

# IMPACT OF MICRO FINANCE ON INCOME GENERATION IN KURUNEGALA DISTRICT

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## ABSTRACT

Microfinance is a financial service that provides small loans, savings accounts, insurance, and other financial products to low-income individuals, typically in developing countries. Microfinance institutions (MFIs) provide these services to people who are unable to access traditional banking services, either because they lack collateral, a credit history, or live in remote areas. Various researchers seeking to examine the impact of microfinance on income generation across the world. But the most notable thing is that there is no consensus on the findings of those researchers. Therefore, this study aimed to find out the impact of microfinance on income generation in Kurunegala District. Micro credit, micro insurance, micro training and micro savings has used to explain microfinance. This study was conducted in Kurunegala District based on microfinance users. The findings of this research will be a meaningful impact on people who need to make an improvement in their income. A sample survey research design is employed in this research. The convenience sampling method is used in this research based on the availability of the respondents. A questionnaire is designed using a five-point Likert scale. Data are collected from 159 microfinance users attached to Micro Finance institutions in Kurunegala District. Both primary and secondary data has used for the study. Primary data has obtained through a structured questionnaire and interviews. Target respondents are both staff and customers of young, middle-aged, and matured ages both male and female individuals. To analyze the data both inferential and descriptive statistics were used. The data were analyzed using Descriptive Statistics, Correlation Analysis, and Regression Analysis using SPSS software. The results of the correlation analysis and simple regression analysis showed that there is a positive relationship between microfinance indicators and income generation. The study provided insights for policymakers, donors, academicians, and microfinance institutions to better understand the key variables that are significantly associated with income generation and enable them to implement suitable strategies to improve income generation.

**Keywords:** *Financial Service, Income Generation, Micro Credit, Microfinance, Micro Saving*

## 1. INTRODUCTION

### *1.1. Background of the study*

The main goal of everyone is to have a better life with a better standard of living. To achieve a higher standard of living the income generation of people should be at a higher level. The goal of income generation interventions is to strengthen participants'

capacity to generate revenue and protect their livelihoods by addressing issues including poverty, unemployment, and a lack of economic possibilities.

A class of financial services known as microfinance caters to people and small enterprises without access to traditional banking and related services. Microfinance covers, among other things, payment systems, savings and checking accounts, micro-insurance, and microcredit, which gives small loans to underprivileged customers.

Muhammad Yunus was the founder of the reduction of poverty using microfinance. He was the founder of Grameen Bank. He was awarded the 2006 Nobel Peace Prize for his efforts of reducing poverty in Bangladesh. The Grameen Bank offers extremely poor borrowers the opportunity to start their own businesses and achieve a high enough income to escape the cycle of poverty by giving them small loans.

As was already said, microfinance in Sri Lanka began in the early 20th century. Having been established in 1906, The Providence and Credit United Societies (TCCSS) were the nation's first formal microfinance providers. After gaining independence in 1948, the government made haphazard policy changes to strengthen the intervention of the rural fiscal sector. Creating a rural financial sector the first innovative strategy was the establishment of the united rural banks (CRBS) as the MPCSS's bank windows in 1964 and the multifunctional United societies (MPCSS) in 1957 (Henepola, 2022).

However, there is a lack of industry data and monitoring mechanisms for the microfinance sector in the nation, which makes it difficult to understand the market structure, market potential, and growth opportunities for the existing players. It is also uncertain whether microfinance institutions actually help their clients escape poverty or whether they simply drag them into debt traps without the clients' knowledge.

Having a higher income generation will lower the poverty of people. Sivachithappa (2013) did a study on the impact of microfinance on income generation and livelihood of members of self-help groups in India with reference to Mandya District. According to Yunus (1997) and Khandker (1998), microfinance is an alternative finance that gives poor people access to funds so they can maintain their economic activities or start new ones (Yitamben, 2004). As a result, microfinance can be a powerful tool in the fight against poverty and income generation.

Sri Lanka has a long history of having a rudimentary microfinance system. 'Cheetu,' which has existed in Sri Lanka since at least the early twentieth century, is an informal but effective method of saving and capital accumulation, and thus serves as a basic method of microfinance for the poor. In Sri Lanka, the microfinance sector has evolved into a diverse range of institutions and products that serve as an important means of financial inclusion and empowerment for the low-income and poor segments of society.

There are approximately 15,000 microfinance institutions operating illegally in Sri Lanka. However, only 54 companies have registered with the Microfinance Association, and those who obtained loans from those companies have reaped the benefits provided by the government on multiple occasions.

### ***1.2. Statement of the problem***

Several studies have looked at the impact of microfinance on improving income generation (Samer et al, 2015). Yet it remains relatively unclear whether, and to what extent, the recent microfinance has affected the improvement of income generation. Some studies have found that there is a negative relationship between microfinance and improving income generation. Some studies have found that microfinance will lead for negative aspects as well. For example, Mayoux (1998) found that men are misusing the loans. Therefore, there is less agreement regarding the extent, manner, and timing of how and when poverty might be alleviated through microfinance. In this study, we attempt to fill this gap by examining the impact of microfinance on improving income generation in Sri Lanka with a special focus on the Kurunegala District.

### ***1.3. Research Questions***

Does microfinance help the poor to enhance their income generation in Kurunegala District, Sri Lanka?

### ***1.4. Research Objectives***

To find the impact of microfinance on improving income generation in Sri Lanka

To identify the impact of microcredit on income generation

To identify the impact of micro insurance on income generation

To identify the impact of micro training on income generation

To identify the impact of micro-savings on income generation

### ***1.5. Significance of the study***

The implication of microfinance on improving income generation has considerably attracted the attention of microfinance institutions, policymakers, donors as well as academicians. Therefore, the findings of this study will help,

**Microfinance institutions** - to comprehend the needs of low-income and impoverished clientele.

**Policymakers** - to establish an environment that will facilitate the establishment, effective regulation, and growth of microfinance institutions. To better comprehend the functions and effects of MFIs and, as a result, to develop a regulatory environment that will support their development.

**Donors** - to determine whether their support is achieving the stated goal of improving income generation and to determine whether their resources are being used effectively.

**Academicians** – to increase the corpus of knowledge in the brand-new sub-discipline of microfinance. This will serve as a starting point for future studies on microfinance.

## **2. LITERATURE REVIEW**

### ***2.1. Introduction***

A number of literatures on microfinance studies from various disciplines are studied to have an idea about the present piece of work. Many academics have expressed divergent opinions about Microfinance. While some academics claim that Microfinance significantly helps countries improve income generation, others hold the opposite view. Therefore, the following section will bring reviews of the theoretical and empirical literature on the impact of microfinance on improving income generation.

### ***2.2. Micro Credit***

Microcredit is the provision of small loans and financial services to individuals or groups who do not have regular access to traditional banking services. The provision of microcredit provides a financially viable and efficient alternative to the current approaches to alleviating rural poverty (Chan & Ramakumar, 2002). Many low-income countries have started using micro-credit programs as a tool to fight poverty. They provide financial services to the underprivileged, particularly women, in an effort to enable them to work for themselves in non-farming rural businesses of their choice. Financial intermediation is a practice used by microcredit programs with their intended audience (Khandker, 1998). In order to combat poverty, microcredit institutions spend billions on tiny loans, mostly to female entrepreneurs. Microcredit advocates contend that it reduces market imperfections, promotes the expansion of microbusinesses, and improves the welfare of borrowers (Karlan & Zinman, 2011).

Chan & Ramakumar (2002) studied about micro credit and rural poverty in several developing countries. This study shows that microcredit programs have been able to bring about a marginal improvement in the beneficiary's income. This study found that there are some disadvantages also. It found that in Bangladesh, the practice of repayment of Grameen bank loans by making fresh loans from money lenders has resulted in the creation of debt cycles.

Guha and Gupta (2005) examined the impact of micro credit for income generation in India. This study investigates key aspects of Rosca such as group formation procedures, loan sequencing, peer monitoring, loan repayment, default rate, and so on. It also examines how Rosca achieves sustainability with little social sanction and discusses policy implications. Alhassan and Akudugu (2012) investigated the impact of microcredit on women's income generation capacity in Ghana's Tamale Metropolitan Area. According to the findings of this study, access to microcredit helps to improve the income generation capacity of women in the study area.

### ***2.3. Micro Insurance***

Micro insurance is a term used to describe insurance products and services that are specifically designed to meet the needs of low-income individuals and households who typically have limited access to traditional insurance coverage. Over the past 20 years, micro-insurance programs have grown quickly in many developing countries and are now largely regarded as an essential component of the social security system

(Sirojudin & Midgley, 2012). One of the fundamental institutions may be able to serve as a safeguard against social and financial marginalization for those whose coping mechanisms are failing (Asmare & Worku, 2018).

According to the study by Gabrah, Mensah & Yidana (2020), micro-insurance boosts client asset accumulation as well as societal protection against catastrophes and shocks, employment, savings, and employment for the poor in the case of a disaster. According to the study, factors influencing the demand for micro-insurance products include a lack of creative micro-insurance products, inadequate distribution channels, a lack of supportive micro-insurance legal framework, uncompetitive pricing of micro-insurance products, a lack of government support for micro-insurance programs, respondents' low-income levels, religious or cultural factors influencing the demand for insurance products, and low public trust.

#### **2.4. *Micro Training***

The goal of Kisaka and Mwewa (2014) was to determine the impact of training, micro-savings, and microcredit on the expansion of SMEs in Machakos County. Multiple regression analysis was used to find the relationship between microcredit, micro-savings, and micro training on the growth of SMEs. The findings demonstrate how microcredit, micro savings, and training all work together to positively impact the growth of SMEs. The training impact is not statistically significant, though. This might be caused by training that is not grounded in the actual needs of SMEs.

Hameed et al (2017) have been shown through the research that microfinance variables, such as microcredit and micro training, have a favorable impact on the success of microenterprises. Microcredit and micro training have a considerably stronger impact on microenterprise success than any other microfinance element, such as microwaving, micro insurance, or social capital, followed by education level. Additionally, it has been discovered that education mediates the relationship between microfinance parameters and the success of microenterprises.

#### **2.5. *Micro Savings***

Organizations and financial institutions can use micro-savings as a form of microfinance to encourage people to save money. Traditional savings accounts and micro-savings accounts are both intended for small deposits. Microfinance, which offers savings and credit services to the underprivileged, has been a highly favored intervention among international development organizations during the past five years (Wright, 1999). This study examined whether we should be worried about "Increasing income or reducing poverty". This study found that well-designed micro finance services can reduce poverty.

Ruth et al (2012) also analyzed whether micro-credit, micro-savings, and micro-leasing serve as effective financial inclusion interventions enabling poor people and especially women to engage in meaningful economic opportunities in low and middle-income countries.

## ***2.6. Microfinance and improving income generation***

According to Arora and Singhal (2013) comprehensive review of the literature on the effects of microfinance, this type of program offers low-income and impoverished households a wide range of financial services, including credit, savings, money transfers, and insurance. Microfinance has developed as a need-based policy and program in the development paradigm to serve the underserved segments of society, including women, the poor, rural residents, the disadvantaged, etc.

Idris and Agbim (2015) examined the connections between self-employment, education, training, and skill acquisition, as well as economic empowerment. This study discovered that self-employment, education, training, skill acquisition, and economic empowerment are all significantly impacted by microcredit. The researchers suggested raising awareness of the importance of microcredit for economic empowerment, self-employment, education, training, and skill acquisition.

In Sri Lanka there have been several studies on microfinance and poverty reduction. According to Wijewardana and Dedunu (2017) Micro Finance institutions are helping to increase the number of loans to the poor in the Anuradhapura area and reduce the loan interest rate as lower as possible to enhance the living standard of poor people in the area. Micro Finance institutions should enhance their management capacity and bring an effort to reach the needy people in order to eradicate poverty and promote the welfare of society (Sugathadasa, 2018). MIF should develop to avoid multiple loans received by the beneficiaries. Because, when poor people receive microloans from several places then it can become a burden for settling them (Kaluarachchi & Jahfer, 2014). The poverty and socioeconomic vulnerability of poor households, and social capital formation through group loans among the hardcore poor may be one good strategy (Herath, 2015).

Kumari, Azam, and Khalidah (2019) review the empirical research that has been done to determine how microfinance has affected global and Sri Lankan poverty reduction. The research showed that the majority of previous studies had acknowledged the beneficial relationship between microfinance and poverty. Shaw (2004) found that Microfinance customers in southeast Sri Lanka profits from their microenterprises are correlated with their starting salaries. Poorer consumers are forced to choose low-value pursuits with bleak growth prospects because they encounter geographic, financial, and cultural hurdles to entrance into the most promising microenterprise jobs.

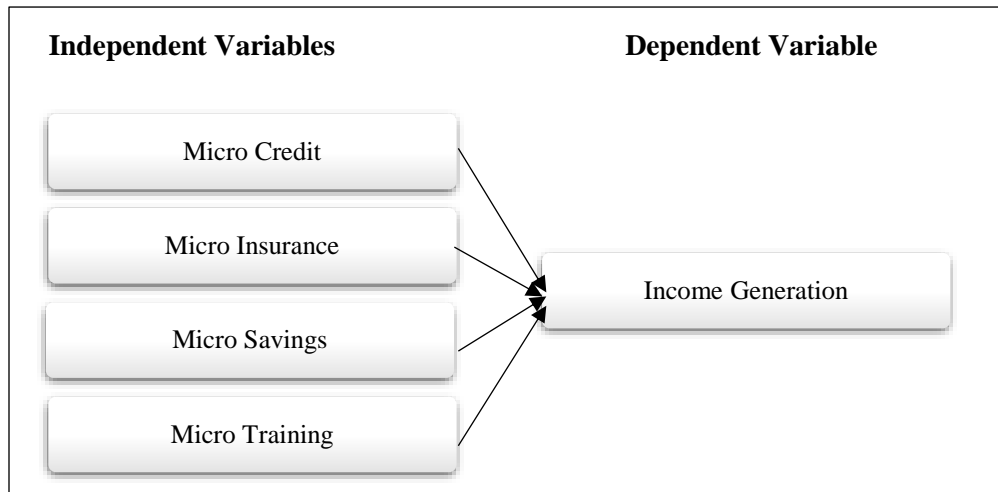
In this way, many studies have been done on the relationship between microfinance and poverty reduction. But in Sri Lanka, there is very little focus on the impact of various microfinance services on the reduction of poverty. Since this study will try to fill that gap.

### 3. METHODOLOGY

#### 3.1. Conceptual Framework

Conceptualization demonstrates the theory that underpins the research process, as well as how to develop and clarify the notion. The relationship between all dependent and independent variables is indicated by the conceptual framework.

Based on the literature review, the following conceptual framework was developed for this study.



Source: Developed by researcher

**Figure 1: Conceptual framework for this study**

#### 3.2. Research Hypotheses

According to the conceptual model, hypotheses were needed to evaluate the link and influence between the dependent and independent variables to determine the validity of the assumptions. Hypotheses are possible responses to the study's research questions. The impact of microfinance on improving income generation in Sri Lanka is the subject of this study. The researcher evaluates hypothesis to see if there is a relationship between the dependent and independent variables, as well as the influence of the dependent and independent variables. Based on the above theoretical framework, the following hypothesis can be formulated to achieve the study objectives.

H1: Micro Credit has a positive impact on income generation

H2: Micro Insurance has a positive impact on income generation

H3: Micro Savings has a positive impact on income generation

H4: Micro Training has a positive impact on income generation

### 3.3. Operationalization of the independent and dependent variables

In order to realize the aims of the research, the variables listed under the conceptual framework must be converted into visible and measurable components (Sekaran & Bougie, 2016)

The questionnaire has adopted five likert scales to evaluate the degree of agreement and disagreement between the respondent and the scale of the use percentage. The scales were implemented from earlier studies due to the significance of literature, context and compatibility, and reliability. Lead to improvement of basic needs, preference, reasonability of interest rates, easiness, and easiness of credit access due to group guarantee system have taken as the indicators for micro credit. Micro insurance covers, convenient premium, convenient to access, benefit and easiness have taken as the indicators for micro insurance. Improve lifestyle, savings have increased, easiness and satisfactory interest rate have taken as the indicators for micro savings. MFIS organize training, enable to save more, better usage of micro credits, helpful in running the business, increase education and training programs have taken as the indicators for micro training. Increase of income, increase in consumption have taken as the indicators for income.

### 3.4. Population and sample

A population is a collection of individuals who meet the criteria for the sample. The target population is the total population on whom the researcher intends to base future generations. The target population for this study is the staff and customers attached to the Micro finance units in Kurunegala District.

A statistical method called sampling is used to choose a subset of a population a larger social group for the study and this study will use a convenient sampling method to select the sample. The sample size will be taken according to the Morgan table (Krejcie & Morgan, 1970). The researcher has selected four areas in Kurunegala District in Sri Lanka.

**Table 1: Distribution of microfinance customers among branches**

Branch	Weight	Sample Size
Kurunegala	44.02	70
Narammala	19.49	31
Kuliyapitiya	15.72	25
Nikaweratiya	20.75	33
	100	159

Source: Created by the researcher

### 3.5. Data Collection

Both primary and secondary data have been used to obtain the data for the study. Primary data will be obtained through a questionnaire and interviews. A structured questionnaire will be used to collect the data from respondents in Sri Lanka with special reference to Kurunegala District in Sri Lanka. The respondents are the microfinance beneficiaries who are engaged with microfinance services in the



Kurunegala District. As the secondary sources financial institutions annual reports and journal articles, reports will be used. Self-administered five points “Likert Scale” questionnaire was used to obtain the views and attitudes of the respondents about microfinance services, especially micro credit, micro insurance, micro-savings, and micro training. The questionnaire consists of 03 sections. The total number of questions in the questionnaire is 38.

### ***3.6. Data Analysis Techniques***

This study used both inferential and descriptive statistics in analyzing data. SPSS Statistical software was used to evaluate the acquired data, and tables and figures were used to interpret the results.

#### ***3.6.1. Descriptive Statistics***

Initially, descriptive-analytical techniques including measures of central tendency (mean / mode/median) and dispersion (range / standard deviation/ maximum and minimum), as well as skewness and kurtosis, were utilized to explore all the variables in order to provide a common picture of the features of the sample.

#### ***3.6.2. Reliability Test***

Reliability refers to the stability and consistency of research over time and is ensured by creating and maintaining a database of case studies and developing a clear case study protocol (Korsmeyer, Yin, & Oltvai, 1994). Cronbach's alpha is a reliability coefficient that indicates how well the items in a set are positively correlated to one another. The closer Cronbach's alpha was to 1, the higher the internal consistency reliability.

#### ***3.6.3. Inferential Statistics***

Under inferential statistics, methods such as correlation and regression analysis were utilized to analyze the direct connections between variables. Correlation analysis will be used to find the correlation between loan amount, interest rate, difficulties of payments, and repayment schedule. Between loan amount, monthly income, and monthly savings, another correlation analysis will be conducted. The correlation coefficient helped evaluate the relationship between dependent and independent variables. The correlation coefficient shows the linear association strength of two variables and lies between a -1 and +1 correlation that is close and 1 indicates a significant positive relationship. Correlation of 0 indicates no relationship between those variables.

#### ***3.6.4. Regression Analysis***

Multiple regression analysis methods have been used to determine the relationship between dependent and independent variables. OLS regression will be estimated to find out the impact of microfinance services on the improvement of income generation in Sri Lanka.

To examine how independent variables affect the dependent variable, a multiple regression model is utilized. A dependent variable's value can be predicted using this

method using the values of the independent variables. It comprises a number of methods and tools for modeling and evaluating different variables when the focus is on the relationship between a dependent variable and one or more independent variables. Therefore, the following multivariate regression model was developed to find out the effect of each of the variables following Gujarati (2009):

$$IG = B_0 + B_1MC_1 + B_2MI + B_3MS_3 + B_4MT_4 + \varepsilon \quad \rightarrow \quad (1)$$

Where IG is the income generation as the dependent variable,  $B_0$  is constant.  $B_1, B_2, B_3, B_4$  are the parameters to be estimated for the independent variables,  $X_i$  are the independent variables, namely Micro Credit, Micro Insurance, Micro Savings, and Micro Training.  $\varepsilon$  is the error term to capture the unexplained variations in the model and which is assumed to be normally distributed with mean zero and constant variance.

#### 4. RESULTS AND DISCUSSION

##### 4.1. Reliability of the study

The reliability of a survey instrument are critical considerations when selecting one. The degree to which an instrument produces the same results over repeated trials is referred to as its reliability. In this study, the researcher uses "Cronbach's Alpha" separately for "Impact of microfinance on income generation in Kurunegala district". The results of Cronbach's alpha test are given in table 2.

**Table 2: Reliability statistics of the variables**

<b>Instrument</b>	<b>Cronbach's Alpha</b>
<b>Income</b>	0.827
<b>Micro Credit</b>	0.733
<b>Micro Insurance</b>	0.742
<b>Micro Savings</b>	0.787
<b>Micro Training</b>	0.871

Source: Survey Data

##### 4.2. Data Presentation

###### 4.2.1. Demographic Profile

The researcher has gathered data on gender, age, highest educational qualification, monthly income of microfinance service users. Demographic information describes the nature of the sample survey. The researcher distributed a questionnaire among respondents and gathered information on a questionnaire through a Google form with virtually met respondents and the questionnaire was given to micro fiancé users personally. There were 159 respondents. Therefore, all respondents were becoming valid respondents and provided valid responses.

###### *Gender Distribution*

The questionnaires are distributed randomly among both male and female microfinance users. As shown in table 3, out of the 159 respondents, 107 are male and 52 are female respondents which are 67.3% and 32.7% of the total respectively.

**Table 3: Gender of respondents**

Gender	Frequency	Percent (%)
Male	107	67.3
Female	52	32.7
<b>Total</b>	<b>159</b>	<b>100</b>

Source: Survey Data

#### *Age structure of the sample*

According to table 4, majority of the sample are represented by the age level below 20 years and it is 43.4% of the sample. Lower representation is in the age level of 40 – 50. There is no respondent above the age of 50.

**Table 4: Age of respondents**

Years	Frequency	Percent (%)
<b>Below 20</b>	<b>69</b>	<b>43.4</b>
<b>20-30</b>	<b>57</b>	<b>35.8</b>
<b>30-40</b>	<b>25</b>	<b>15.7</b>
<b>40-50</b>	<b>8</b>	<b>5.0</b>
<b>Above 50</b>	<b>0</b>	<b>0</b>
<b>Total</b>	<b>38</b>	<b>100</b>

Source: Survey Data

#### *Education of the beneficiaries*

According to table 5, the highest number of respondents is having education from grade 6 – 10. 27.7% of respondents are having educational levels from grades 1 – 5 and 8.8% of respondents are having educational levels of more than 10 years.

**Table 5: Educational level of respondents**

Educational Level	Frequency	Percent
<b>Not at all</b>	<b>20</b>	<b>12.6</b>
<b>1 – 5</b>	<b>44</b>	<b>27.7</b>
<b>6 – 10</b>	<b>81</b>	<b>50.9</b>
<b>&gt;10</b>	<b>14</b>	<b>8.8</b>
<b>Total</b>	<b>159</b>	<b>100</b>

Source: Survey Data

#### *Number of family members*

According to the table 6, 13.2% of respondents are having less than 2 family members. The majority of the respondents are having family members between 4- 5 which is 72.3% of the total respondents. 14.5% of respondents are having more than five family members.

**Table 6: Number of family members**

Number of family members	Frequency	Percent
<b>&lt;2</b>	<b>21</b>	<b>13.2</b>
<b>4 – 5</b>	<b>115</b>	<b>72.3</b>
<b>&gt;5</b>	<b>23</b>	<b>14.5</b>
<b>Total</b>	<b>159</b>	<b>100</b>

Source: Survey Data

### *Occupation*

According to the table 7, majority of the respondents are engaged in business activities which are 63.5% of the total respondents. Out of 159 respondents, 50 respondents are engaged in agricultural activities.

**Table 7: Occupation of the respondent's**

<b>Occupation</b>	<b>Frequency</b>	<b>Percent</b>
<b>Agriculture</b>	50	31.4
<b>Business</b>	101	63.5
<b>Other</b>	8	5.0
<b>Total</b>	159	100.0

Source: Survey Data

#### *4.2.2. Frequency Distribution analysis of respondents by their microfinance-related information*

##### *Source of startup capital*

According to the table 8, the main source of startup capital is the loans from microfinance institutions. Out of the 159 respondents, 124 people are using loans from MFIs as the source of startup capital. 10.1% of the respondents are using personal savings and 11% of respondents are using friends and relatives as the source of startup capital.

**Table 8: Source of startup capital**

<b>Source of startup capital</b>	<b>Frequency</b>	<b>Percent</b>
<b>Personal Savings</b>	16	10.1
<b>Friends and Relatives</b>	11	6.9
<b>Loans from MFIs</b>	124	78
<b>Other sources</b>	8	5.0
<b>Total</b>	159	100.0

Source: Survey Data

##### *Credit Limit*

**Table 9: Credit Limit**

<b>Credit Limit</b>	<b>Frequency</b>	<b>Percent</b>
<b>&lt;10000</b>	0	0
<b>10000 – 50000</b>	41	25.8
<b>50000 – 100000</b>	79	49.7
<b>100000- 500000</b>	35	22.0
<b>500000 – 1000000</b>	4	2.5
<b>100000&lt;</b>	0	0
<b>Total</b>	38	100

Source: Survey Data

According to table 9, most of the respondents take credit between 50000 to 100000 which is 49.7% of the total respondents. Out of the total respondents, 41 respondents are taking credits between 10000 to 50000 and 35 respondents are taking credits between 100000 to 500000.

*Period of credit*

According to table 10, most of the respondents are taking loans for a period of 1 year to 2-year repayment which is 30.2% of total respondents. The least number of respondents are taking credit for more than 5 years.

**Table 10: Period of credit**

Period of credit	Frequency	Percent
<month	0	0
1 month – 6 months	16	10.1
6 months – 1 year	46	28.9
1 year – 2 years	48	30.2
2 years – 5 years	40	25.2
5 years <	9	5.7
<b>Total</b>	<b>159</b>	<b>100.0</b>

Source: Survey Data

*Purpose of taking loans*

According to the table 11, most of the respondents are taking loans for business financing which is 36.5% out of total respondents. 13.8% of respondents are taking loans for educational purposes also. 20.8% of respondents are taking loans for home improvements.

**Table 11: Purpose of taking loans**

Purpose of taking loans	Frequency	Percent
Business Financing	58	36.5
Debt repayment	24	15.1
Home improvement	33	20.8
Family expenses	18	11.3
Education	22	13.8
Marriage	0	0
Health	4	2.5
Other	0	0
<b>Total</b>	<b>159</b>	<b>100</b>

Source: Survey Data

*Repayment of loan***Table 12: Repayment of loan**

Repayment of loan	Frequency	Percent
Fully paid	13	8.2
Half paid	75	47.2
More than half	67	42.1
Not paid	4	2.5
<b>Total</b>	<b>159</b>	<b>100</b>

Source: Survey Data

When considering about the extent of repayment of the latest credit which the respondents have taken shown by the table 12. According to the table, it shows there only 4 respondents who has not repaid the loan he/she has taken. Out of the total respondents, 47.2% of respondents have half paid the loan and 8.2 respondents have fully paid the loan.

*Awareness of the duration and amount of loan*

According to table 13, 146 respondents are aware of the duration and amount of loan which is 91.8% of total respondents. But 13 respondents which are 8.2% of the total respondents were not aware of the duration and amount of the loan.

**Table 13: Awareness of the duration and amount of loan**

Awareness of the duration and amount of loan	Frequency	Percent
Yes	146	91.8
No	13	8.2
<b>Total</b>	<b>159</b>	<b>100.0</b>

Source: Survey Data

*Awareness of the interest rate*

According to table 14, 138 respondents are aware of the interest rate of the loan which is 86.8% of total respondents. But 21 respondents which are 13.2% of the total respondents were not aware of the interest rate of loans.

**Table 14: Awareness of the interest rate**

Awareness of the interest rate	Frequency	Percent
Yes	138	86.8
No	21	13.2
<b>Total</b>	<b>159</b>	<b>100.0</b>

Source: Survey Data

*Monthly income before using microfinance services***Table 15: Monthly income before using microfinance services**

Monthly income before using microfinance services	Frequency	Percent
<b>Below 10000</b>	<b>0</b>	<b>0</b>
<b>10000 – 20000</b>	<b>3</b>	<b>1.9</b>
<b>20000 – 30000</b>	<b>43</b>	<b>27.0</b>
<b>30000 – 40000</b>	<b>49</b>	<b>30.8</b>
<b>40000 – 50000</b>	<b>39</b>	<b>24.5</b>
<b>Above 50000</b>	<b>25</b>	<b>15.7</b>
<b>Total</b>	<b>159</b>	<b>100.0</b>

Source: Survey Data

*Monthly income after using microfinance services***Table 16: Monthly income after using microfinance services**

Monthly income after using microfinance services	Frequency	Percent
<b>Below 10000</b>	<b>0</b>	<b>0</b>
<b>10000 – 20000</b>	<b>3</b>	<b>1.9</b>
<b>20000 – 30000</b>	<b>22</b>	<b>13.8</b>
<b>30000 – 40000</b>	<b>52</b>	<b>32.7</b>
<b>40000 – 50000</b>	<b>41</b>	<b>25.8</b>
<b>Above 50000</b>	<b>41</b>	<b>25.8</b>
<b>Total</b>	<b>159</b>	<b>100.</b>

Source: Survey Data

According to table 15, before taking microfinance services the income of most of the respondents prevailed 30000 - 40000. According to the table 16, after taking microfinance services the income of most of the respondents prevailed between 30000 and 50000 and more of the respondents had income more than 50000 also.

**4.3. Data analysis**

*4.3.1. Univariate analysis*

Under the univariate analysis researcher used descriptive statistics (Mean and standard deviation).

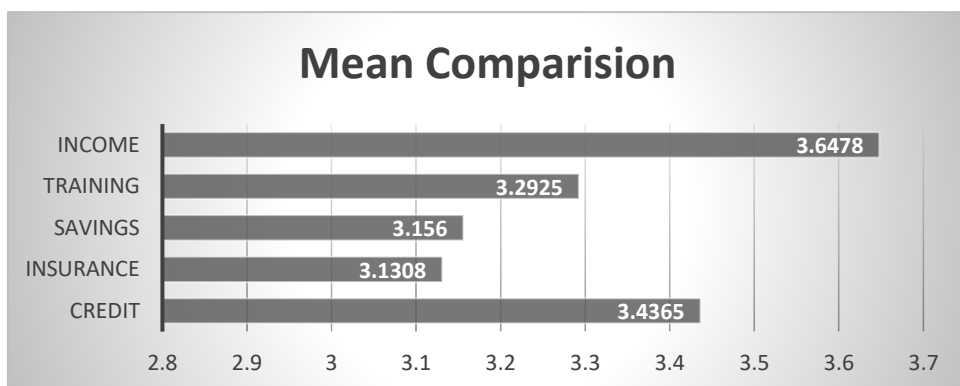
*Descriptive Statistics for variables*

Descriptive statistics make mathematically identifying and comparing variables easier. In this study, descriptive statistics usually involve measures of central tendency (mean, median, mode) and measures of dispersion (variance, standard deviation, etc.). In this research independent variables are micro credit, micro insurance, micro-savings, and micro training. The dependent variables are income. Five-point Likert scale uses to measure the impact of microfinance on income generation.

**Table 17: Descriptive statistics for variables**

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness	Kurtosis
	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic
<b>Credit</b>	159	2.00	4.40	3.4365	.54371	-.493	.192
<b>Insurance</b>	159	2.00	5.00	3.1308	.66978	-.151	.192
<b>Savings</b>	159	2.00	5.00	3.1560	.66204	-.006	.192
<b>Training</b>	159	2.00	5.00	3.2925	.76185	-.166	.192
<b>Income</b>	159	2.00	5.00	3.6478	.72551	-.322	.192
<b>Valid N (listwise)</b>	159						

Source: Survey Data



Source: Survey Data

**Figure 2: Mean comparison**

According to table 17, the mean values of microcredit, micro-insurance, micro-savings, and micro-training are 3.43, 3.13, 3.15 and 3.29 respectively. Microcredit has a higher mean value compared to other independent variables. That means micro credit is at a high level in the Kurunegala district and it is almost “Strongly agree”. The mean value of the dependent variable which is income is 3.64. The standard deviation of independent variables which are micro credit, micro insurance, micro-savings, and micro training are 0.54, 0.66, 0.66 and 0.76 respectively. The standard deviation of dependent variables which is income is 0.72. The standard deviation of all variables is the smallest that is showed the smallest dispersion with a close relationship.

4.3.2. *Bivariate analysis*

Bivariate analysis includes Correlation analysis and simple regression analysis which are used to investigate the relationship between microfinance and income.

*Correlation analysis*

Correlation coefficient analysis is used as a statistical analysis to determine the strength between two variables and determines the positive or negative relationship between two intervals or a variable.

Using the Pearson’s Correlation (Based on parametric test – Normality and linearity assumption are satisfied) with a two-tailed test of significance, the correlation analysis has been made to investigate any relationship between the independent variables – micro credit, micro insurance, micro-savings and micro training and dependent variables – income can be summarized as follows.

**Table 18: Correlation analysis**

		Credit	Insurance	Savings	Training	Income
<b>Credit</b>	<b>Pearson Correlation</b>	1	.674**	.362**	.424**	.376**
	<b>Sig. (2-tailed)</b>		.000	.000	.000	.000
	<b>N</b>	159	159	159	159	159
<b>Insurance</b>	<b>Pearson Correlation</b>	.674**	1	.629**	.257**	.433**
	<b>Sig. (2-tailed)</b>	.000		.000	.001	.000
	<b>N</b>	159	159	159	159	159
<b>Savings</b>	<b>Pearson Correlation</b>	.362**	.629**	1	.508**	.726**
	<b>Sig. (2-tailed)</b>	.000	.000		.000	.000
	<b>N</b>	159	159	159	159	159
<b>Training</b>	<b>Pearson Correlation</b>	.424**	.257**	.508**	1	.747**
	<b>Sig. (2-tailed)</b>	.000	.001	.000		.000
	<b>N</b>	159	159	159	159	159
<b>Income</b>	<b>Pearson Correlation</b>	.376**	.433**	.726**	.747**	1
	<b>Sig. (2-tailed)</b>	.000	.000	.000	.000	
	<b>N</b>	159	159	159	159	159



According to the results of the Pearson correlation shown in table 18, the relationship between microfinance and income is as follows. There is a positive significant between income and microcredit. The correlation coefficient is 0.376 which is significant at a 1% level of significance. There is a positive relationship between income and micro insurance. The correlation coefficient is 0.433 which is significant at a 1% level of significance. There is a positive relationship between micro-savings and income. The correlation coefficient is 0.726 which is significant at a 1% level of significance. There is a positive relationship between income and micro-training. The correlation coefficient is 0.747 which is significant at a 1% level of significance.

*Simple Regression analysis*

The simple regression analysis is made to determine the relationship between the set of independent variables and the dependent variables.

In this study, simple regression analysis is used to provide the impact of the set of predictors and the dependent variables. To meet the objectives 4 models were developed.

**Table 19: Statistics of regression between microfinance and income**

Method	Linear			
	MC	MI	MS	MT
<b>R</b>	0.376	0.433	0.726	0.747
<b>R square</b>	0.141	0.188	0.527	0.558
<b>Adjusted R square</b>	0.136	0.182	0.524	0.555
<b>Std. Error</b>	0.674	0.655	0.5008	0.484
<b>Sum of squares</b>	11.766	15.606	43.789	46.37
<b>F</b>	25.872	36.268	174.59	197.85
<b>Sig. F</b>	0.000	0.000	0.000	0.000
<b>T</b>	5.086	6.022	13.213	14.066
<b>Sig. T</b>	0.000	0.000	0.000	0.000
<b>b-constant</b>	1.923	2.179	1.138	1.307
<b>b-</b>	0.502	0.469	0.795	0.711

Source: Survey Data

According to that, the Regression equation is:

$$IG = 1.923 + 0.502MC$$

The b value of the equation, the gradient of the regression, is 0.502, which is significant at 1% (Sig t = 0.000). As indicated by R square, 14% of the variance of income is explained by microcredit. The F value is 25.872 which is significant at 1%.

$$IG = 2.179 + 0.469MI$$

The b value of the equation, the gradient of the regression is 0.469, which is significant at 1% (Sig t = 0.000). As indicated by R square, 18.8% of the variance of income is explained by microinsurance. The F value is 36.268 which is significant at 1%.

$$IG = 1.138 + 0.795MS$$

The b value of the equation, the gradient of the regression is 0.795, which is significant at 1% (Sig t = 0.000). As indicated by R square, 72.6% of the variance of income is explained by microinsurance. The F value is 174.594 which is significant at 1%.

$$IG = 1.307 + 0.711MT$$

The b value of the equation, the gradient of the regression is 0.711, which is significant at 1% (Sig t = 0.000). As indicated by R square, 74.7% of the variance of income is explained by microinsurance. The F value is 197.85 which is significant at 1%.

*Multiple Regression Analysis*

The data has entered into the analysis and undertook a multiple regression. And results substituted the understanding coefficient into a regression equation:

Model 01

$$IG = 0.485 - 0.049MC + 0.046MI + 0.488MS + 0.500MT$$

Variables such as Micro Credit, Micro Insurance, Micro Savings, and Micro Training found a positive relationship between incomes. The results indicate that Micro training and micro savings are the significant variables.

**Table 20: Model summary for multiple regression containing all variables – Income Generation**

Model	R	R Square	Adjusted R square	Std. Error of the estimate
1	0.849	0.720	0.713	0.38878

**ANOVA<sup>a</sup>**

Model	Sum of Squares	df	Mean Square	F	Sig.	
	<b>Regression</b>	59.889	4	14.972	99.055	.000 <sup>b</sup>
1	<b>Residual</b>	23.277	154	0.151		
	<b>Total</b>	83.166	158			

**a. Dependent Variable: Income**

**b. Predictors: (Constant), M\_Training, M\_Credit, M\_Saving, M\_Insurance**

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
	<b>(Constant)</b>	.485	.217		2.230	.027
	<b>Credit</b>	.049	.087	.037	.567	.052
1	<b>Insurance</b>	.046	.081	.042	.568	.571
	<b>Savings</b>	.488	.072	.446	6.829	.000
	<b>Training</b>	.500	.053	.525	9.419	.000

**a. Dependent Variable: Income**

R square assumes that every independent variable in the model help to explain variation in the dependent variable. According to r squared and adjusted R square

value indicated that there is a high degree of goodness of fit of the regression model. The significant variables are Micro Credit, Micro Savings and Micro training.

#### **4.4. Discussion on the findings**

##### *4.4.1. Discussion on the relationship and impact of microcredit on income generation*

A significant relationship is found between microcredit and income generation. According to the Pearson correlation coefficient, the relationship between the two variables is positive with a correlation coefficient of 0.424. This result shows that there is a positive relationship between microcredit and income generation.

As per the results of simple regression analysis between these two variables, micro-credit is found to have a significant positive impact on income generation with the strength of a b value of 0.502 and which is significant at 1% thus null hypothesis is rejected and the alternative hypothesis accepts which indicate that “There is a linear relationship between micro credit and income generation. This finding is similar to other studies, either empirically or theoretically.

##### *4.4.2. Discussion on the relationship and impact of micro insurance on income generation*

A significant relationship is found between micro insurance and income generation. According to the Pearson correlation coefficient, the relationship between the two variables is positive with a correlation coefficient of 0.257. This result shows that there is a positive relationship between micro-insurance and income generation.

As per the results of simple regression analysis between these two variables, micro insurance is found to have a significant positive impact on income generation with the strength of a b value of 0.469 and which is significant at 1% thus null hypothesis is rejected and the alternative hypothesis accept which indicate that “There is a linear relationship between micro insurance and income generation. This finding is similar to other studies, either empirically or theoretically.

##### *4.4.3. Discussion on the relationship and impact of micro-savings on income generation*

A significant relationship is found between micro-savings and income generation. According to the Pearson correlation coefficient, the relationship between the two variables is positive with a correlation coefficient of 0.508. This result shows that there is a positive relationship between micro-savings and income generation.

As per the results of simple regression analysis between these two variables, micro-savings are found to have a significant positive impact on income generation with the strength of a b value of 0.795 and which is significant at 1% thus null hypothesis is rejected and the alternative hypothesis accept which indicate that “There is a linear relationship between micro savings and income generation. This finding is similar to other studies, either empirically or theoretically.

#### *4.4.4. Discussion on the relationship and impact of micro training on income generation*

A significant relationship is found between micro training and income generation. According to the Pearson correlation coefficient, the relationship between the two variables is positive with a correlation coefficient of 0.747. This result shows that there is a positive relationship between micro-insurance and income generation.

As per the results of simple regression analysis between these two variables, micro insurance is found to have a significant positive impact on income generation with the strength of a b value of 0.711 and which is significant at 1% thus null hypothesis is rejected and the alternative hypothesis accept which indicate that “There is a linear relationship between micro training and income generation. This finding is similar to other studies, either empirically or theoretically.

## **5. CONCLUSION, AND RECOMMENDATIONS**

### ***5.1. Conclusion***

The study covered the interaction between microfinance with income generation. The main objective of the study is to examine to what extent microfinance influence income generation. The purpose of this research is to bring out insight into the influence of microfinance in terms of microcredit, micro-influence, micro-savings, and micro-training on income generation. Therefore, addressing this gap is the primary intention of this study. This study mainly focused on four objectives.

#### *5.1.1. Objectives 01, 02, 03, and 04*

First, second, third, and fourth objectives of the study are to identify the effect of microfinance in terms of microcredit, micro-insurance, micro-savings, and micro training on income generation in Kurunegala District.

Descriptive statistics and other analysis methods are formulated in order to come up with findings related to the research problem. This survey design used a questionnaire as the major tool of data collection. The selected sample size is 159.

Frequency analysis is used to understand the sample profile and descriptive statistics are used to investigate the level of microfinance and income generation. The study found that four factors in terms of microcredit, micro-insurance, micro-savings, and micro-training affect income generation.

### ***5.2. Recommendations***

The study recommends that Micro Finance Institutions operating within Kurunegala District is to be empowered through the provision of finances which can be advanced to the locals as loans to facilitate income generation. The study also recommends that MFIs should undertake regular training programs on financial management courses with a view to learning the best financial management skills and improving their business.

The Sri Lankan government should revise and create new MFI policies to take into account new concerns as a result of alterations in the banking sector. To better satisfy

the requirements of the underprivileged clients they seek to assist, microfinance programs must be carefully planned. The government may also enact stringent regulations to prevent corruption and other sinister vices from spreading to microfinance initiatives. For the consumers' microfinance credit, financial literacy is advised. This will guarantee that the loan is applied to its intended purpose. Policymakers may also step in and create strategies to combat the persistently severe poverty through income generation and high living standards.

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