributes about 19.16% to agricultural GDP (MOFA, 1990). Also, in Nigeria for instance, outputs of cassava is about 39 million metric tonnes and this is because cassava production has moved from subsistence food need production to commercial, industrial and export production (Adeniji, 2006). This implies improvement in food security via reduction in post-harvest losses and thus increased income or household purchasing power in order to meet vital services such as health and education of their children.

Besides gari, cassava is also used for the extraction of starch for bio-fuel. In fact, the consumption of starch in the industrialized countries has been increasing in recent times due to its uses in the cosmetic, confectionary and pharmaceutical industries. For example, China, Thailand and Vietnam are a few countries making tremendous imports of starch.

2.1 Uses of loans

Goetz and Sen Gupta found considerable differences in terms of the control of loans by female clients.

Whereas the decision to acquire loans maybe influenced by the need to acquire new stocks and pay wages, Goldberg (2005) studies in Bangladesh suggest that loans are used for business expansion, managing risk and volatility. Husain (1998), carried out an evaluation of 500 clients and found that 80% of the average loan went to "productive investments" such as livestock, petty trade, land purchases, etc. Of the remaining 20%, about half went to consumption and half went to paying off existing loans and mortgages. He added that over 45% of clients studied used loans to cope with income variations caused by personal crises and crop losses. Also, Coleman (1999) noted that in some villages of Bangladesh two-thirds of the clients regularly borrow from a moneylender to repay their village bank loans.

By this assertion, it is vital for clients to have some capacity building training for proper management of loan facilities in order to strengthen their business growth. Strong training components have a higher probability of success, particularly as far as women micro-entrepreneurs are concerned, Berger (1995).

2.2 Assessment indicators

Assessing the impact of microfinance on household income, expenditure, assests and livelihoods are undoubtedly important part of impact assessment. According to Barnes (1996) assets are useful indicators of impact because their levels do not fluctuate as highly as other economic indicators and is not simply based on an annual estimate. In addition, (Sherraden 1991) and Sebstal et al (2000)) indicate that data on expenditure or assets are good proxy indicators for income and wealth levels of households. Gaile (1997) argued that improving the credibility, utility and cost effectiveness of simple approaches was where the greatest gains in impact assessment could be realised. By this assertion, the author developed the following measurable domains/indicators for assessment

1. The family lives in a comfortable house with a zinc roof, and each member of the family is able to sleep in a bed instead of the floor or mat.
2. Family members have potable drinking water by acquiring decent water containers and filters.
3. All children in the family of school going age are attending school with neat school uniforms, bags and adequate learning materials such as mathematical set, books, pens, pencils etc.
4. Family members have adequate and neat clothing for every day use, and sleep under a treated mosquito net to protect them from being bitten by a female anopheles mosquito carrying the malaria parasite.
5. The family has additional sources of income, such as animal rearing, back yard gardens and any venture that can generate income for family use in the event of liquidation of first business.
6. The clients maintain an average annual balance of at least GH¢ 150 in their savings Accounts.
7. No member of the family goes hungry any time of the year, has kwashiorkor or symptoms of kwashiorkor and eventually dies of malnutrition.
8. The family can take care of its health needs by at least paying a premium of GH¢ 7.20 under the National Health Insurance Scheme.

SECTION 3: RESULTS

3.1 Socio-economic and demographic features

Gari processing is biased towards women (over 95%) with the average age of 42. The finding is similar to previous studies by (Gloria, 1998) that 92% of operators engaged in traditional processing of food stuffs are young and energetic women. They have attained a minimum of Junior High education and have average of 13 years of experience in the industry. The results show that fifty-three percent of respondents are female household heads taking care of 7 people averagely in their homes. This implies that their basic needs such as health, food and shelter largely emanates from the industry.

The results further indicate that the respondents have made at least two visits in the last four years to Bonzali Rural Bank (55%), MAFEC (Manteso Friends of the Earth Centre-local NGO) 27%, credit union 10% and Susu groups 8% for an average loan of GH¢ 321.87. They explained that the loans were used to expand and diversify production. The findings also reveal that the respondents made an average net

profit of GH¢347.87 after joining the scheme compared to GH¢ 45.50 (control group). The profits are a clear indication that the industry can propel development of the individual and the society at large because they are able to save and invest. The average number of employees is 2 and is either from the family or hired because the work is laborious. The results show that a minimum of GH¢ 2 is paid as wages for hired labour while GH¢ 0.20 is paid as tax on a basin of gari sold.

Table 1: Means of variables used in the analysis

Variables	Measuring unit	Mean	Minimum	Maximum	Standard deviation
Age of respondent	Years	42	19	80	10.75
Experience	Years	13	2	40	10.72
Education level	Years of schooling	7	3	20	3.57
Household	Number of size	7	4	15	3.42
Labour	Number of employees	2	1	6	1.68
visits to MFI	Number/times	2	1	4	0.98
Loan (capital)	Ghana cedi	321.87	200	500	101.76
Tax	Ghana cedi/basin	0.36	0.20	0.50	0.13
Wage rate	Ghana cedi/day	2.62	2	4	0.72
Sales	Ghana cedi/'alonka' bowl	1.12	0.80	1.50	0.21
Home consumption	'Alonka' bowl	22	4	80	20.09
Net Profit*	Ghana cedi	45.50	25	125	16.03
Net Profit**	Ghana cedi	347.87	20	965	270.41

Source: Field survey, 2008. *, ** represent profits obtained before and after joining microfinance scheme in the last four years respectively.

3.2 Program participation impacts

From Table 2 below; the findings show that clients spend on durable assets (e.g. purchase land, bicycles, fridges, etc) as a store of wealth that can be divested or liquidated to meet an unexpected financial need. The respondents indicate that it has increased their level of participation in decision-making process as they determine and purchase the household needs. Besides, some are in to active politics as their level of political participation has improved. For instance, 1 out of the 4 Assemblywomen used her proceeds to campaign for power, while 9 who are Unit committee members also said that they used part of their money for their electoral process.

The results further indicate that (67%) of households are pursuing a risk reduction strategy by diversifying some of their resources in order to decrease their chance of a loss from structural factors, like price fluctuations and the vagaries of the weather which could affect supplies of raw materials and thus increased inflow of income from different income sources.

Table 2: Impact Assessment of microfinance programmes Clients vs. Non-clients

Variables	Household	
	Clients/ participants (%)	Non-Clients/ Control group (%)
Acquired productive assets	79	41
Increased household income	72	58
Increased number of employees	75	25
Increased in savings	68	32
Increased in expenditure	57	43
Diversification of resources	67	33

Source: Field survey, 2008

The evidence gathered shows that beneficiaries have increased their household income by seventy-two percent. It also shows that beneficiaries use part of income to pay a premium of GH¢ 50.4 for the health needs of their households under the National Health Insurance Scheme (91%), acquired treated mosquito nets (74%), containers for harvesting water (93%), mattresses (47%). Furthermore, respondents have average stock worth GH¢ 124. These include; poultry, animals, cereals, tubers and some appreciable amount of vegetables. The findings correspond to conclusions reached by Pitt (2003), Khandker (2005), Coleman (1999) and MkNelly et al (1998) that microfinance programmes have significant positive effect on participants' consumption.

3.3 Level of satisfaction

With respect to program satisfaction, they cited the acquisition of valued skills and knowledge in savings. A respondent expressed her savings behaviour in relation to what the Holy Bible (Proverbs Chapter 6: 6-8) teaches about the essence of savings.

'The ant gathers food in small bits and stores it during the dry season as preparation for the rainy season'. I watch the way the ants behave and I appreciate their value for savings. By and large, I mobilise and use scarce productive resources efficiently and save some like money into my saving account for the future when I may be feeble and can no longer work to earn a living'. (Mariam Al hassan)

Although, microfinance is available to women micro entrepreneurs the respondents explained that high interest rates on loans which range between 23 and 28 percent, lack of grace period on loans collected, time wasted attending 'un necessary' meetings, lack of access to market information and lack of improved quality processing equipment were some of the challenges they still faced.

Conclusion and Recommendations

The evidence shows that women are better off with microfinance than without it and this justifies the decision of many programs to recruit them and to develop products that suit their needs. The study reveals that participants have increased their assets base, acquired knowledge in savings and improved skills in production diversification. However, clients indicate they pay high interest rates on loans (23 and 28 percent), have no grace period on loans collected, lack quality processing equipment and have no access to market information.

It is recommended that interest rates on loans should be reviewed by microfinance institutions operation in the study area to attract more willing-beneficiaries. Also, clients should be spared some time before paying back loans. Ideally, they should start paying loans some two to three months after loans are granted to them. Finally, appropriate technology should be developed perhaps by the Technology Consultancy Center, Kumasi to help reduce production cost and increase the quality and volume of gari processed to increase income levels.

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