Access to Microfinance by Rural Households: Evidence from a Village Study in Sri Lanka

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ABSTRACT

This study was carried out in Dambulla Divisional Secretary Division (DSD) with the objective of analyzing the determinants of access to microfinance by rural households. Three villages from three Grama Niladari Divisions (GNDs) were selected for the survey. 120 households were selected randomly as 40 households from each village. To analyze the ability of rural households to access microfinance a logit regression model was estimated. The study found that more than 60 per cent of households were not able to access microfinance in the area. Logit regression analysis revealed that the annual income of head of the household, distance to closest microfinance Institution (MFI), availability of collaterals, level of education and the ownership of an enterprise were the statistically significant variables affecting access to MF. To overcome these constraints priority has been placed for the development of basic physical infrastructure in order to facilitate their access to microfinance. In addition, there should be a suitable extension mechanism to take out the negative attitudes from peoples' mind on borrowing from formal sources of finance.

KEYWORDS: Microfinance, Logit model, Regression analysis, Accessibility, Intermediation

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1 INTRODUCTION

Access to microfinance and microfinance inclusion are very close and interrelated scenarios. Access to microfinance means providing an environment in which people in general have access to formal microfinance service and, through that to the use of different financial products at affordable prices. Microfinance inclusion means the process of facilitating those sectors and segments of the population that are outside, to become a part of the formal microfinance system and enrolling individuals or groups into the formal microfinance sector (Jayamaha, 2008). Microfinance is offer a variety of small-scale financial products including credits, savings, insurance and business development services (Remenyi, 2002). MFIs engage in a variety of small-scale financial products and business development services to poor stratum of the society. Whereas the exact definition of microfinance varies from country to country, Asian Development Bank-ADB (2000) defines microfinance as "the provision of a broad range of financial services such as deposits, loans, payment services, money transfers, and insurance to poor, low-income households and their micro-enterprises".

Over the past three decades, MFIs have adopted innovative ways of providing MF services to small entrepreneurs, especially in developing countries. Two main approaches on the role of microfinance intermediation in poverty reduction can be identified (Remenyi, 2002). In terms of the first approach that is portrayed as the Minimalist Approach, the MFIs offer only financial services in the form of credit. These MFIs are unwilling to provide non-financial services due to multiple reasons ranging from high administrative costs to high transaction costs. In that sense, the primary focus of these MFIs is institutional profit disregarding the social and poverty alleviation dimension of microfinance. On the other hand, MFIs that follow Credit-Plus Approach provide other services in addition to credit. These non-financial services may include skill development, training, educational activities, marketing assistance, some other social services such as organizing festivals and collective

social activities, supply of inputs and business development services. According to them, the provision of credit alone will not guarantee that the recipients of credit use scarce capital in productive manner ensuring the recovery of loans. These services that include mainly the services that would assist households in developing their businesses are provided with, or prior to, the provision of key financial services, namely credit facilities. These services are increasingly being recognized as an important component of microfinance intermediation as they are associated with the viability and sustainability of the enterprise, and socio-economic empowerment of clients. Moreover, it is believed that the viability and sustainability of enterprises will in turn ensure financial viability and sustainability of the relevant MFIs.

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Morduch and Haley (2002), argue that microfinance has proven to be an effective and powerful tool for poverty reduction. Like many other development tools, however, it has insufficiently penetrated the poorer strata of society. The poorest form the huge majority of those without access to primary health care and basic education; similarly, they are the majority of those without access to microfinance. Therefore, microfinance is an appropriate tool by which to reach the millennium goals. Robinson (2001) state that, "among the economically active poor of the developing world, there is strong demand for small-scale commercial financial services - for both credit and savings. Where available, financial services help low income people to improve household and enterprise management, increase productivity, smooth income flows and consumption cost, enlarge and diversify their micro business and increase income" (p.5). Otero and Rhyne (1994), Holcombe (1995), Remenyi (1991), Schuler et.al. (1997) also confirmed that microfinance brings about immense socioeconomic benefits including income generation ability and vulnerability reduction of clients. Remenyi (1997) points out that microfinance is increasingly recognized as an effective instrument for poverty reduction. However, some of the researchers have argued that the poorest of the poor (the hardcore poor) are excluded from microfinance programs (Daley-Harris and Zimmerman, 2009; Banerjee et al. 2009; Pronyk et al. 2007; Ahmed et al. 2006;

¹ Business development services includes technical assistance and services such as training on business and financial management, accounts/book keeping.

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Matin and Hulme, 2003; Hashiemi, 2001). Other researchers, Oommen (2008); Buckley (1997); Wood and Shariff (1997); and Adams and von Pischke (1992) stated that there are no considerable positive impacts by microfinance interventions but negative impacts. Between these two extremes, Fernandez (2005); Mosley and Hulme (1998); Hulme and Mosley (1996) pointed out that even though microfinance interventions have several beneficial effects on poverty they do not help the poor, as is so often claimed.

With the objective of helping low-income earners, Sri Lanka has introduced a series of poverty-reduction oriented microfinance programs. These include Regional Rural Development Bank, Cooperative Rural Bank, Sanasa Development Bank, Samurdhi Development Bank and Commercial Banks under the specific schemes, aimed at providing access to credit for poor people at affordable interest rates. In addition to the government, non-governmental organizations (NGOs) and some social institutions are also working in the sector. However, the achievements have been inadequate; especially in terms of reaching the households for whom the programs were designed. This is mainly because these programs include terms and conditions that are not favourable to poor in rural areas. Among these unfavorable conditions are the collateral requirements from the institutions that made the loan beyond the reach of the poor (Colombage et al., 2008). Other problems associated with the programs are lack of program planning, clear-cut policy directives, appropriate training and coordination among banks and line agencies.

People in rural areas prefer microfinance services due to special characteristics of microfinance schemes such as easy access, efficient and simplified procedures in obtaining loans. Microfinance plays a significant role in financial intermediation by introducing a number of different services and thereby reducing the risks on repayments and costs of lending to poor households. However in many developing countries, access to financial services is highly limited due to a number of institutional weaknesses and other reasons which would be constraints in economic development. Limited access to financial services disproportionately affects the poor, and people living in rural areas. Therefore, microfinance could play a major role in accomplishing the demand for financial services by the poor which remains largely

unmet. It is generally accepted that small-scale entities play a significant role in development; they supply and market many of the row materials and agriculture products. Those small businesses are said to be in need of more credit, more training, more technology, more raw materials and more markets. Microfinance could also be a possible solution for such issues (Chang, 2010).

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Studies of microfinance in Sri Lanka show the same divergence of opinion as those above. In the recent years, poor women have been particularly empowered by microcredit, as it gives them ability to earn an income and thus improve their bargaining positions vis-q-vis their male partners (Gunathilake and de Silva, 2010). Premaratne (2009) has discloses that the accessibility of microfinance depends on factors such as the level of household income. distance to MFI, availability of information technology, interest rate, level of education, vocational training, and collateral availability. De Mel et al. (2008) have found that returns to capital were not profitable among female-owned microenterprises but economically viable for male-owned enterprises. While Colombage (2004) has found that even though microfinance interventions have several benefits on poor households, variables such as lack of entrepreneurial skills, small size of loans, investing in low value added activities, limited product diversification, and poor physical infrastructure adversely affect their enterprise development. Tilakaratne et al. (2005) found that micro-credit enabled households to improve their income, assets and housing conditions. The degree of the impact was found to diverge across different income groups: while the middle and higher income quintiles increased their level of income, for the poorest households, the impact of micro-credit was mainly on consumption driven. On the contrary, de Silva (2006) found slight impact of participation in microfinance on the income earning capacity of households. However, household per capita savings were found to be significantly higher for participants of microfinance programs than for observationally identical non-participants. Therefore, many studies show that the overall impact of microfinance was certainly pro-poor.

From the studies reviewed above we can conclude that although many of them show that microfinance has had a positive impact on poverty reduction, there is debate about the level

of impact on poverty, and about whether microfinance is reaching the poor households. Therefore, it is immensely important to explore the discourse on accessibility of microfinance services to rural households and determinants of accessibility in current neo-liberal market economy system.

Using using three Grama Niladhari Divisions (GNDs) as case study in Sri Lanka, this paper, will attempt to contribute to this debate by examining the following objectives:

- To identify the characteristics of the existing MFIs in the study area.
- To analyze the determinants of access to microfinance and causes for limited access to microfinance services.

This paper contains five sections. Section one presents the introduction and objectives of the study. Section two examines conceptual framework and review of literature, focusing on microfinance accessibility. Section three provides a description of the research methodology employed. Section four provides the results of the regression model and descriptive analysis on determinants of access to microfinance services. The last section presents conclusions and policy implications.

2 REVIEW OF LITERATURE

Financial intermediaries are classified as formal, semi-formal and informal (Sanderatne 2002). In market economics, the function of financial intermediation is performed by commercial banks and the capital markets. More widespread financial intermediation, as well as increasing depth and variety, is hallmark of advancing development. But in many developing countries, capital markets are still at an elementary stage, and commercial banks are unwilling to lend to the poor largely because of the lack of collateral and high transaction costs. Financial transactions may involve individuals, non-financial businesses, financial institutions, governments or different combinations of these (Warren F. Lee et al., 1980). In Sri Lanka commercial banks, development banks, NGOs and regional development banks are included in financial institutions. Although there is a role for financial institutions, in Sri

Lanka most of the microfinance activities are undertaken by non-formal banking sectors and NGOs. The most serious weakness of the institutional credit program is the lack of a village level organization which could lend on the basis of farmers' credit worthiness, supervise the use of funds for the intended purposes and, ensure the recovery of funds (Sanderatne, 2002). Cooperatives which could be one mechanism in this regard are poorly staffed, accused of corruption and have not shown an ability to supervise the lent funds. Consequently, credit intended for farmers has been used for other purposes and high rates of default continue to be a serious problem of institutional credit scheme (ibid, 2002). On the other hand, commercial banks do not have the institutional capacity to reach small farmers and manage risk in agricultural lending and lending for rural households. Commercial banks normally serve a very limited agricultural clientele. In many cases, a satisfactory rate of disbursement is due to loans being granted to large borrowers (Orlando and Bikki, 1995).

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Primary aim of credit is to achieve a temporary redistribution of purchasing power from those who have money but do not intend to use it to those who need money but have none. As the storage of capital is the major problem faced by rural households in developing their enterprises, the widespread and the effective use of money is essential. Credit is important and necessary in nearly all commercial farm business. It is a unique resource, since it provides the opportunity to use the additional inputs and capital items now and to pay the cost from the future earnings. So the potential to improve net farm income should be one of the determining factors in the decision of whether to use credit (Levine et al., 2000). The main objective of the provision credit is the strengthening of the economy of low income people that will generate high income for them. It was found that too often poverty involves fundamental structural barriers that limit the access to productive assets, markets and wages. Similarly, the poor had practically less access to credit from either the banking or co-operative system.

Households who running small scale enterprises always have facing difficulties in obtaining credit from the regulated formal financial system, due to the lack of a sound accounting system, their inability to provide sufficient collateral and a lack of expertise in capital planning (Harper, 1984). Assessments of credit merit give much importance to

employment status, security of income, occupation and a history of financial stability. Rural communities are experiencing literacy or numeracy difficulties. Poor written and spoken language limits people's ability to access credit (Harper, 1984). As a result of these, most people in disadvantaged sectors have difficulty in accessing conventional credit and therefore many use traditional forms of credit or non-commercial sources of credit. Deficiency of available information can potentially cause difficulties in accessing credit by rural communities. Priority has been placed on providing information to the people explaining the finance system, the nature of credit, the consequences of inability to pay, and other issues in community languages, whereas investigating the attitudes towards credit amongst them who have received little. Basic physical infrastructure is also a prerequisite for access to credit; especially for institutional credit. Lack of access to telecommunication facilities and transport also has an impact on accessing credit. Absence of quick and reliable loan processing mechanism leads to creation of negative attitudes in the minds of people on borrowing from formal sources of finance.

A distinct feature of rural credit policy adopted in Sri Lanka was the emphasis given to microfinance as a method of promoting self-employment among the unemployed. Microfinance is no different except that it deals with the credit market consist essentially of poor households that the formal banking sector has found it impossible to service (Remenyi, 2002). Microfinance enables poor to begin or expand micro businesses or other income generating opportunities and to accumulate their small savings safely. It is a means of providing finance in small quantities, at reasonable cost and conditions, which are both convenient and suitable for the businesses they undertake (Sanderatne, 2002). Remenyi (1997) pointed out that MFIs succeed where modern banks have failed because they have learned lessons such as how to accommodate collateral substitutes as an effective basis for client selection, how to use self-interest to manage risk and maintain high on-time recovering rates, how to minimize the cash cost of making small loans and collecting small savings, how to mobilize peer pressure and social background to enforce contractual obligations, and finally, how to segment the market so as to remain focused on the poor, yet target the well-motivated. On the basis of these lessons MFIs have learned that banking with the poor can be

profitable, but only if costs are contained, risks are managed and clients treated as active partners in the conduct of the business of the enterprise. However, a study by the International Fund for Agricultural Development (IFAD) has confirmed that complicated loan procedures and paper work, combined with a lack of accounting experiences limit poor households access to formal sources of credit.

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The microfinance theory describes the economic and social worth of a microfinance intermediation in terms of the depth, worth to users, cost to users, breadth, length, and scope of its output. Judgments of the performance of MFI have been based on the concepts of accessibility/outreach and financial viability (Yaron, 1994). Accessibility is the social value of the output of an MFI in terms of the depth, worth to users, cost to users, breadth, length, and scope (Schreiner, 1998). Accessibility/outreach is commonly proxied by sex or poverty of borrowers, size of the loan, the price and transaction costs born by users, the number of users, the financial and organizational strength of the lender, and the number of products offered, including deposits. Thus, outreach stands for the social and economic value of loans from a MFI.

Depth of outreach is the value that society attaches to the net gain from the use of microcredit by a given borrower (Schreiner, 2002). Deeper outreach usually increases not only social value but also social and economic cost. Worth of outreach to users is how much a borrower is willing to pay for a loan. Worth depends on the loan contract (amount) and on the willingness to accept, constraints, and opportunities of the user. Cost of outreach to users is the cost of a loan to borrower. Cost to users includes both price and transaction costs. Breadth of outreach is the number of users. Length of outreach is the time frame in which a MFI produces loans (Schreiner, 1998). Scope of outreach is the number of types of financial contracts offered by a MFI. In practices, the MFIs with the best outreach produce both loans and deposits. These six aspects of outreach are useful because direct measures of the social value of microfinance are expensive.

Consequently, it can be summarized that there are a number of reasons for the limited access of formal financial services, including microfinance by the poor. Lack of money

income to open savings accounts, not having collateral to secure a loan, no credit record or no permanent employment to be eligible for a personal credit line, lack of information on available services, myopic behavior, and inability to complete necessary paper work are very crucial among them. On the other hand, traditional Banking System is not designed to help those who do not already have finance records. In addition, a variety of reasons contribute for financial exclusion of the poor households. In remote, hilly and thinly populated areas with poor infrastructure, physical access itself acts as a restraint. From the demand side, lack of awareness, low income / assets, social exclusion, and illiteracy acts as barriers. From the supply side, distance from branch, excessive documentation and procedures, unsuitable products, language, and staff attitudes are common reasons for exclusion. All these result in higher transaction cost apart from procedural hazards. Hence, the poor usually access to informal money lenders without getting into the formal financial market.

This conceptual framework and factors affect to accessibility of microfinance services were attached to this study to analyze the determinants of accessibility of rural households. Accordingly, descriptive and econometrics analyses were done with respect to determinants of access to available microfinance services in the study area.

3 METHODOLOGY

The study was carried out in Dambulla DS division in Matale district which consists of 59 Grama Niladhari(GN) divisions. The extent of the study area is 456.3 square kilometers. The total number of households in the study area is about 17700. Dambulla area was selected because there is large proportion of households who are engaged in agriculture, self-employments and small industries. It is a rural agricultural and agri-commercial area with country's main centralized vegetable market but limited organized monetary services for agricultural producers and traders.

There are several MFIs operating in the area. Some of them are privately owned and some are government supported programs. SEEDS – founded in 1988 and the economic arm

of the Sarvodaya movement began in 1985. This was the first centrally managed, specialized microfinance NGO in Sri Lanka, and is today considered the largest NGO - managed microfinance program. Samurdhi Savings and Credit Scheme were established by the Ministry of Rural Development in 1996. This scheme intended to serve the rural community through village level task forces. They provided subsidized loans ranging from Rs. 2,500 to Rs. 10,000. Sanasa which is another MFI was established in 1995 to assist low income people providing services of savings and credit. Ceylinco Grameen is one of the privately owned MFI which practice the Grameen model in Bangladesh in 1975, targeting economically disempowered people. In addition to the above institutions, several other financial institutions have launched special microfinance schemes in the study area. Hatton National Bank introduced "GamiPubuduwa"-village awakening micro finance programme in 1989 to assist of income generating self-employment activity up to Rs. 1 Million with a maximum repayment period of 4 years. The Regional Development Bank offers microfinance in association basically with SEEDS. Recently, the Bank of Ceylon started to provide microfinance especially for agriculture through mid-country perennial crop development loan scheme and for non-agriculture through Nawa Mahajana Wega credit program. Co-operative Rural Banks started to provide credit and saving facilities for low income stratum in villages. Both credit and savings are small in this latter scheme. Several other MFIs sponsored by some other banks such as the Peoples' Bank, the Commercial bank and also by some NGOs are also operating in the area.

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The size of the sample of this study is 120 rural households which were randomly selected from three GN divisions with 40 households from each GN division. Questions regarding household information, employment patterns, income data, and accessibility of microfinance obtained during two years (2013 and 2014), and individual perceptions of existing MFIs were included in the questionnaire. Primary data were collected through household survey, focus group discussions and personal interviews.

This study investigate the factors affecting and their relationship to the accessibility of MF, we have used a logistic regression model. Accordingly, the regression model of the study

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stating that if a head of the household has accessed microfinance, Y=1 and otherwise Y=0. Thus, the model derived as follows;

$$Y = f(X_1, X_2, X_3, X_4, X_5, D_1, D_2)$$

Where, Y is the dependent variable.

TABLE 1: Variables Definitions for Regression Models

Variable	Definition
Y=1	When the household head has accessed microfinance and received a loan
Y = 0	When the household head has not accessed microfinance and have not received a loan).
X1 ·	Age of the household head in years
X2	Annual income of head of the household
X3	Distance to closest MFI (meters)
X4	Interest rate on lending (percentage)
X5	Level of education of household head (No. of years of schooling)
D1	Collateral availability: If the household head has enough collaterals for credit $D1 = 1$, otherwise $D1 = 0$
D2	Ownership of an enterprise: If the household head is an owner of a micro enterprise $D2 = 1$, otherwise $D2 = 0$

Logit Model:

$$\mathbf{Li} = \mathbf{In} \left[\frac{Pi}{1 - Pi} \right] = \beta_1 + \beta_2 \mathbf{Xi}$$

Where,

Pi = the probability of accessing microfinance, where Y = 1.

1 - Pi = the probability of not accessing microfinance, where Y = 0.

Thus, the estimated logit model is as follows;

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 D_1 + \beta_7 D_2 + U_1$$

Where, Ui is the stochastic error term.

4 RESULT AND DISCUSSION

In simple terms, access to microfinance means to provide an environment in which people in general, have accesses to the formal microfinance system, through the use of different financial products at affordable prices. The access could be to any formal MFI, market, and payment system or to a financial instrument, including savings, credit, and insurance services. Determinants of accessibility of rural households were analyzed in this study, and this section illustrates the findings of descriptive and the logistic regression analyses.

Access to Microfinance

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Results of the study show that 38% of rural households have accessed microfinance and 62% of them have not accessed microfinance. Consequently, the proportion of the rural households who have accessed to microfinance is low (Figure 1). Reasons/causes for limited accessed to available MFIs would be explained in following sections.

Monthly income level of the household head is crucial for accessibility of microfinance because to start a new project or restart the existing one with microfinance, higher current income level may be an extra advantage. Generally, households who have higher income are the more capable and advantage group relative to low income earners to access microfinance in this competitive market economy scenario.

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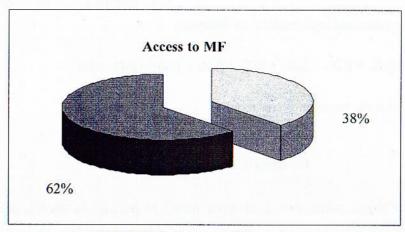


FIGURE 1: Access to MF services

The study results indicated that out of the respondents² who have accessed to microfinance, 47% is in the range of Rs. 5000.00 -10,000.00 monthly income level. Similarly, out of the respondents who have not accessed microfinance, 65% is in the range of Rs. 2000.00 - 5000.00 monthly income levels. Respondents who belong to the income categories of 10000.00 - 15000.00 and less than 15000.00 have less access to microfinance. It could be due to most of the MFIs focus on the people who are in low income categories because the objective of microfinance raising the level of income of the poor. This may be due to other constraints like their not having fixed assets to provide collateral, lack of information about available MFIs, myopic behavior of the poor, poor literacy and numeracy.

Microfinance Accessibility and Collaterals Availability

Table 2 illustrates that 52% of respondents who have accessed microfinance have adequate collateral and 13% of them have none. Further, 30% of recipients who have not accessed microfinance have inadequate or no collateral. In order to minimize the risk of loan defaults, fixed assets or a guarantee from a fixed income receiver is asked by some of MFI as collateral in lending. It may be the reason for obtaining the above results. According to recent

² Head of the household is the respondent in this analysis.

study by Ministry of Finance and Planning, Sri Lanka and GTZ (2008), confirmed that most common forms of collateral used in obtaining loans are personal and group guarantees. Further, the study revealed that group guarantees play an important role among the lower income groups.

TABLE 2: Access to Microfinance and the Level of Income of Head of the Household

Monthly Income (000')	Re	spondents
	Accessed	Not Accessed
2000-5000	22%	65%
5001-10000	47%	34%
10001-15000	18%	48%
<15000	10%	18%

TABLE 3: Ability to Provide Collateral

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	Adequate	Inadequate	None
Accessed	52%	35%	13%
Not Accessed	8%	62%	30%

Note: adequate means the head of the household has enough collateral to borrow a micro loan. Inadequate means available collaterals do not enough to have a loan, and "None" means that do not have any collateral to borrow a loan.

Except personal and group guarantees, land, building/property, jewelry, Vehicles/other durables, and savings are the other usable as collaterals to obtain a loan from available MFIs.

Microfinance Accessibility and Distance to MFI

Distance to the nearest location of MFI, reveals that, if the distance is shorter, accessibility to microfinance is high while the MFI is far from the household's residence, it mean that access to microfinance is difficult. The results show the households far away from the MFI have less access to microfinance (Table 3). When the distance to MFI is high the transaction cost to the borrower is higher. Therefore, those who reside far away from MFIs have lesser access to microfinance. This transaction cost includes not only in monetary terms

but also in social and family matters. Since some of these poor households are vulnerable in nature by socially, politically and economically, they are very lethargic to come forward and change the existing mode of production and traditional socio-economic system. Especially for women there are many restrictions to change the attitudes and traditional systems. If it is far away the existing MFI they reject the transaction with formal institutions and stay and continue with unorganized financial market.

TABLE 4: Access to Microfinance and the Distance to the Closet MFI

	<5 km	6-10km	11-15km	16-20km	>20km
Accessed	52%	35%	9%	4%	0
Not Accessed	22%	19%	40%	19%	0

Occupational Situation and Accessibility of Microfinance

When employment patterns and access to microfinance are considered the people who are permanent income receivers accessed microfinance is less (about 43%) frequently (Table 4). Mostly it is the people who are self-employed who accessed microfinance (about 57%). Since most of the MFIs provide financial services to the people for starting an enterprise or to develop their existing enterprises the above findings are not surprising. From the total number of respondents nearly 50% was engaged in their own business activities, whereas the rest (around 49%) were engaged in different types of occupations like salaried occupations, casual labour work and farming activities.

The households of villages selected for the study are transitional, moving from one to more enterprises. Therefore, larger population engaged in own business activities. However, most of these businesses are very small and suffering with lack of market facilities for their products.

The results show that larger proportion (29%) of respondents who were able to obtain microfinance is engaged in handicrafts (table 6). The fewer percentage of respondents who have obtained microfinance are engaged in agriculture related enterprises (6%). This may be

due to the reason that most MFIs reluctant to offer loans for agriculture related activities because of risk associated with them. Some of the government and private sector employers are working in both handicrafts and agricultural sectors during the weekends as self-employers. Similarly, some of the farmers are engaged in trading, food processing and inland fisheries for extra earnings.

TABLE 5: Client Occupation and Accessibility of Microfinance

Occupation	Number of Clients %
Government	28
Private	5
Own business	50
Casual labour	10
Own farm	7

TABLE 6: Distribution of Outreach

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Field of Outreach	Number o	of Clients (heads	of households) %
Handicrafts		29	
Transport	a a	23	mall/ of english
Trading		11	
Repairing		12	
Food Processing		13	
Agri/livestock		6	
Fisheries		6	

Level of Education and Accessibility of Microfinance

It is assumed that level of education of the head of the household is positively related with accessibility of microfinance. The general concern is that if a person has a good/high level of education it will affect positively for the economic development. According to the results, a larger proportion of respondents (75%) have obtained beyond primary education

accessed microfinance (Table 6). Further, larger proportions of respondents who have not obtained education or obtained only primary education have not accessed microfinance. It can be assumed that poor literacy and numeracy levels of rural communities cause lesser access to microfinance. This has also been confirmed by several recent studies that claim excessive documentation as one of key barriers to obtaining credit. Inability to understand application forms and lack of awareness of services provided are also barriers that are faced, to a large extent, by households in poorer income groups (Ministry of Finance and Planning, Sri Lanka and GTZ, 2008; Thilakarathne et al., 2005).

TABLE 7: Microfinance Accessibility and the Level of Education

Education Level	Respondents (%)	
	Accessed	Not Accessed
No education	5	11
Primary	25	42
O/L	46	28
A/L	19	18
Degree/Diploma	5	Establish Transfer

Age Distribution and Access to Microfinance

Table 7 shows that out of the respondents who have accessed to microfinance highest percentage (49%) belong to the age category of 25-40 years. They are the people who have greater need for financial services because most of them in that age group are not dependable on others and have more responsibilities on their families. Consequently, this is the group that should be address by MFIs attractively. The lowest percentage of that belongs to the age categories of less than 25 and more than 55 years.

TABLE 8: Age Distribution of with the Access to Microfinance

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	Respon	Respondents %	
Age Level (years)	Accessed	Not Accessed	
< 25	5	6	
25 – 40	49	43	
40 – 55	40	41	
> 55	6	12	

Available Sources of Microfinance and Interest Rates

According to the findings, highest percentage (35%) of respondents who have accessed microfinance has obtained microfinance from Ceylinco Grameen. Next highest percentage of respondents (17%) has obtained those services from Samurdhi Savings and Credit Scheme (Table 8). SEEDS and the Commercial Bank have provided microfinance services to the lowest fraction of those respondents. Ceylinco Grameen has adapted practically to the Bangladesh Grameen Model, which preferred by most of the people where as other institutions has not. Study indicates that a larger proportion (71%) of respondents have accessed microfinance through privately owned MFIs than through state owned MFIs because most of the existing MFIs are privately owned institutions in the area.

TABLE 9: Access to Microfinance Services of Different MFIs

MF institution	Rate of accessibility	
SANASA	12%	
Samurdhi	17%	
SEEDS	6%	
RDB	12%	
HNB	12%	
Commercial Bank	6%	
Ceylinco Grameen	35%	

Table 8 illustrates that the highest rate of access, which is 35%, is found from Ceylinco Grameen by which micro credit is provided with the interest rate of 20% - 24% (table 10). Even though, the interest rate was higher, the reason for higher access to Ceylinco Grameen was explained earlier. The next highest rate of access is to the interest rate of 20% - 24% charged by RDB/HNB/SEEDS which is not a lower interest rate charge for micro credit in comparative sense. The lowest rate of access is to the interest rate of 18% - 20% charged by Commercial Bank for micro credit. The access to the Commercial Bank was less. The reasons may be the absence of credit plus services, availability of MFI branches, and excessive documentation as mentioned above.

TABLE 10: Microfinance Accessibility and Current Interest Rates of Existing MFIs

14% - 16%	29%
	29%
18% - 20%	6%
	net delenant in the last
20% - 24%	30%
24%	35%
	20% - 24%

Clients' Views on Existing MFIs

Table 10 shows that 86% of non-borrowers perceive that there is inadequacy of MFIs. Further, 51% of borrowers perceive that same. Though people have accessed microfinance they observed that the existing MFIs in Dambulla are insufficient to satisfy their requirements. This indicates that there is still an unmet demand for financial services, particularly credit in the area. Thus, it is necessary to support for expansion in outreach of microfinance.

TABLE 11: Access to Microfinance and Satisfaction of the Services Provided by Existing MFIs

	Sufficient	Insufficient
Accessed	18%	51%
Not Accessed	4%	86%

TABLE 12: Views on Accessibility of Microfinance

Respond	% of Respondents
Very Easy	2%
Easy	4%
Difficult	66%
Very Difficult	6%
No Idea	22%

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The results implies that the large proportion (66%) of respondents have difficulty in accessing microfinance (Table 11). Only 6% of respondents have easy access to the existing microfinance schemes in Dambulla division. Out of the total number of respondents 22% did not have any opinion on accessibility. According to the survey finding it was ascertained that high interest rates on credit and excessive documentation as the key barriers to obtaining credit. Collateral requirements, rigid terms and conditions and forced savings/insurance premium are also barriers to access microfinance. Similarly, lack of awareness of services provided by MFIs, non-availability of branches in close proximity and unfriendly attitudes of bank officers are also important factors. These barriers to accessibility of microfinance, also confirmed by the focus group discussions have had with selected household heads.

According to the results, 63% of respondents who have accessed microfinance perceive that there is a requirement of suitable/successful MFI (Table 12). Meanwhile 75% of respondents were not able to access microfinance. People believe that it is necessary to

establish the successful MFIs in Dambulla Division because of institutional weaknesses and many other reasons discussed above.

TABLE 13: Access to Microfinance and Requirement of a Suitable MFI

	Highly	Moderately	Not required	No idea
	Required	Required		
Accessed	16%	47%	37%	0
Not Accessed	29%	46%	14%	11%

For the improvements of accessibility of microfinance, reduction of poverty and socioeconomic vulnerability of rural poor it is necessary to restructure and regulatory mechanism for existing MFIs.

Easy and fast loan procedures, reduced documentation, better information dissemination and a customer friendly environment are the key suggestions raised by respondents for service improvement in MFIs. Many of the respondents claimed that lack of institutions in close proximity to their residences was a problem for accessibility of microfinance. This could be due to the concentration of most formal MFIs in and around urban centers, making access inconvenient for rural costumers. In non-urban areas where public transport in scare this is a very valid problematic scenario. The use of new technology such as smart cards, mobile telephone banking like Grammen Bank in Bangladesh, and alternative distribution channels such as agent banking and mobile banking could be a means of mitigating this issue.

Econometric Analysis

To examine the accessibility of microfinance, a logit regression model was done with 120 observations with 46 observations at one and 74 observations at zero. According to the logit results the model is statistically significant. Prob> chi 2 = 0.0000 and pseudo R^2 is 0.5467. Results of the model are presented by Table 13 below.

Regression results indicated that only annual income of household head, distance to closest MFI, ownership of an enterprise, the level of education of respondent and collateral availability were the statistically significant variables affecting access to microfinance. Meanwhile, age of the respondent and interest rate on lending were not significant factors regarding access to microfinance.

TABLE 14: Results of Logit Model: Probabilities of Accessing Microfinance

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Independent Variable	In (Pi/1-Pi)	Probability	
X1 (Age of the respondents)	- 0.0012	0.1542	
X2 (annual income of head of the household)	- 0.0005 0.4998 **		
X3 (distance to closet MFI)	- 0.5222	0.3723**	
X4 (Interest rate)	0.0010	0.3420	
X5 (Level of Education)	1.556	0.2654*	
D1 (collateral availability)	2.5996	0.9308**	
D2 (ownership of an enterprise)	3.345	0.9659**	

^{**}Significant at 0.05 level, * Significant at 0.1 level.

The results of the logit analysis point out that if the annual income of household head goes down by Rs.1000.00 the probability of accessing microfinance goes up by 49.98%. This is not the expected result of this variable. Generally, a higher income level increases the accessibility of microfinance and enhances investment potentiality of households Reason for this situation may be due to the target group of the MFIs was poor. When the distance to MFI goes down by 1 km the probability of accessing microfinance goes up by 37.23%. It means that if the distance is shorter, accessibility to microfinance is high. Also if the respondent is able to provide collateral the probability of accessing microfinance is 93.08% compare with households who do not have collateral requirements. Results indicate that the difference of

accessibility to microfinance between the households who owned a micro enterprise when they taking credit and households who do not have an ownership is significant. Compare with the two groups of households, who are owners of micro enterprises, cause 96.59% probability of accessing microfinance. This indicates that with the initial ownership of an enterprise with or without resources such as housing, land, machineries, micro credit is effective positively or beneficial for clients. And it is a crucial factor in determining accessibility of micro credit. The level of education of head of the household is also a significant explanatory variable for accessibility of microfinance. If the respondent has higher level of education, probability to access to microfinance is high.

5 CONCLUSIONS AND POLICY IMPLICATIONS

This section discusses the conclusions and policy implications of the study taking into consideration the overall finding of the study. Findings revealed that the accessibility of microfinance has negative relationship on an annual income of head of the household. It could be the case that when people move to higher income levels may be they want bigger size loans (not microfinance). So it can be concluded that within the income range observed in the sample when income of the people increased by Rs 1000 it will lowers the probability of accessing MFI. Distance to closest MFI is a significant factor determining access to microfinance. Ownership of an enterprise, level of education of household head, and collateral availability on lending are the other significant explanatory variables and they are positively related with accessibility of microfinance. It was found that the respondents age between 25-55 years were able to access microfinance because most of them had established themselves in some way as young individuals or families with heads of households aged between 25-55 years have the greatest need for financial services. According to the findings of focus group discussions, most of the respondents who have received education beyond primary level have accessed microfinance as they can access the information easily through social networks and follow the complex procedures with less effort in obtaining credit.

Most of the MFIs in the study area focus on the people who are at a low level of income with the objective of raising their level of income so that their accessibility of microfinance is high. Also it is observed that people who are in very low level of income (poorest of the poor) have accessed microfinance was less. Therefore, it is important to find out ways of identifying the poor and ways of excluding the non-poor. Otherwise it is not possible to serve effectively the poorest of the poor through microfinance.

Ceylinco Grameen is based on the practice of providing financial services at the village level, promoting and motivating groups of the poor, use of group guarantees, compulsory savings mobilization, intensive supervision of borrowers and cost effective operations like weekly repayment and implementation of emergency fund. Therefore, we do have a reason to think that larger proportion of clients have obtained microfinance from Ceylinco Grameen because their practices are preferred by the borrowers. SEEDS and SANASA also have practicing group lending in the area with some of the credit plus services but relatively less.

We could find a purely practical reason to higher access to microfinance by clients who have ownership of an enterprise. Most of the MFIs focus on the people who have engaged on small scale businesses with the objective of promoting self-employments among the unemployed people. Therefore, being an owner of a micro enterprise is an additional qualification for an easy access to microfinance with high priority. However, this is perhaps; depend on the goal or purpose of the MFI.

In this study it was found that very low percentage of respondents has obtained microfinance services from SEEDS even it follows credit plus approach, because that institution is more than 15 km. away from Dambulla city. Therefore, people have to travel long distance to carry out the transactions. Thus, we can think that the distance to the MFI affects to the accessibility to microfinance. It was found that less access to Commercial Bank in the project site. The reason for that could be less or no additional facilities are provided to the borrowers other than credit because the bank focuses sharply earn profits.

It is easy to realize the significance of the availability of collateral to microfinance accessibility. Generally, banks are unwilling to provide credit without collateral because they went to decrease the risk of poor repayment due to uncertainty of operation. Introduction of micro-insurance systems will reduce the risk of operations and also the risk of loan defaults. On the other hand, banks should combine micro lending with micro savings, which will encourage them to save as well as make them easy to repay.

According to the overall findings it can be concluded that the study revealed the five significant factors (annual income of household head and distance to closet MFI were negatively affected, while, collateral availability, level of education, and being an ownership of an enterprise have positively affected) affecting access to microfinance. In order to serve the needs of the rural households attempts have to be made to implement a suitable regulatory framework to promote micro lending with minimizing the restrictions on entry of small banks involve in offering microfinance services.

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