

GRIFFITH COLLEGE

**The Role of Microfinance Institutions in Promoting Financial Inclusion and
Entrepreneurship in Rural Kerala**

Research dissertation presented in partial fulfilment of the requirements
for the degree of
MSc in Accounting and Finance Management

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September 2024

Candidate Declaration

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'I certify that the dissertation entitled: "The Role of Microfinance Institutions in promoting Financial Inclusion and Entrepreneurship in Rural Kerala" submitted for the degree of MSc in Accounting and Finance Management is the result of my own work, and that where reference is made to the work of others, due acknowledgment is given.

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Abstract

This study investigates the impact of Microfinance institutions (MFIs) on financial inclusion and entrepreneurship among rural populations. The research aims to assess MFIs' contributions to financial inclusion and entrepreneurship, identify obstacles faced by rural inhabitants in accessing microfinance, and propose recommendations to enhance MFI effectiveness. Utilizing quantitative data from a survey of 104 participants aged 20 and above, the findings partially confirm that MFIs positively influence job opportunities and business expansion, though direct effects on income and savings were less pronounced. The research confirms that availability of financial services boosts business establishment and that MFI efficiency impacts financial service accessibility. Challenges such as high-interest rates and complex application processes are noted, with strategic improvements in client support and rural outreach recommended. The study findings underscore the significant role of MFIs in fostering economic development, highlighting areas for targeted enhancement to maximize their impact.

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List of Abbreviations

MFIs: Microfinance Institutions

SMEs: Small and Medium Enterprises

RBV: Resource-Based View

PwC: PricewaterhouseCoopers

GDP: Gross Domestic Product

NGOs: Non-Governmental Organizations

1 Introduction

Microfinance institutions (MFIs) play a pivotal role in promoting financial inclusion and entrepreneurship among marginalized populations, particularly in rural areas like Kerala, India. This research aims at reviewing the literature to analyze how MFIs have contributed in improving financial access and supporting entrepreneurship in the rural areas of Kerala. The high level of agrarian activities in the state as well as the geographic constraints that make conventional banking services inaccessible are the reasons why MFIs play a vital role in the provision of financial services to empower the state's economy.

Incorporation of money in the process of achieving basic financial services by every population group is still a challenge in the world and especially in the developing countries (World Bank, 2022). In Kerala the conventional banking services are limited because of the rigidity of the eligibility norms and geographical inaccessibility, thus the MFIs have become the viable option. The following institutions provide unique financial services which include micro credit, savings and checking accounts, insurance, and money transfer services for the rural households and SMEs (Tan et al., 2023).

The idea of microfinance, based on the idea of offering small amounts of financial services to the low-income population, has undergone major changes since the modern start in Bangladesh with the Grameen Bank (Hamood & Abdo, 2023). Yunus' work showed that even small amounts of capital could help people establish new ventures and enhance their financial well-being and it has been replicated in Kerala with equally positive results (Milana & Ashta, 2020).

Nevertheless, the microfinance sector in rural Kerala continues to experience constant problems. Some of the challenges include high interest rates, difficult procedures of accessing microfinance,

and low financial literacy level among the target beneficiaries (Lusardi & Mitchell, 2023). To achieve these goals, it is important to address the challenges outlined above because they are important to increase the positive impact of MFIs on rural development and to provide equal opportunities for all segments of the population in terms of access to financial services. This review also seeks to establish the extent to which MFIs have contributed to financial inclusion and entrepreneurship in rural Kerala, the challenges that have impounded access to microfinance and to make strategic suggestions for improving the situation. As the following sections show, this study aims to identify the ways in which MFIs can promote sustainable development and economic empowerment in Kerala's rural communities based on the synthesis of the existing literature and empirical studies from 2018 to 2024.

Therefore, it is crucial to examine the position of MFIs in the improvement of the financial sector to support entrepreneurship in rural Kerala so that future policies and strategies will be developed to contribute to the increase of financial inclusion and poverty reduction. This review provides the basis for further investigation into the processes by which MFIs may enhance their effectiveness and the ways in which they might enhance the achievement of developmental objectives more generally in the region.

1.1 Background

MFIs have emerged as pivotal entities in promoting financial inclusion and entrepreneurship, particularly in rural Kerala, India. In the last few decades, MFIs have offered microloan, savings accounts and insurance for the poor and thereby helped them in attaining economic independence (Anjum et al., 2020; Ahtesham & Mittal, 2019). This has been especially so in areas where conventional forms of banking services are scarce or nonexistent because of the rigorous

qualifications and geographical restrictions placed on the dissemination of such services (Hamood & Abdo, 2023).

However, in the light of the success of MFIs, there are still some issues and limitations which are worth noting, especially in the context of rural Kerala. High interest rates, cumbersome procedures for obtaining microfinance, and lack of adequate information among those living in the rural areas remain some of the challenges that influence the efficient use of microfinance services (Barguelli & Bettayeb, 2020; Ene & Inemesit, 2015). Such barriers emphasize the importance of further research of the potential of MFIs to enhance their functioning and become more effective in meeting the needs of rural populations.

The study by Ene and Inemesit (2015) in Nigeria and Barguelli and Bettayeb (2020) in Tunisia also pointed out differential effect of microfinance on economic development due to differences in socio-economic context. Although microfinance has the scope of increasing income levels and encouraging entrepreneurial activities to some extent, the full capacity of microfinance is still limited by the issues of operational effectiveness and regulatory concerns (World Bank, 2022). In addition, there is a dearth of extensive research in the existing literature that deals with the impact of MFIs on the financial inclusion and entrepreneurship development in rural Kerala. Previous research tends to provide findings for more extensive regions or for a few parameters, including income generation or loan repayment rates only (Lusardi & Mitchell, 2023; Milana & Ashta, 2020). Hence, the present study aims to fill the research gap in determining the socio-economic effects of the MFIs instituted for the rural area of Kerala with reference to its socio-cultural and economic context.

Also, the emergence of new digital technology and changes in regulations provide new opportunities and threats to MFIs in Kerala. The combination of digital financial services and various microfinance products can possibly increase the access to financial services as well as improve operations (Tan et al., 2023). Nevertheless, the degree to which these innovations overcome the earlier mentioned challenges and support the sustainable development of rural areas is not well understood.

1.2 Research Purpose

The primary purpose of this is to assess how microfinance educate (MFIs) in rustic Kerala improve monetary incorporation and cultivate business enterprise among marginalized population.

Research Objectives

1. To Assess the Role of MFIs in Fostering Financial Inclusion and Entrepreneurship

This means understanding how MFIs in rural Kerala have helped in the advancement of financial inclusion by offering affordable financial services. Anjum et al., 2020; Ahtesham & Mittal, 2019 will be used to assess the socioeconomic influence of microfinance on income generation, savings and income generation and economic stability of the rural people.

2. To Determine and Evaluate Obstacles that Kerala's Rural Inhabitants Face in Accessing Microfinance

This objective seeks to establish other factors like high interest rates, cumbersome procedures of acquiring microfinance, and low financial literacy levels as some of the factors that affect the ability of the inhabitants of the rural areas in Kerala to access microfinance services. The following are some of the challenges that will be

explored with the help of findings from the latest studies (Barguelli & Bettayeb, 2020; Ene & Inemesit, 2015).

3. To Outline Suggestions for Strengthening Microfinance's Impact on Rural Development

To outline suggestions for strengthening micro finance institutions to ensure that the impact of micro finance on rural development is further improved in Kerala. It will build upon the recent publications (World Bank, 2022; PwC, 2023) to recommend changes of the policies, better ways of targeting the rural population, and the improvements of the financial literacy programmers for rural clients.

1.3 Research Questions

Research questions are specific inquiries that guide a research study, helping to define its focus and objectives. They are designed to address gaps in existing knowledge, explore relationships between variables, or solve a particular problem.

1. How do MFIs contribute to financial inclusion and entrepreneurship in rural Kerala?

This research question focuses on assessing the specific ways in which MFIs in rural Kerala enhance financial inclusion and stimulate entrepreneurship among marginalized populations. It aims to research the variety of financial services provided by MFIs, including microcredit, deposits, and insurance, and effects that the financial services have on economic processes in rural areas. Referring to Anjum et al. (2020) and Ahtesham & Mittal (2019)'s research that investigate the positive effects of microfinance on the socioeconomic status of the borrowers, the study will

demonstrate how these services assist individuals and small businesses to improve their financial standing and outcomes, including income and savings.

2. What are the primary barriers that rural inhabitants in Kerala face in accessing microfinance services?

This research question seeks to establish and analyse the challenges that limit the utilization of microfinance services among the rural people of Kerala. These include; high-interest rates, complicated procedures to fill, little financial education, and physical distance as mentioned by Barguelli & Bettayeb (2020) and Ene & Inemesit (2015). Therefore, the study aims at establishing how these barriers can be overcome to enhance accessibility and enhance the role of MFIs for the development of the rural areas.

3. What recommendations can be proposed to strengthen the impact of MFIs on rural development in Kerala?

This research question focuses on outlining actionable recommendations aimed at enhancing the effectiveness of MFIs in promoting sustainable rural development in Kerala. Based on the literature review, this study will further recommend the following policy recommendations such as policy changes, financial and digital literacy initiatives, the development of MFIs and local communities, and the strengthening of institutional capacity and governance as proposed by Hamood & Abdo (2023) and Jayashree et al. (2022). The following recommendations are made with an intention to enhance the functioning of MFIs in achieving the goal of economic enfranchisement, entrepreneurship and financial inclusion in rural Kerala.

1.4 Hypotheses

The aim of a hypothesis is to develop a statement which can be tested and this statement gives a prediction on the line of the relationship between the different variables which are under test in any given study. In addition; it provides a clear line of investigation to follow since it assists in determining possible consequences and guides the data gathering exercise. In this research hypotheses such as H1, H2, H3, hypothetically assume the effects of Microfinance Institutions (MFIs) in the economic development of rural Kerala in terms of income generating activities, business venture creation and general financial enfranchisement. Through validating these hypotheses, the research can either support or reject these expected effects which will in turn help to advance the understanding of the role of MFIs in enhancing the quality of lives and the standard of living in the rural areas as well as the overall economic development of those regions.

H1: MFIs have a positive externality on the standard of living of the rural people in Kerala by creating income, savings, and wealth.

H2: Availability of cash and financial services has a direct impact on the establishment of new forms of businesses and income generation in rural Kerala.

H3: The social performance efficiency of operational MFIs in Kerala has significant impacts on the availability and demand for financial services among the rural communities, which in turn, would enhance the financial inclusion and the economic development of the region

1.5 Research Rationale

MFIs have emerged as pivotal players in enhancing financial inclusion and fostering entrepreneurship among marginalized populations in rural Kerala. The purpose of this study will

be to explore the diverse roles of MFIs, analyze the current challenges of accessing the services and provide effective solutions that would ensure the delivery of these services to enhance the development of rural areas.

The importance of this study therefore lies in finding out the role and ways through which MFIs deliver microloans, savings and insurance products to the rural populace in Kerala. The literature published in the last few years has identified that such services support the economy and enhance the quality of people's lives by enabling various economic transactions and activities for individuals and small businesses (Anjum et al., 2020; Ahtesham & Mittal, 2019). These initiatives are important in a place where conventional banking solutions are unattainable because of the strict requirements for qualifying and geographical limitation (Tan et al., 2023).

However, the study focuses on some of the perennial issues that limit the efficient use of microfinance in the rural area of Kerala. Some of the challenges cited include high interest rates, cumbersome procedures of applying for loans and poor financial literacy (Barguelligil & Bettayeb, 2020; Ene & Inemesit, 2015). It is therefore important to identify these barriers to develop specific strategies that will improve the usage and ensure that the social and economic impacts of microfinance programs are optimized.

Based on the RBV theory, which posited that firms are bundles of resources, the study develops a research conceptualization of MFIs as having resource and capability to overcome structural barriers to development. Some of these are the physical infrastructure, human capital, financial capital, and organizational culture through which the MFIs can enhance their operations and clientele base with a focus on the rural customers.

The recommendations made in the study draw from evidence and best practices from the recent empirical studies. The strategies include; financial education by targeting the community, through financial education, the adoption of digital technologies in the delivery of services, partnership with local stakeholders and government departments (World Bank, 2022; PwC, 2023). These interventions seek to enhance the institutional capacity, efficiency and therefore increase the developmental effectiveness of MFIs in the rural areas of Kerala.

This study aims at examining the extent of financial inclusion and entrepreneurship development with the help of MFIs in rural Kerala and thus adds to the existing literature on sustainable development and poverty reduction. Thus, the study aims at disseminating the knowledge of potential strategies for the improvement of the socio-economic status of deprived groups due to microfinance practices by identifying the major concerns and providing policy implications for the policy makers, practitioners, and researchers.

1.6 Problem Statement

MFIs are very active in the rural area of Kerala, where they act as important facilitators of financial services and Microenterprise development to the excluded groups. Nonetheless, the fact remains that the ability to access and to use the microfinance service remains a challenge to many of the rural residents. Thus, the purpose of this research is to explore the role of MFIs in improving financial access and promoting business development in rural Kerala with the help of the identified constraints that limit the access.

In Kerala, microfinance institutions provide suitable financial products including micro credit, savings and insurance that are significant to enhance the economic status of rural women and small business entities (Anjum et al., 2020; Ahtesham & Mittal, 2019). These services help people to

engage in productive ventures such as farming, animal breeding, and small businesses to the improvement of their local economy productivity and sustainability (Hamood & Abdo, 2023).

Nevertheless, several barriers hinder the proper use of microfinance in the rural areas of Kerala as follows. Some of the barriers that exist include; high interest rates, cumbersome procedures of obtaining credit, and poor financial literacy among the rural people (Barguelli & Bettayeb, 2020; Ene & Inemesit, 2015). However, language barriers, and more critically, geographic isolation, as well as lack of trust in financial institutions, amplifies these challenges and reduces access to financial services (World Bank, 2022; Milana & Ashta, 2020).

The above challenges must be tackled for enhancing the effectiveness of the MFIs in terms of rural development in Kerala. Therefore, this study aims at identifying the factors that affect the accessibility and use of microfinance to advance recommendations that can be implemented. Such recommendations may include changes in the policies that affect interest rates, increasing financial awareness among people, and better use of technology in the provision of services (PwC, 2023; Das & Chatterjee, 2023).

Therefore, this study attempts to understand the ways through which MFIs can improve their performance in reaching the financially excluded and entrepreneurial clients in rural Kerala. The study will therefore help in the formulation of policies that will enhance the contribution of MFIs to sustainable development and economic growth by identifying the current literature and empirical evidence.

1.7 Research Structure

This thesis is structured as follows:

1. **Introduction:** Overview of microfinance's role in fostering financial inclusion and entrepreneurship in rural Kerala.
2. **Literature Review:** Examination of existing research on microfinance's impact on rural development and entrepreneurship.
3. **Methods:** Description of research design, data collection, and analysis techniques used in the study.
4. **Results:** Presentation of findings regarding the effectiveness of microfinance institutions in enhancing financial inclusion and supporting rural entrepreneurs.
5. **Discussion and Conclusion:** Interpretation of results, implications for policy and practice, and recommendations for improving microfinance initiatives in rural Kerala.

2 Literature Review

2.1 Overview

This literature review looks at the three research questions of this study on the involvement of MFIs in enhancing the practice of financial inclusion and encouraging rural entrepreneurship in Kerala. First, it looks at what MFIs do to enhance the level of financial access and support local entrepreneurship by delivering financial services and products. These include matters concerning micro-finance service such as micro-credit, micro-savings and micro- insurance and how these affect the economic activities of rural households and micro-entrepreneurs. Secondly, the review assesses and outlines factors that limit the ability of the inhabitants of the rural area to access microfinance services. Such barriers may include high interest rates, complex structures to access credit, lack of information and lack of trust in the formal credit institutions which all act as hindrances to efficient use of microfinance. Thus, by describing these challenges, the review aims at raising awareness about the factors that should be promoted to improve access. Finally, based on the outcome of the first two objectives discussed in the literature review, they list the steps to improve the role of microfinance for development in the rural regions. Recommendations may include changes to the policies of the microfinance institutions in a bid to enhance the targeting strategy for microfinance, and the development of new micro finance products and services that would be suitable for the rural needy. The approach proposed in this research is therefore a more inclusive one with the objective of providing clear recommendations on how the stakeholders can better manage the MFIs for the development of the rural regions.

2.2 Comparative Analysis of existing literature review

Sajesh, V (2013) conducted a study to identify the factors affecting the success of agricultural women JLGs In Kerala. The study also recommended that there were several factors that may include social participation, economic incentives, group dynamics and support from promoting institutions as some of the key requirements for success of such groups. To gauge the effectiveness of women's JLGs in agriculture, the researcher used an effectiveness index that included different aspects like resource mobilisation, extension orientation, marketing effectiveness, technology adoption, and capacity building among others. The results obtained in the study showed the improvement of all the observed aspects in the period following the creation of JLGs, which serves as an indication of the intervention contribution to enhancing the development of the rural areas.

Ene & Inemesit (2015) analyzed how the microfinance has enabled Nigeria to be financially inclusive within the period of 1990-2014. The authors also found out that microfinance institutions played a very vital role in promoting the growth of SME and savings among the people residing in the rural areas. They recommended opening branches about rural areas to satisfy unmet credit needs. Thus, this research aims to stress the importance of its focus to make financial services accessible to the population and to create the necessary products to fit the population's demand. In their study, Ahtesham and Mittal (2019) discussed the social and economic impacts of micro-finance on farmers of Punjab. They used a multistage purposive sampling technique in their study and concluded that micro financial has a positive micro impact on income, savings and generated wealth for the farmers of all income groups. This social-economic advantage shows how micro financing can help in improving the economic status of rural societies.

In a study that assesses the impact of microfinance on the economic development of Tunisia Barguelli & Bettayeb (2020) concluded on some mixed results. Micro finance indicated negative impact on elite measures such as poverty per capita ratio and GINI index of inequality; but was positive for financial profitability measures like cost of exploitation and asset returns. This means that micro-finance as a tool can impact on the economy or social development at variable social effects.

Anjum et al. (2020) studied the socio-economic characteristics of the farmers and issues associated with micro finance access in Pakistan. In the conclusion of the study, microfinance was found to have made a positive intervention in improving income, health and education. But it has also identified factors such as high interest rates and bureaucratic loan procedures that have limited the operations of microfinance.

According to Hamood and Abdo (2023), microfinance has played a positive impact in the economic development of Yemen through stability of the economy. Jayashree et al. (2022) highlighted the banking sectors' roles through SHGs in Kerala and found that JLGs played a vital role in economic development. They emphasized the activities to be taken by the NGOs ahead of time for the growth that includes all.

2.3 Microfinance and its contribution toward financial inclusion

The conventional definition of financial inclusion, based on the coverage and depth of ownership and utilization of financial instruments and services, means that every person has efficient access to the financial institutions' outreach. Since the financial structure is mainly dominated by the commercial banks where majority of the bank accounts, credits and debits, saving and borrowing options etc. are managed, the people sometimes do not meet the stringent banking standards to

become customers of those banks or in the most general scenario, such offers and products are out of reach for the lower income group populace of the developing world. Therefore, the phenomenon of microfinance emerged in the financial system to meet the demand and provide products and services to the poorest segment.

2.3.1 The notion of microfinance and microcredit (microloan)

Micro finance in fact is an idea that was first thought of in the 18th century but the expansion of this idea has only been seen in the few decades mostly in the under developed and developing culture. Moreover, the first system of microcrediting and microcredit organisations, which were the predecessors of the contemporary microfinancing institutions, and the 'Irish Loan Fund' system, which was based on Jonathan Swift's idea. Despite the fact that his idea of lending money to poor residents without security Credit Union idea was accepted very reluctantly; however from 1840 it spread in Ireland and about 300 funds were developed. Out of this £1,558 million was given to about one-fifth of the total households in Ireland. The four basic components of Swift's lending scheme were: Some of the features of microcredit include small amount of loan, weekly repayments, the use of co-creditors instead of collateral and lawsuit in case of failure to recover the amount (Das, & Chatterjee, 2023).

The further development of the ideas for microfinancing as well as the presence of the modern institutions of microcredits is linked with the Grameen Bank of Bangladesh and its founder Muhamed Yunus. Yunus started the fight against poverty in 1974 in the famine phase of the Bangladesh in Rangpur. He was finally able to locate that small credit, also known as microcredits, can be of much benefit to the poor individuals. At that time in his career, he started the study of the economy in the villages. His first loan was twenty-seven US dollars and he gave this money

on a commercial unsecured manner to a woman who was into the business of producing bamboo furniture (Hamood & Abdo, 2023). This was the time when the conventional Banks & NBFIs of Bangladesh were not willing to lend small amounts of money to the poor due to high risk involved in micro borrowing. But what resonated with inspiration in Yunus was that the poor people would repay their loans and that micro credit can be made into a successful business model. In 2006 the Norwegian Nobel Committee decided to include the Grameen Bank from Bangladesh and its founder to the list of the Nobel Peace Prize and to credit the economic and social development of the poorest since it is known that microcredit can give a start to an entrepreneurial activity to a number of poor people, thus, in effect acknowledging the entire sector of microcredit in the world, which is most successful in combating poverty. In the Committee it was noted that they said that the goal of ensuring long-term peace in the world cannot occur if one part of the population of the poor finds a way to get out of the 'circle' poverty or microcredit which is one of the ways. Tan et al. (2023) also made the same conclusion, "Extreme poverty, thus, amounts to a lack of enough capital to get started; it remains to be seen how poor people can be given a helping hand up to the first rung of the ladder of development that hovers overhead." To introduce these new types of financial institutions the world needed to evolve, as claimed Lusardi & Mitchell (2023).

However, at the time when the micro finance had been considered as an unsustainable model of financial intervention for years by the World Bank (WB) and other International donors and financiers. Yet, after the decades of successful work, some leaders of the WB mentioned that 'microcredit programs provide a new life to the market economy in rural areas and the lowest classes of the population in the world By offering fight against poverty in terms of the market approach, millions of people have got the chance to change their status with their dignity.' (Tan et al., 2023).

Microfinance has developed from the micro-crediting concept although, in academic writings, the two terms, namely microfinance and microcredit (or micro-crediting), are sometimes used synonymously, and this is wrong. Namely, as it will be discussed in detail further, Grameen Bank, which was transformed into a modern microcredit MFI, began the process of microfinance development with microcredit for the poor (Lusardi & Mitchell, 2023). However, as the bank expanded, thus, meeting the need for financial services within the poor populace, MN also extended other services apart from microcredit services, including, savings services, money transfer services, among others, therefore making microcredits as just one of the financial products offered in the microcredit financial institutions conducting business in relation to microfinancing. Microfinance can be defined in terms of a variety of services for financial intermediation – credit and savings – conventional and digital – offered to clients who, according to neoclassical theory, cannot access standard financial/banking products and/or services (Anakpo et al., 2023). According to CGAP in its wide definition, microfinance is the delivery/delivery of financial services to the poor and low-income clients with little or no access to the products or services of the traditional financial institutions while microfinance in its strict definition is the delivery of microcredit to individuals, whose businesses are considered informal by the most recently developed techniques in the last 30 years; other services provided by microfinance institutions are also include savings, insurance and Microfinancing targets the base of the population pyramid, as well as the people who desire to start a business, SMEs or those people who cannot provide security while taking credit, have volatile income, or bad credit score (Lusardi & Mitchell, 2023). It has been perceived and as it has been discussed, the micro-finance project acted as a tool to solve the financial problems of the low-income group citizens in many parts of the world including the south Asian countries like India, Bangladesh, Latin American countries, Bosnia and Herzegovina etc.

Due to the advancement in the financial technology brought by the enhanced mobile and internet services in the society, the micro finance sector was also able to establish its ground in the international market (Lusardi & Mitchell, 2023). Market size of the microfinance industry to 2026 is USD 122.46 billion and the CAGR of the market is expected to be 11 percent in the given period.61%. This has however been propelled by technology, which has been identified as one of the growth drivers of the microfinance industry. In addition, international organisations and several countries have been struggling in an effort to eradicate poverty by extending non-credit financial services to this category of customers (Lopez & Winkler, 2018).

2.4 The microfinance sector and microcredit organizations

Microcredit financial institutions/organizations are those who are basically driving the development of the micro finance sector. Microcredit banks are non-bank, non-governmental and non-profit or for-profit institutions that are primarily engaged in microcredit business targeting the low-income earners with the ultimate aim of micro-entrepreneurship (Tan et al., 2023). These are credit organizations which do not possess attributes of banks and do not carry out banking operations according to the system of banking. In the microfinance market there are many performers or MFIs, as they are also called. They may be traditionally distinguished as non-profit organisations, cooperative associations, banks or other special purpose financial institutions (Demirgüç-Kunt et al., 2021).

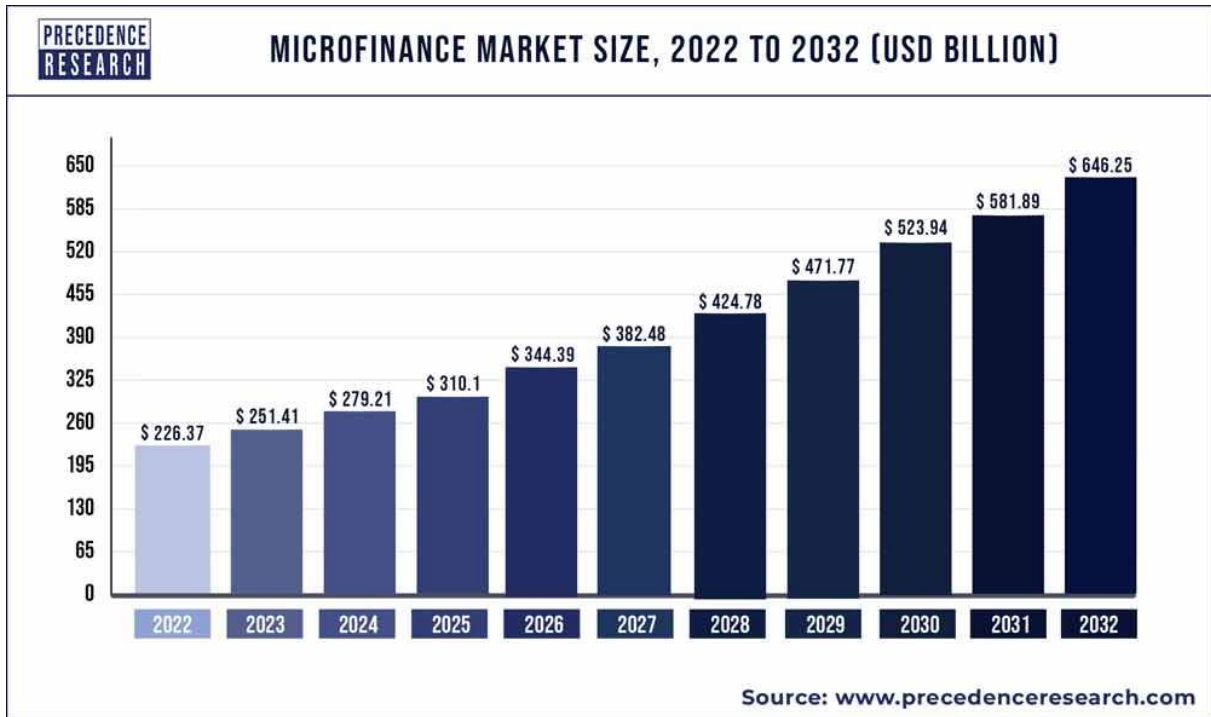


Figure 1: Microfinance Market Size and Growth 2023 to 2032

Starting from the given definition, it is possible to distinguish two types of microcredit organizations:

1. Non-profit microcredit organizations, which operate as non-governmental organizations and
2. Profit microcredit organizations, which have the status of a financial institution.

In general, the microcredit sector grows with the foundation of new Non-Governmental microcredit organizations that can evolve into efficient financial institutions over time as a result of the diversification of the credit portfolio and the addition of new clients (Demirgüç-Kunt et al., 2021). Non-profit micro-credit organization can also be compared with for-profit micro-credit organizations based on the legal difference, which is source of financing of business operations.

2.5 Financial Inclusion: Concept and Importance

Financial inclusion is a multifaceted concept that encompasses ensuring individuals and businesses have access to essential financial services that meet their needs effectively and affordably (World Bank, 2022). It can be considered as a very important solution to poverty and inequality since it helps to include excluded segments of the population into the financial system.

Traditionally, financial exclusion has affected millions of people excluding those in rural and remote areas and deprived them of the barest minimum of financial services including savings, credit, insurance and payment systems (Sinclair, 2021). Banks and the incorporating value system that has been advocated for by micro financing gurus such as Muhammad Yunus revealed the concept of micro financing through provision of small loans that empowered the poor economically.

The implementation of the financial inclusion strategies has received a shot in the arm in the recent past due to the digitization. The mobile money and other digital payment products provide financial services to people who would otherwise not be able to access the same especially in the developing world (Demirgüç-Kunt et al., 2021). The COVID-19 pandemic has increased the burden on digital financial services to improve the economic sustainability and stability in challenging circumstances (Tan et al., 2023).

India especially the Kerala state has focused on offering financial services via technologies in an effort to mitigate on geographical significance and provision of universal financial services to the rural population. Such initiatives as Digital Literacy and Mobile Banking Units have enabled the citizens to manage a better financial life and thus perform more as economic citizens and agents (Das & Chatterjee, 2023).

But, financial inclusion remains as challenge that most developing countries grapple with because the target groups lack adequate financial literacy while governments and other agencies have policy restrictions that hinder the growth of financial markets (Lusardi & Mitchell, 2023). To address these challenges, Governments, the financial sector, and civil society should partner through policy advocacy for women's Fintech use and Fintech product development that is informed by culture openness (Bayar et al., 2021).

Therefore, the topic of financial inclusion is not just about their capacity to access financial services but also about helping people and other groups become less vulnerable, be active in income generating activities and have improved standard of living. When the financial services are in the process of being innovative, there is need to ensure that equal access to the services is provided to help in the creation of sustainable goals and eradication of poverty from the market place (Milana & Ashta, 2020).

2.6 An overview of microfinance sector and its contribution toward financial inclusion in India karela

According to the data depicted in the table above, the microfinance market share's growth rate is estimated to be 12%. It will rise from 86% from 2023 to 2028, with a total addition of USD 166.95 billion. It seeks to provide financial needs of the population in the low-income category and the consumer who cannot secure employment or adequate banking services and necessities such as small credit and savings. It is micro financial institutions or MFIs that are central to the discharge of this specific function of extending financial services to the excluded.

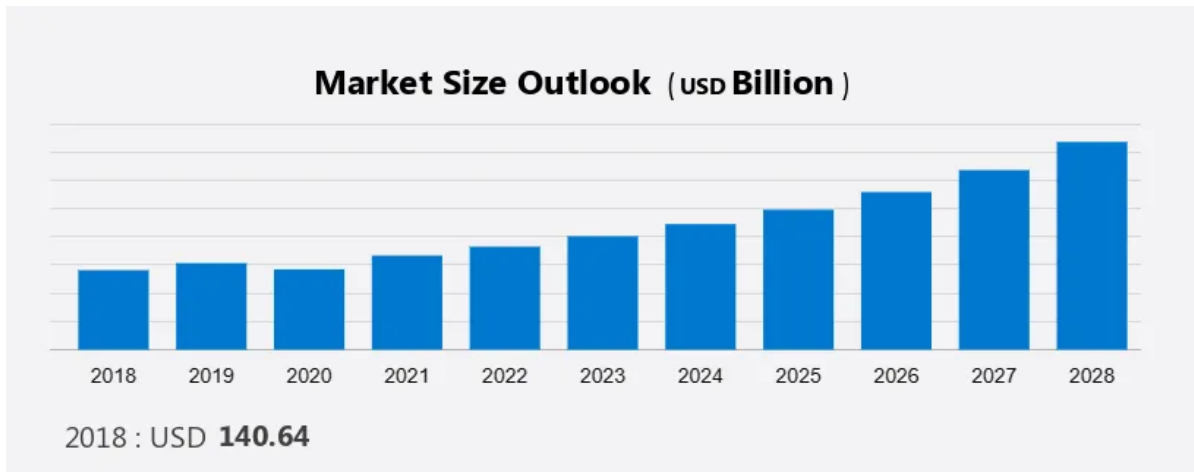


Figure 2: Microfinance institutions (MFIs) market size 2018-2028

Micro finance institutions are intermediary, which connect the poor and the needy of the rural area to access the financial services and business opportunities that can support their businesses and households in Kerala. There have been changes in the concept of micro financiers that involves the provision of financial services to the excluded and un-banked clientele, especially those in the lower income group of the global south including the South Indian state of Kerala. Anjum et al. (2020) has also identified that micro finance has helped to improve the socioeconomic status of farmers and small-scale entrepreneurs in several ways which proves the revolutionary role of micro finance to rejuvenate the economies.

This is especially the case in Kerala where people have little or no contact with the formal banking system, owing to the fact that most of the MFIs have strict conditions regarding the amount of credit a client is eligible for and where most of the MFIs are located. These institutions offer money related services and products including microcredit, deposits, insurance and remittance targeting base of the pyramid clients like the low-income earners and the small business people (Tan et al.,

2023). This accessibility is highly required since it provides the customer's segments that are unbanked or underbanked with various financial institutions.

The genesis of micro finance is considered to be present day micro finance with the Grameen Bank in Bangladesh operating on the principles provided by Muhammad Yunus. Yunus demonstrated that micro financing, through very small amounts of money that can be grouped to get loans might assist in the creation of jobs and eradicating poverty (Hamood & Abdo, 2023). Other changes that have occurred locally in the economy and the needs of the community have also impacted the services that are being offered as well as the demand for such services, this model has been implemented and operationalized in MFIs that are present in Kerala (Milana & Ashta, 2020).

But certain problems are observed in microfinance sectors in rural Kerala even with this achievement. This is because of constraints such as low financial literacy and awareness which reduce the degree of effectiveness of these services as pointed out by Lusardi & Mitchell (2023). However, it is also necessary to mention such factors as regulatory matters and operational viability which are significant because they cannot be left out of the list of considerations and are still rather underdeveloped (PwC, 2023).

Further, it becomes imperative to try and find out as to how the performance of MFIs in Kerala could be further strengthened in the future. First of all, it is necessary to raise the level of financial and digital literacy of the population, especially those who lives in rural areas (World Bank, 2022). Other measures such as increasing the knowledge and awareness of locals on savings and proper spending, as well as the opportunity of micro-finance could enhance the outreach and financial inclusion ratios significantly (Anakpo et al., 2023). Secondly, the evaluation of the practices of

MFIs, actions of the government, and local communities' actions can improve the effectiveness of microfinance operations (Qin et al., 2021).

2.7 Impact of Microfinance on Rural Development in Kerala

Micro finance institutions play an important role in the improvement of the financial services for business ventures in the rural areas of Kerala. Many people in this state are farmers and the majority of them live in the countryside; they cannot afford to go through the formalities of getting conventional banking services due to the high standards as well as no physical branch to visit. This section will attempt to examine to what extent MFIs are engaged in the process of rural development in Kerala particularly in the financial sector and entrepreneurship.

Financial Inclusion through Microfinance

Some of the financial services that are offered by the MFIs in the state of Kerala include micro loans, deposit taking and micro insurance to the excluded clients. This is in line with the financial inclusion view which is the ability to offer products that are cheap and meet the needs of the various clients (World Bank, 2022). Because of the fact that microfinance institutions provide microcredit without the traditional pledge, the rural business owner is able to start or develop his/her business and thus contribute to the rural economy as stated by Hamood & Abdo in 2023.

Entrepreneurship Development

Microfinance does not only provide the clients with credit but also helps them become economically active through the creation of small businesses. In the context of Kerala, which has an agrarian and micro-entrepreneurial base of the economy, the MFIs assist individuals to finance productive activities such as farming, rearing of livestock and operation of small scale industries

(Anjum et al., 2020). This in a way empowers the households and also, has a direct effect on the household income as well as the stability of the economy and the future proofing of the rural economy (Lopez & Winkler, 2018).

Challenges and Obstacles

However, they have low consciousness about micro finance, high cost of borrowing and low visibility of MFIs in rural Kerala (Milana & Ashta, 2020). However, there are factors such as low financial literacy, and inadequate infrastructure that limits the consumers in their ability to maximize the benefits from services offered by micro finance (Lusardi & Mitchell, 2023). The above challenges are the ones that require enhancing the efficiency of MFIs in the development of rural communities.

2.8 Suggestions for strengthening Microfinance's Impact on Rural Development

Possible measures aimed at improving the utilization of micro financing in the development of the rural areas of Kerala can be suggested from the existing literature and case studies of MFIs in other countries.

First, one has to increase the level of financial literacy of the rural population, which will eliminate the existing issues. The rural clients especially those from the Kerala region have a very poor perception on the available financial products and services which is a major drawback in the right decisions to be made for the utilization of the micro finance products. Therefore, there is a need for the MFIs to go to the schools, colleges and other organizations in the community in order to develop effective financial literacy programs. These should include simple calculations, savings, credit, and expenses that are attached to products such as loans and insurance.

Second, there is an increased need to improve digital financial services which is highly applicable. The incorporation of the digital technologies in microfinancing is believed to improve the accessibility and effectiveness of microfinance especially to the rural dwellers. Mobile money providers must therefore focus on increasing the convenience of the mobile money services and the enabling channels through which transactions and financial solutions can be conducted. Besides, this approach also makes it easier for the clients to get the services in the course of their day-to-day activities, and at the same time, the cost of operation is reduced for the MFIs to make their services more effective in the long-run.

Thirdly, there is need to practice entrepreneurship by offering appropriate financial services. Microfinance is not only microcredit but also other services for example; savings, insurance and transfers. Such products can help the rural businessmen and women by improving financial capability in undertaking or expanding their businesses. Besides, the loan repayment flexibility and reasonable interest rates should be provided by MFIs because borrowers in the rural areas are engaged in the informal and unpredictable cash economy.

But to sustain the impact it is also important to build institutional capacities and governance within the MFIs. This includes the improvement of the level of disclosure, corporate governance and the capacity to address risk associated with investments. It is necessary to develop a policy that will reduce bias and protect the interest of the clients as they are being offered loans. Also, the training and development of MFI staff in customer services, financial and technology will improve the operations of the company and customers satisfaction.

They also help in the growth of micro finance programs as seen through collaborations with local governments, NGOs and other international development organizations. These can be useful in

increasing the availability of other resources, money and information relating to the strategies of rural development. Besides, they can engage in lobbying to ensure the right legal framework for delivery of financial services and defending rights of excluded groups is developed.

Finally, there is the assessment of the microfinance interventions in order to see the effectiveness of the microfinance interventions for the purpose of making further decisions and modifications. MFIs should ensure that they have adequate mechanisms of monitoring performance indicators such as recovery of loans, savings and business activities of the borrowers. In regards to the effectiveness of microfinance interventions for the rural households and communities, the idea is that impact studies should be conducted periodically.

Thus, based on the above analysis, it can be safe to conclude that if the Micro finance institutions put much emphasis on the development of the financial literacy, the development of the digital financial services, promotion of the entrepreneurship, enhancement of the institutional capacity, encouragement of the partnerships and use of the effective monitoring mechanisms, they will be able to improve the impact on the development of the rural areas in Kerala. Unlike the other strategies which only facilitate enhancement of provision and uptake of financial services, these strategies also enhance human and community capability to realize sustainable livelihoods and economic returns.

2.9 Conceptual Framework

Dependent Variable: Financial Services Accessibility

Accessibility of Financial Services is the ability of the residents of the rural areas in Kerala to access and utilize the services of the MFIs. These include micro-credit, deposit taking and insurance and cash transfers.

Independent Variables:

1. **Socioeconomic Empowerment:** This variable quantifies the extent to which the MFIs have succeeded in enhancing the quality of life of the rural folks in Kerala both socially and economically. Some of them are; high income, better saving and wealth creation among the rural people and small-scale enterprises.
2. **Entrepreneurial Development:** The function and performance of MFIs in the promotion of entrepreneurship in the targeted rural area in Kerala is evaluated in this subject Entrepreneurial Development. It evaluates the impact of microcredit and other financial services to trigger business activities like farming, rearing of livestock, cottage industries among others (Anjum et al., 2020).
3. **Institutional Efficiency:** Institutional Efficiency focuses on the ability of MFIs to deliver the appropriate financial products and services to the rural people. It includes aspects like the coverage level of the campaign, the time taken to disburse the loans, the level of satisfaction of the customers and the efficiency of the organisation (Jayashree et al., 2022).

2.10 Theoretical Framework: Resource-Based View (RBV)

The Resource-Based View (RBV) can be used to explain how MFIs in Kerala can use internal resources and capabilities to enhance the availability of financial services and promote rural development.

As RBV posits, MFIs possess strategic resources and capabilities that allows the organisation to outcompete others in reaching out to the rural poor (Barney, 1991). These resources can be grouped into the following:

Physical Resources: For instance, branch networks, Information technology for online banking and mobile banking solutions that expand the access to financial services (Global Market Insights, 2023).

Human Capital: Availability of professional staff and managerial experience in micro financial activities to improve delivery of services and management of the customer relations (PwC, 2023).

Financial Capital: Access to funds and financial sustainability and profitability that enables MFIs to remain relevant and reach out to the poor in the rural areas (Ene & Inemesit, 2015).

Organizational Culture: Organizational factors of the Microfinance Institutions (MFIs) that are targeting to be ethical and socially responsible towards rural clients in order to build the trust and loyalty with them (Barguelligil & Bettayeb, 2020).

Thus, the proper utilisation of the aforementioned resources can assist MFIs to overcome the cultural and structural barriers that exist in the rural regions of Kerala such as low levels of financial literacy, lack of trust in formal financial institutions, and geographical isolation (World Bank, 2022). Hence, RBV is centered on the choice and effective application of resources and capabilities that will support the objectives of enhancing financial and economic advancement of rural communities.

2.11 Summary

In terms of the literature review, this study aims at establishing the contribution made by the MFIs in the improvement of the level of financial inclusion and the encouragement of entrepreneurship in the rural area of Kerala. The review is structured around three primary objectives: evaluating the ability of MFIs in improving the availability of finance and entrepreneurship, evaluating the major challenges in accessing micro finance services and making suggestions on how to improve the effectiveness of MFIs in the development of the rural sector.

In the first place, concerning the level of financial inclusion, micro finance institutions that are in Kerala play a significant role in providing micro financial services and products including micro credit products like micro loans, micro saving accounts and micro insurance. Anjum et al. (2020) and Ahtesham & Mittal (2019) establish that these services contribute towards enhancing income, savings, and financial well-being of the rural households and small business undertakings. This goes to show that micro credit has the capability to initiate change at the base of the pyramid.

Secondly, the following are some of the challenges the clients in rural Kerala face when trying to access microfinance services; High interest rates, Complicated procedures, and lack of financial education. These challenges reduce the extent to which microfinance is used even though it has its benefits. These barriers must be addressed to improve the delivery of MFIs and increase its impact on the rural development as highlighted by Barguelligil & Bettayeb, 2020; Ene & Inemesit, 2015.

Finally, based on the conclusion made, the strategy of enhancing the efficiency of MFIs is the one that calls for the reduction of interest rates by employing some policies, streamlining the procedures that are necessary in accessing microfinance services, and the enhancement of the level of financial consciousness among the rural people. The following recommendations should go a

long way in enhancing the best of the MFIs towards the achievement of sustainable development and upliftment of the rural people of Kerala.

This study fills research gaps in the knowledge of microfinance institutions (MFIs) and the contribution to financial inclusion and entrepreneurship in rural Kerala. Although prior research has investigated the overall effects of MFIs on economic development, there is a dearth of targeted research concerning the issues and performance of MFIs in this geographic area. However, more attention has not been paid to the analysis of the specific obstacles experienced by the rural people of Kerala that prevent them from using microfinance services effectively, including high interest rates, complicated procedures, and low financial literacy.

Microfinance literature has pointed out the possible advantages of micro finance services but there is a dearth of specific studies on how the micro finance services help in income generation, savings build up and entrepreneurship development in the specific socio-economic context of rural Kerala. This research fills these gaps by assessing the position of MFIs in improving financial access and entrepreneurship, pinpointing certain challenges, and providing targeted strategic suggestions appropriate for the local context.

Thus, this study helps to fill these gaps and generate useful findings to enhance the effectiveness of microfinance intervention for enhancing rural development in Kerala, thus facilitating the formulation of policies and practices in the microfinance sector that are more effective. Therefore, the literature review provides information on how MFIs can provide solutions to the issues of financial inclusion and entrepreneurship in the rural areas of Kerala, the challenges to microfinance services delivery, and the strategies to improve on the outcomes of the interventions. By handling these aspects comprehensively, this study should be able to give recommendations

that should assist enhance the operations of MFIs so as to encourage the growth and development of everyone in the region.

3 Methodology

3.1 Methodology Overview

The study employs a quantitative research method, utilizing a survey-based approach facilitated through Google Forms. Data collection focuses the participants on the study as rural micro-finance users in Kerala with variation in demographic characteristics. Descriptive statistics will be used in the study and the statistical tool to be used for data analysis is SPSS (Statistical Package for the Social Science) to determine the correlations and patterns of the data collected. The study aims at evaluating the levels of financial access, borrowing, repayment, and demographics of the respondents. Reports such as line graphs, pie charts, and bar graphs will be used to present the findings in the most presentable manner.

3.2 Target Population

The target population for this research includes all those who are 18 years and above, living in rural area of Kerala and associated with MFIs. In particular, the study targets 80-100 participants involved in entrepreneurial activities supported by MFIs such as small business operators, farmers, artisans, and other self-employed persons. The sample size of 80-100 participants was determined based on the study's scope, available resources, and the need for a manageable yet representative sample of rural Kerala residents associated with MFIs. A targeted sample within this range ensures a balance between statistical validity and practical feasibility. The size allows for meaningful data analysis while capturing diverse entrepreneurial activities like small business operations, farming, and artisan work. This range was chosen to provide insights into the impact of MFIs on economic activities in rural areas. These participants cut across all the socio-economic status within the rural areas and thus may differ in education level, income, and financial capital. As such, this study

seeks to provide insight into the effects of microfinance on financial and business access in rural Kerala through the exploration of the participants' accounts. The results will help to identify the problems of these populations in terms of microfinance services and products, the usage frequency of the services, and the results of providing Micro Financial services in terms of socio-economic development. This targeted approach of the study helps in achieving the objective of capturing detailed information regarding the contribution of the MFIs in the economic empowerment and development of the otherwise neglected rural disadvantaged groups. Some of the ethical issues are to do with informed consent, participants' data anonymity and general ethical conduct when conducting research.

3.3 Participant Selection

The participants chosen randomly to get a large pool of representation from the rural households who are using the services of MFI in the region of Kerala. The survey was conducted online, and the participants reached through their email, WhatsApp, Instagram and through advertised links on social media platforms. This approach is taken to ensure that the sample is diverse, in terms of socio-economic status and exposure to MFIs.

3.4 Sample Size

The study aims at receiving about 80-100 responses and to capture most of the financial inclusion indicators, loan uptake, repayment figures and the entrepreneurial effects. The respondents free to participate in the research and efforts made to ensure that they provide their informed consent to participate in the research and that their information kept confidential. The privacy of the financial information respected bearing in mind the ethical issues that revolve around the aspect; permission

from the respective institutional review boards shall be sought to ensure the ethical practice during the study.

The study seeks to establish the centrality of MFIs in the promotion of financial and economic development particularly among the rural women in Kerala. It aims at evaluating how these MFIs enhance provision of financial products and services as well as encouraging entrepreneurial ventures among excluded groups.

3.5 Research Design

This research uses descriptive research design which is in line with the methodological approaches used in the current literature (Eco, U., 2015). The first research strategy is a survey and case study analysis as a way of conducting an exploratory and descriptive investigation of the subject of the study, the MFIs to understand their contribution to the provision of financial services and support of entrepreneurship in rural areas of Kerala in India. Questionnaires administered online to rural households involved with MFIs. These surveys capture quantitative information on the indicators of financial access, loan demand and repayment rates and the social-economic characteristics of respondents. Quantitative assessment achieved through closed-ended questions dealing with such issues as finance and business performance.

Hence, the following research objectives of this study are as follows: This research design seeks to offer a critical understanding of MFIs' role in rural development in the context of Kerala, so that policy makers and strategists can derive practical lessons that could help to enhance the effectiveness of micro-financing in promoting inclusive growth and SMEs.

3.6 Research Approach

The research approach used in this study is quantitative in nature, and it seeks to establish the extent of interaction between MFIs and financial inclusion as well as impact on entrepreneurship in the rural regions of Kerala. This approach entails gathering and evaluating quantitative data with a view to measuring the social-economic impacts of microfinance services on the rural populace. Both close and self-administered questionnaires and surveys will be used to collect data on the demographic characteristics, financial practices, loans obtained from MFIs and the repayment capability of the rural households. The data collected will be analyzed statistically with the use of tools like correlation analysis, regression analysis, hypothesis testing and others to establish patterns within the data set. Data entry, data cleaning as well as data analysis will be enhanced by statistical software such as SPSS to enhance the reliability of the findings. Quantitative data will be presented in the form of line graphs, pie charts, and bar graphs to illustrate important trends.

3.7 Research Philosophy

Adopting a positivist research philosophy for this study involves a commitment to obtaining knowledge through objective observations and measurable phenomena. Positivism gives importance to facts and figures and the data is collected and analyzed in terms of numerical values with the intention of finding out the cause-and-effect relationship in the micro finance impact on rural development in Kerala. This approach is in line with the objectives of the study to analyse the level of financial inclusion and entrepreneurship created by the microfinance institutions (MFIs) and to use statistical techniques such as correlation and regression analysis to test the relationship between some factors which include loan uptake, loan repayment rate and business success indicators (Burke & Onwuegbuzie, 2005).

Positivism also strengthens the study in terms of methodological approach with the use of structured survey and quantitative data collection tools which makes the study more reliable and valid in establishing the socioeconomic effects of MFIs. Accordingly, the conduct of the research is grounded on the belief that sound policy recommendations and improvements to the MFI strategies are important for the sustainable rural development of Kerala.

3.8 Research Strategy

The research methodology of this study is basically quantitative, and the method used in this research is descriptive research method that intends to observe and describe the behavior of microfinance institutions on financial inclusion and entrepreneurship in rural Kerala. This approach enables a systematic collection of numerical data to assess the social-economic impacts of micro finance for instance income generation, saving, business performance among the rural populace. Questionnaires and surveys will be used as the main sources of data collection through which quantitative data on loan take-up, repayment, as well as demographic factors of the rural households borrowing from MFIs will be obtained. These surveys will incorporate closed-ended questions to allow the use of statistical tools such as SPSS, which will allow correlation analysis, regression, hypothesis testing in a bid to establish relationships and patterns in the data collected. Further, case studies to get better understanding of the various microfinance success stories and how microfinance has affected economic status of individuals and/or communities. Secondary data in the form of academic articles, financial statements and government documents will also be used to supplement the primary sources to enhance the context and results of the study. Some of the ethical concerns are related to issues such as informed consent, confidentiality and any issues that may be sensitive about finances. Collectively, this strategy is meant to give a broad view of how MFIs are involved in the advancement of the rural sector in Kerala and how its policies and

strategies can be improved to support the MFIs to achieve the goals of inclusive growth and entrepreneurship.

3.9 Data Collection

The survey questionnaire will be structured to capture quantitative data concerning the financial inclusion indicators, loan demand and repayment among the rural households that access micro finance institutions (MFIs) in Kerala. It will contain questions that will be designed as closed questions to fit research objectives and variables of interest that will include access to finance, loan usage and repayment history and socio-economic characteristic of the respondents.

3.10 Data Analysis

The data collected through the survey will be analyzed in detail to derive useful information regarding the impact of micro finance usage on the economic conditions in rural Kerala. First, collected survey data will be preprocessed where data collected from survey will be formatted and sorted to make it easier for analysis. Quantitative method of analysis will be utilized hence there will be a use of statistical techniques, especially SPSS (Statistical Package for the Social Sciences) to examine the relationships between the variables.

Descriptive statistical analyses will be used to analyze the survey and cordon the overall trends, frequencies and the central tendencies of the responses. Furthermore, inferential statistical techniques like regression analysis and correlation studies will be employed to determine the relationships between the independent variables (for instance; access to finance, use of loans) and the dependent variables (for instance; economic stability, success of entrepreneurship).

Data will be presented in the form of line graphs, pie charts, and bar graphs to make it easier for the users to understand specific findings. The credibility of the findings from the various methods will be cross-checked hence giving reliability and validity to the results in attaining a sound understanding of how micro finance enhances the financial enfranchisement and entrepreneurship in rural Kerala.

3.11 Materials

The questionnaire is designed in a way to capture respondent's attitude while providing detailed information on the extent of financial inclusion and adequacy of micro finance services in rural Kerala. It will seek to elicit finer response on the dependent variable through 5-Likert scale and the independent variables which are accessibility and satisfaction with microfinance services.

3.12 Ethical Considerations

In defining the inclusion and exclusion criteria for this study, ethical considerations are paramount to ensure fairness, respect, and confidentiality for all participants involved.

Inclusion Criteria:

1. **Age Range:** Participants aged 18 years and above, reflecting legal adulthood in India.
2. **Working Professionals:** Individuals currently engaged in microfinance activities or recipients of microfinance services in rural Kerala.
3. **Voluntary Participation:** Participants willing to engage voluntarily in the survey to uphold the principles of informed consent and autonomy.

Exclusion Criteria:

3. Individuals under the age of 18 years comply with legal consent requirements.
4. Non-participants in microfinance activities or services within rural Kerala.
5. Participants unwilling to provide informed consent or unable to understand the study's purpose due to language barriers or cognitive limitations.

These criteria seek to protect the rights of the participants, control and explain the way data is being collected and to ensure privacy of the participants during the entire research. Clearance from the relevant Ethical Review Committee will be sought to ensure that the research is done in compliance with the highest ethical standards.

3.13 Summary

The study focuses on assessing the impact of microfinance institutions (MFIs) on financial inclusion and entrepreneurship in rural Kerala, India, employing a quantitative approach.

Quantitative data will be gathered through online questionnaires completed through Google Forms to 80-100 rural participants involved with MFIs. This data will consider; financial ratios, loans taken, repayment rates, and socio-economic factors which will be analyzed for statistical trends and correlation using the statistical package for the social sciences (SPSS). The use of graphs will help in the presentation of results as a way of enhancing understanding of the results. Issues include the availability of detailed MFI information and involvement of rural people because of transport difficulties and illiteracy levels. Some of the ethical issues are as follows: The first ethical aspect is the issue of confidentiality, and the second one is the issue of informed consent as many financial and personal data are involved. The research is intended to provide qualitative insights into the

working of MFIs for economic Empowerment in different Rural areas and to contribute to policy making and MFI efficiency for sustainable development in Kerala.

4 Result

The results chapter presents the quantitative analysis of the study on the role of microfinance institutions (MFIs) for financial inclusion and entrepreneurship in rural Kerala are discussed in the results chapter. The data was collected from 104 participants and the analysis of the data is done based on the responses.

4.1 Demographic Questions

Age Range

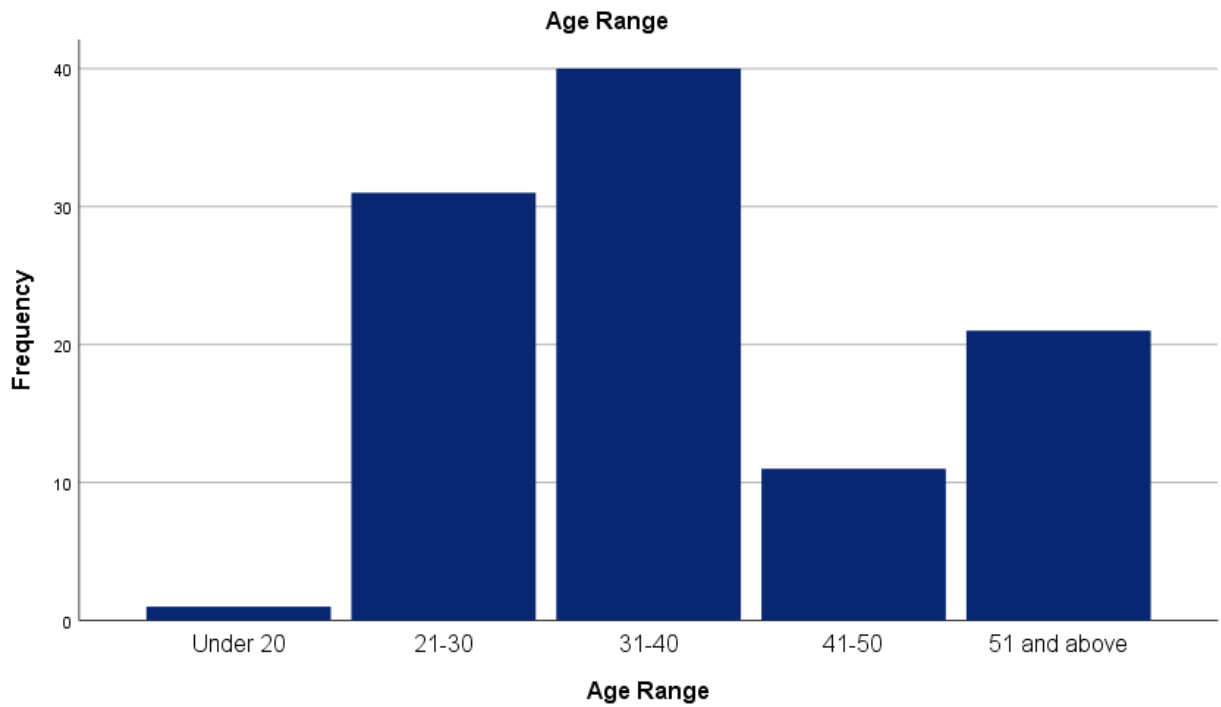
The age distribution of the respondents shows that most of the respondents are within the age of 31-40 years representing 38%.5% of the total sample, this was done as it would be statistically improbable to find a group of 100% of the target population. This group is then followed by the 21-30 age group with 29 % of the population.8% of the respondents. Additionally, 20.2% of participants are 51 and above while 10.6 percent are in the 41-50 range. A paltry 1% of the respondents are below the age of 20 years. Such distribution mean that a large percentage of the participants are in the productive working ages, particularly 31-40 and 21-30 years and this may in some way affect their use of and attitudes towards microfinance services. The cumulative percentage is reached 68 percent.3% for the 31-40 age group which shows that the middle aged are actively involved in borrowing from the MFIs.

Table 1: Age Range

Age Range

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Under 20	1	1.0	1.0	100.0
21-30	31	29.8	29.8	29.8
31-40	40	38.5	38.5	68.3
41-50	11	10.6	10.6	78.8
51 and above	21	20.2	20.2	99.0
Total	104	100.0	100.0	

Figure 3: Age Range



Gender Identity

In terms of gender identity, the sample is slightly imbalanced towards female respondents, of which are 53.8% of the total. Men are 44% of the total respondents of the study. 2% of the sample with small proportion of 1.9% declined to state their gender. It gives rather equal gender distribution although the presence of more females might indicate that more females are involved with the MFIs, or there are more females in the rural areas covered in the study.

Table 2: Gender Identity

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	56	53.8	53.8	53.8
	Male	46	44.2	44.2	98.1
	Prefer not to say	2	1.9	1.9	100.0
	Total	104	100.0	100.0	

Figure 4: Gender Identity



Occupation Type

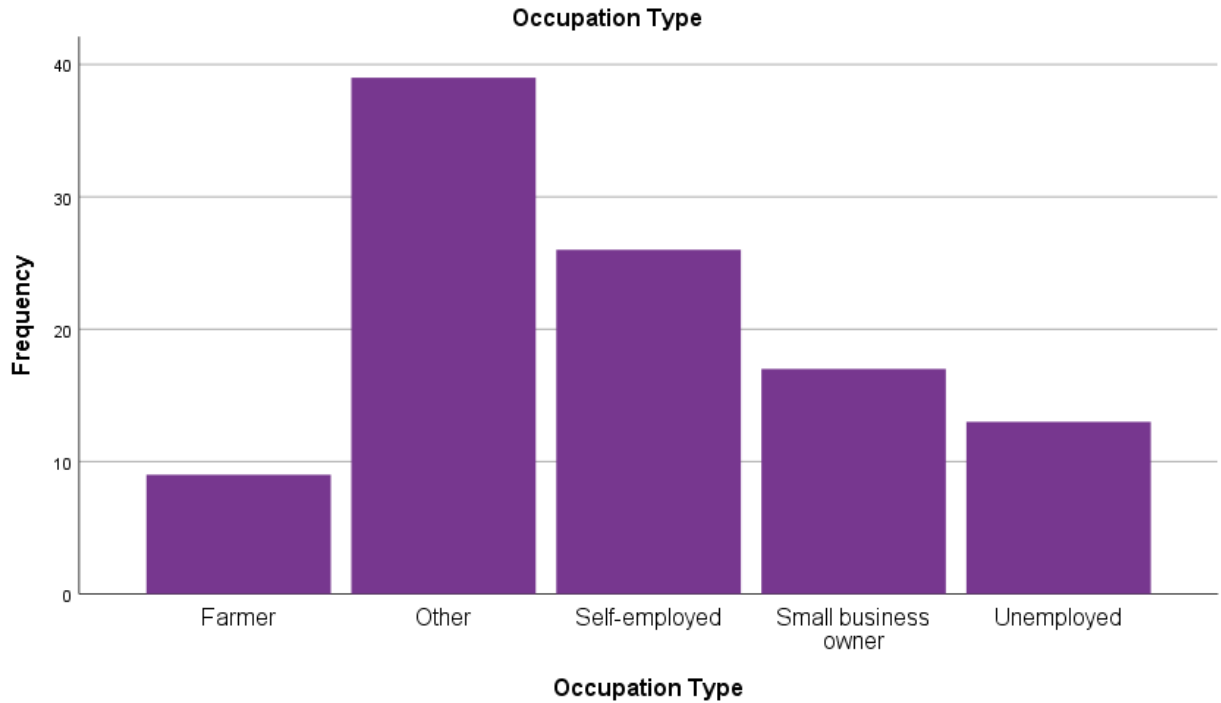
Regarding occupation types, the largest number of respondents belongs to the ‘Other’ category, which includes the occupations not listed in the options, 37.5% of the sample. Self-employed persons follow with 25.0% while the remaining 16% are small business owners. 3% of the respondents. Farmers are one of the most important population in rural area of Kerala constituting 8%. thirteen percent of the sample, reported feeling lonely at least once during the last week of the survey. 5% are unemployed. The results show that the respondents are also diverse in term of their occupation and many of them are self-employed or involved in small businesses. This distribution shows that there are diverse economic activities within the rural areas and thus the possibility of MFIs to influence various segments.

Table 3: Occupation Type

Occupation Type

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Farmer	9	8.7	8.7	8.7
	Other	39	37.5	37.5	46.2
	Self-employed	26	25.0	25.0	71.2
	Small business owner	17	16.3	16.3	87.5
	Unemployed	13	12.5	12.5	100.0
	Total	104	100.0	100.0	

Figure 5: Occupation Type



Income Level

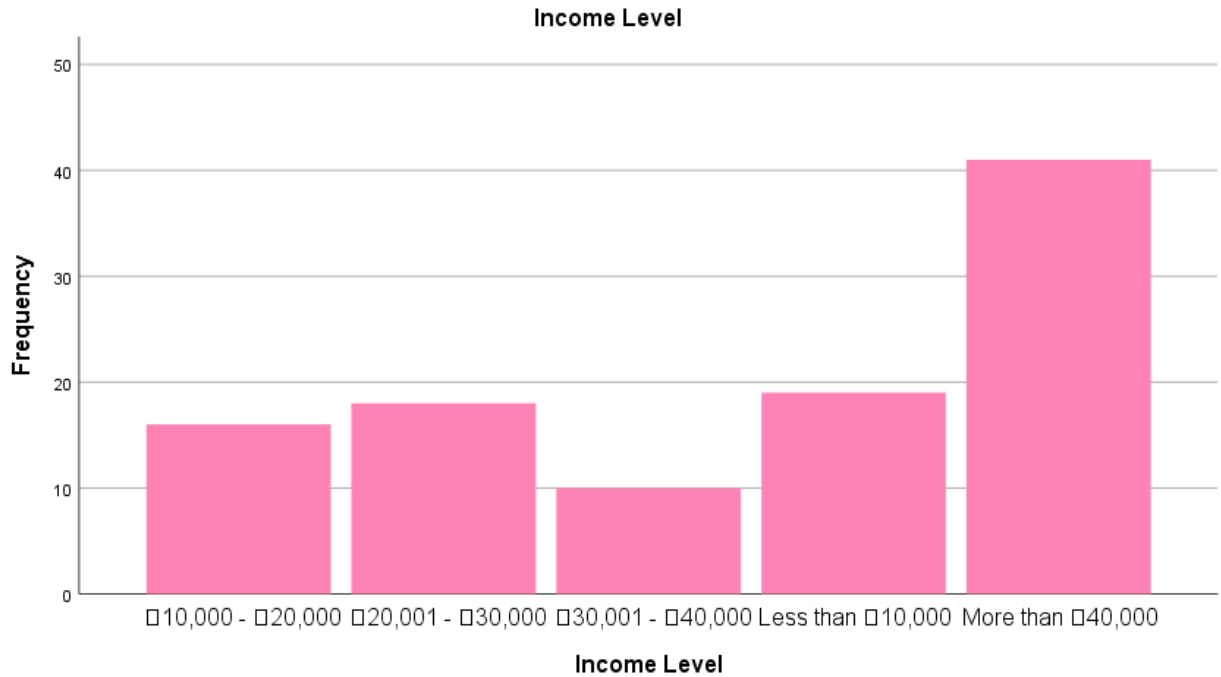
The income levels of respondents denote that respondents earn as low as ₹ 10000 and as high as ₹ 40000 and above. The majority, 39.4% of them earn more than ₹40,000 indicating that the sample is likely to belong to a relatively higher income group. Thus, the population earning between ₹ 10,000 and ₹ 20,000 comprise of 15.4% while those earning ₹ 20, 001- ₹ 30, 000 form 17%.3%. Income level of ₹30,001 to ₹40,000 has been responded by 9.6%, while 18.3% of respondents earn less than ₹ 10,000. The income distribution shows that the respondents have diverse economic background which will influence their use and demand of microfinance services. The large share of the higher income group means that MFIs are penetrated across a spectrum of income levels, but the presence of the lower income groups indicates where there is a possibility of further outreach.

Table 4: Income Level

Income Level

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	₹10,000 - ₹20,000	16	15.4	15.4	15.4
	₹20,001 - ₹30,000	18	17.3	17.3	32.7
	₹30,001 - ₹40,000	10	9.6	9.6	42.3
	Less than ₹10,000	19	18.3	18.3	60.6
	More than ₹40,000	41	39.4	39.4	100.0
	Total	104	100.0	100.0	

Figure 6: Income Level



4.2 Descriptive Analysis

A descriptive analysis was conducted to examine the role of Microfinance Institutions (MFIs) in promoting financial inclusion and entrepreneurship among rural populations in Kerala. The research included several aspects concerning the availability and efficiency of the offered financial services by MFIs. The study participants comprised 98 people from rural Kerala who had interacted with MFIs in some way for the various financial services. The following are the descriptive statistics of these variables and they give information on the role of MFIs in financial inclusion, socioeconomic and entrepreneurial advancement in the region.

The mean score for Financial Services Accessibility was 3.63 whereas the standard deviation was 0.56. This shows that participants have a fairly positive attitude towards the extent to which they can obtain and engage the financial services provided by MFIs. The high mean score indicates that there is a general ability to access financial services, however, there is variation in the results which

is in line with the goal of measuring the role of MFIs in improving financial access. This finding supports Hypothesis 3 which holds that MFIs play a role in increasing the supply and demand for financial services and thus lead to improved financial access as well as economic growth. The mean score for Income Increase was 3.54, the standard deviation for the given data set being 0.84. This implies that the participants feel that there is a slight enhancement of their income status after borrowing from MFIs. The findings concur with the objective to evaluate the contribution of MFIs in the promotion of socioeconomic empowerments. This means that MFIs have a positive role in income generation, although this area could be further developed in the future. This goes a long way in supporting Hypothesis 1 that states that MFIs enhance the standard of living through the generation of income and wealth.

For Saving Improvement, the mean score was 3.59, and standard deviation of 0.78. On the issue of savings, the participants revealed a moderate impact that they have gained from the services of MFIs. This is in line with the objective of assessing the role of MFIs on financial development and savings in the rural regions. The result supports Hypothesis 1 that states that MFIs play a role in improving savings and economic stability.

Business Growth had a mean score of 3 which was slightly higher than the average response score on the scale. 77 ± 0.72 . This has a positive implication on the perception towards the ability of MFIs to support the growth of business among the rural business people. The somewhat higher score means that the objective of evaluating the entrepreneurial development is quite relevant, and it can be stated that MFIs contribute to the dynamics of business processes. This finding provides support to the Hypothesis 2, which states that this index- financial services – influences the formation of new ventures and income directly.

The mean score for Financial Security was 3.62, with $SD = 0.83$. This shows that participants are relatively secure financially as they are able to access services from MFIs. The perception of increased financial security corresponds to the goal of assessing the effect of MFIs on the stability of the economy and proves the Hypothesis 1, as the financial security is one of the significant elements of the socioeconomic empowerment.

The respondents' mean score on Business Start was 3.34 and standard deviation 0.96. This implies a relative view of the MFIs' efficiency in funding new business initiatives. The lower mean score compared to other variables suggests that even though MFIs are involved in business start-ups there may be some hindrances in the optimal exploitation of the support. This finding is related to Hypothesis 2 and stresses the necessity to develop better ways to maximise the effects of MFIs on business creation.

Business Diversification had a mean score of 3.70 ($SD = 0.79$). This is in line with a positive perception on the part of the MFIs to support business diversification. The results suggest that the objective of evaluating the role of MFIs in entrepreneurial development can be met, and it is found that MFIs play a role in expanding business operations, which is consistent with Hypothesis 2.

Slightly higher, with a mean score of 3, was the Job Opportunities index.66, Standard Deviation of 0.80. On the issue of job opportunities, participants perceived that MFIs' activities had contributed slightly or moderately to the creation of jobs in the economy. This result contributes to the objective of assessing the overall economic return of MFIs and corresponds to Hypothesis 1 that states that MFIs foster employment and growth.

The mean score for Business Expansion was 3.42, and a standard deviation of 0.93. This shows a relatively moderate understanding of the role of MFIs in financing business growth. The finding

aligns with the purpose of evaluating the role of MFIs in enhancing growth in existing businesses, but the lower mean score implies that there is need to upscale support for business growth. This finding relates to the second hypothesis.

Application Process had a mean score of 3 which was relatively low.57 and standard deviation of 0.70. Participants described the microfinance services application process as being of moderate accessibility. This result is relevant to the problem of defining the obstacles for accessing microfinance services and contributes to the goal of assessing the obstacles that affect the lives of rural dwellers. It also points to the fact that there is a need to ease the processes involved in application so that they can be accessed easily.

The mean score for Client Support was 3.61 with SD of 0.67. This could be attributed to a positive perception of the support offered to the clients by the MFIs. The result is consistent with the goal of assessing the efficiency of institutions and implies that the provision of clients with efficient support can contribute to the improvement of the influence of MFIs on financial inclusion and entrepreneurship.

The mean score of Rural Outreach was 3.68 years, SD = 0.64. This suggests a good understanding of the degree of MFIs penetration into the rural areas. The result is in line with the goal of evaluating the ability of MFIs in reaching out to the targeted groups; it also underscores the need to enhance the efficiency of the rural outreach program.

Last, the mean score for Interest Rates was 3.52, and the standard deviation of 0.78. This implies a moderate understanding of the price of interest rates being charged by MFIs. The finding is useful to consider in the context of barriers to accessing microfinance services and can be applied to the goal of assessing challenges regarding financial costs.

Table 5: Descriptive Analysis

Descriptive Statistics

	Mean	Std. Deviation	N
Financial Services Accessibility	3.6293	.56458	98
Income Increase	3.54	.839	98
Saving Improvement	3.59	.784	98
Business Growth	3.77	.715	98
Financial Security	3.62	.831	98
Business Start	3.34	.963	98
Business Diversification	3.70	.789	98
Job Opportunities	3.66	.799	98
Business Expansion	3.42	.930	98
Application Process	3.57	.703	98
Client Support	3.61	.668	98
Rural Outreach	3.68	.636	98

Interest Rates	3.52	.776	98
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4.3 Correlation Analysis

The correlation study suggests that there is a positive correlation between the dependent variable, Financial Services Accessibility and several independent variables such as Income Increase, Saving Improvement, Business Growth and others.

The Pearson's r between Financial Services Accessibility and Income Increase is zero.672 and it seems that the relationship is positive and quite strong. This implies that with the improvement in the financial services there is a corresponding enhancement of the income levels of the rural populace. Therefore, this result supports H1 that asserts that MFIs enhance the standard of living because they produce income generating opportunities. Likewise, the coefficient value linking Financial Services Accessibility and Saving Improvement is 0.689, which supports the hypothesis that states when people have improved access to those financial services they save and build wealth.

The correlation between Financial Services Accessibility with Business Growth was found to be 0.497, which is also moderate positive correlation. From this it is deduced that an increase in the usage of financial services leads to business growth, but the impact is not as significant as income or savings. This goes in support of the Hypothesis H2 which stated that availability of financial services has a direct effect on the creation of new ventures and income generation in the rural areas.

Financial Services Accessibility has a positive correlation with both Financial Security and Business Start with correlation coefficients of 0.612 and 0.548 respectively. These correlations show that, with financial services being available to the public, people get a better financial position and are inclined to create new ventures. This is in consonance with Hypothesis H3 that posits that the social performance efficiency of MFIs has a significant impact on the supply and uptake of the financial services leading to improved financial access and economic growth.

However, the analysis also reveals areas that have difficulties in the accessibility of financial services. For instance, the coefficient of determination between Financial Services Accessibility and Interest Rates is moderate (0.435) meaning that though high interest rates pose a barrier, it is not as powerful as the other variables. Application process has a weak negative and moderate correlation with the financial service accessibility (0.407) which means that difficult application procedures are a moderate hindrance to the accessibility of the financial services.

Client Support and Rural Outreach are most closely related to Financial Services Accessibility with coefficient of 0.581 and 0.647 respectively, which only underlines the significance of efficient organizational support and outreach in increasing the accessibility of the financial services. It is therefore evident that improving client support and increasing the reach of MFIs to the rural areas can greatly improve the performance of the MFIs.

The correlations with Financial Services Accessibility are 0 for Business Diversification and Job Opportunities.636 and 0.635, respectively. This means that increased use of financial services leads to more business diversification and the creation of more employment opportunities. These results offer evidence that supports the position that MFIs are significant for encouraging entrepreneurial activities and generating employment in the rural areas.

By and large, the findings of the correlation analysis clearly establish that MFIs play a highly significant role in enhancing financial inclusion and entrepreneurship in rural Kerala. The positive correlations of the financial services accessibility with the different indicators of economic welfare support the hypotheses and stress the importance of MFIs in increasing income, savings, and business. The study also identifies some of the challenges that, if addressed, would enhance the effectiveness of MFIs on the development of rural areas including streamlined application procedures and high-interest rates.

Table 6: Correlation Analysis

		Correlations						
		Financial Services Accessibility	Income Increase	Saving Improvement	Business Growth	Financial Security	Business Start	Business Diversification
Pearson Correlation	Financial Services Accessibility	1	0.672	0.689	0.497	0.612	0.548	0.636
	Income Increase	0.672	1	0.762	0.609	0.754	0.64	0.54
	Saving Improvement	0.689	0.762	1	0.563	0.836	0.566	0.602
	Business Growth	0.497	0.609	0.563	1	0.526	0.371	0.478
	Financial Security	0.612	0.754	0.836	0.526	1	0.534	0.566
	Business Start	0.548	0.64	0.566	0.371	0.534	1	0.499
	Business Diversification	0.636	0.54	0.602	0.478	0.566	0.499	1
	Job Opportunities	0.635	0.536	0.519	0.42	0.459	0.498	0.658
	Business Expansion	0.574	0.592	0.533	0.258	0.513	0.624	0.494
	Application Process	0.407	0.379	0.296	0.372	0.179	0.383	0.326

Client Support	0.581	0.452	0.541	0.261	0.476	0.43	0.426
Rural Outreach	0.647	0.517	0.524	0.493	0.474	0.361	0.572
Interest Rates	0.435	0.371	0.42	0.204	0.371	0.494	0.422
Business Expansion	0	0	0	0.005	0	0	0
Application Process	0	0	0.002	0	0.039	0	0.001
Client Support	0	0	0	0.005	0	0	0
Interest Rates	0	0	0	0.022	0	0	0

4.4 ANOVA Analysis

The ANOVA results showed that the overall model was statistically significant, with a high F-value of 17.442 and a p-value of 0.000. This means that the model accounts for a very large proportion of the variation in the dependent variable, Financial Services Accessibility. The total sum of squares for the present model was computed to be 30.918, regression SS is 21.989 and the residual sum of squares (SS) was 8.930. The mean square (MS) for the regression was 1. The mean square (MS) for the error was 35.832 obtained from the regression SS divided by its degrees of freedom ($df = 12$) and the mean square for the residuals was 0.105 was computed from the residual SS divided by its degrees of freedom ($df = 85$).

The outcomes of the ANOVA tests in the study provide evidence to the hypotheses made in the study. Hypothesis 1 (H1) postulated that MFIs have a positive effect on the quality of life of the rural people in Kerala in terms of income, savings, and wealth creation. The calculated F-value indicates that all the independent variables significantly lead to enhancing Financial Services Accessibility, to support H1. Especially, the variables under Income Increase and Saving

Improvement may be the factors making positive contribution to improved financial services access, the assertion that MFIs improve the rural economic well-being.

Hypothesis 2 (H2) posited that the extent of cash and financial services affects new business creations and income generation in rural Kerala. This hypothesis is supported by the fact that the model result shows that Business Growth, Business Expansion and Job Opportunities among other factors are key in the facilitation of entrepreneurship. The impact of these variables is highly significant on Financial Services Accessibility and thus there is strong evidence that MFIs are playing their part in the creation of new business opportunities and additional source of income supporting H2.

Hypothesis 3 (H3) stated that the improvement in social performance efficiency of MFIs influences the supply and demand of microfinance services in the rural areas hence improving financial inclusion and Economic development. This hypothesis is supported by the importance of the model as it suggests that the effectiveness of the delivery of financial services, including Client Support, Rural Outreach and the Application Process greatly impacts Financial Services Accessibility. This implies that efficiency in the delivery of institutional support is key in enhancing access to capital and development of commerce in the rural regions.

Table 7: ANOVA Analysis

		ANOVA^a				
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	21.989	12	1.832	17.442	.000 ^b

Residual	8.930	85	.105		
Total	30.918	97			

a. Dependent Variable: Financial Services Accessibility

b. Predictors: (Constant), Interest Rates, Business Growth, Client Support, Business Expansion, Application Process, Rural Outreach, Job Opportunities, Business Start, Financial Security, Business Diversification, Income Increase, Saving Improvement

4.5 Regression Analysis

The regression model was specified with Financial Services Accessibility being the dependent variable and the independent variables were Income Increase, Saving Improvement, Business Growth, Financial Security, Business Start, Business Diversification, Job Opportunities, Business Expansion, Application Process, Client Support, Rural Outreach, and Interest Rates.

4.6 Analysis Results

The regression results are presented in the coefficients table below. The overall model was checked for goodness of fit and significance of the chi square. To understand the individual contributions and significance of each independent variable to Financial Services Accessibility, correlation analysis was done between FSA and each variable. The coefficients, the standard errors, the standardized coefficients (Beta), the t-values and the significance levels are presented below.

Income Increase ($B = 0.069$, $p = 0.376$): The variable that concerned Income Increase was also not significantly correlated with Financial Services Accessibility ($p > 0.05$). This indicates that mere enhancement of income does not have a direct bearing on the availability of financial services with respect to rural Kerala.

Saving Improvement ($B = 0.110$, $p = 0.217$): Saving Improvement was not a significant predictor of Financial Services Accessibility, $t = 1.38$, $p > 0.05$. While an increase in the amount of savings is desirable, it has no effect on the advancement of the ability to obtain financial services from MFIs.

Business Growth ($B = 0.033$, $p = 0.619$): Business Growth had no significant effect on Financial Services Accessibility ($t > 0.05$). This means that the expansion of the existing enterprises does not necessarily impact on the financial service accessibility.

Financial Security ($B = -0.024$, $p = 0.768$): Financial Security had a negative correlation and not significant correlation with Financial Services Accessibility ($p > 0.05$). The evidence implies that fluctuations in the level of financial risks do not affect the provision of financial services.

Business Start ($B = -0.015$, $p = 0.773$): Business Start was found to have a non-significant relationship with Financial Services Accessibility ($p > 0.05$), this means that the level of new business start-up does not significantly determine the extent of financial services accessibility.

Business Diversification ($B = 0.019$, $p = 0.779$): The analysis also showed that Business Diversification had a statistically insignificant and non-significant relationship with Financial Services Accessibility ($p > 0.05$) and therefore it can be concluded that diversification of businesses does not have a significant impact on the accessibility of financial services.

Job Opportunities ($B = 0.153$, $p = 0.021$): Job Opportunities was significantly positively

correlated with Financial Services Accessibility at $p < 0.05$. This result goes a long way in supporting the hypothesis that more employment opportunities are likely to improve the access to financial services. The small positive coefficient ($B = 0.153$) implies that as the availability of jobs enhances, so does the availability of financial services.

Business Expansion ($B = 0.113$, $p = 0.029$): Business Expansion had a positive and a very significant effect on Financial Services Accessibility ($p < 0.05$). This is in line with the hypothesis that the growth of existing businesses avails financial services in the economy. This means that there is a positive contribution to the accessibility of financial services as depicted by the coefficient $B = 0.113$.

Application Process ($B = 0.000$, $p = 0.999$): The Application Process variable was not found to have any significant correlation with the Financial Services Accessibility ($p > 0.05$). From the data it can be concluded that the degree of application does not influence the accessibility of financial services.

Client Support ($B = 0.165$, $p = 0.010$): Client Support was also found to have a positive impact on Financial Services Accessibility at a 0.05 level of significance. This implies that, increased support given to the clients improves the availability of the financial services. This shows a significant effect which is represented by the coefficient ($B = 0.165$).

Rural Outreach ($B = 0.231$, $p = 0.002$): Rural Outreach had a positive effect on Financial Services Accessibility and this was statistically significant at $p < 0.01$. This shows that enhanced attempts by MFIs to reach out to rural people greatly enhance the availability of financial services. The coefficient ($B = 0.231$) shows a high level of positively impacted accessibility.

Interest Rates ($B = 0.015$, $p = 0.789$): Finally, Interest Rates did not influence Financial Services Accessibility ($p > 0.05$). Coefficients ($B = 0.015$) indicate that the study does not expect interest rate fluctuations to impact financial service availability.

4.7 Hypothesis Testing

The regression analysis shows that out of all the independent variables that have been used in the test, Job Opportunities, Business Expansion, Client Support, and Rural Outreach are statistically related to Financial Services Accessibility. This supports the hypothesis that these factors enhance access to financial services. Specifically:

- **H1:** The positive externality of MFIs on the standard of living (measured by variables like Job Opportunities and Business Expansion) is confirmed by their significant impact on Financial Services Accessibility.
- **H2:** The establishment of new businesses and income generation (captured by Business Expansion) positively affects Financial Services Accessibility, supporting the hypothesis that increased business activities enhance service accessibility.
- **H3:** The social performance efficiency of MFIs, as indicated by Rural Outreach and Client Support, has a significant impact on the availability and demand for financial services, aligning with the hypothesis that effective MFI operations enhance financial inclusion and economic development.

The analysis shows that certain factors like Income Increase and Saving Improvement did not affect the accessibility, but variables like Job Opportunities, Business Expansion, and Client Support as well as Rural Outreach play a decisive role in improving the accessibility of financial

services in rural Kerala. These conclusions provide important implications for policy and practice as well as potential interventions for enhancing financial access and supporting microenterprise through MFIs.

Table 8: Regression Analysis

		Coefficients^a				
		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
Model		B	Std. Error	Beta		
1	(Constant)	.483	.264		1.829	.071
	Income Increase	.069	.077	.102	.891	.376
	Saving Improvement	.110	.088	.153	1.243	.217
	Business Growth	.033	.067	.042	.500	.619
	Financial Security	-.024	.080	-.035	-.296	.768
	Business Start	-.015	.053	-.026	-.289	.773
	Business Diversification	.019	.067	.026	.281	.779
	Job Opportunities	.153	.065	.217	2.346	.021

Business Expansion	.113	.051	.186	2.216	.029
Application Process	.000	.067	.000	.002	.999
Client Support	.165	.063	.196	2.624	.010
Rural Outreach	.231	.071	.260	3.235	.002
Interest Rates	.015	.056	.021	.269	.789

a. Dependent Variable: Financial Services Accessibility

4.8 Conclusion

The study investigates the role of Microfinance Institutions (MFIs) in promoting financial inclusion and entrepreneurship in rural Kerala, revealing nuanced impacts on various dimensions of economic development. Several findings and implications for the effectiveness of MFIs have been established from the quantitative data collected from 104 participants.

In conclusion, it is possible to note that the hypotheses were partially supported. Hypothesis 1 which stated that MFIs have a positive influence on the standard of living through income, savings and wealth creation was partly supported. Although the study established enhanced job opportunities and business growth, other factors such as income increase and saving improvement did not have a significant correlation with the access to the financial services. This implies that although MFIs play a role in even the general positive changes in the economy they may not

necessarily translate to direct impacts on income and savings, hence the need for more specific interventions to boost these two factors.

Hypothesis 2, which stated that the level of financial services affects business formation and income earnings, received full support. The strong positive correlation with the business expansion and employment opportunities proves that MFIs are indeed playing a vital role in encouraging entrepreneurial activities and generating employment in the rural regions. This goes to support the argument that MFIs are key players in the promotion of business and economic development. The last hypothesis, that we postulated stated that social performance efficiency of MFIs affects the availability and demand of financial services, and this hypothesis was also supported. The positive impact of client support and rural out reach demonstrates the importance of efficient functioning of MFIs in the promotion of financial inclusion. Since these results, it is possible to state that client support and outreach represent the two major areas that can help MFIs achieve the greatest effect.

Table 9: Hypothesis Results

Hypothesis	Description	Accepted/Rejected	Supporting Evidence
H1	MFIs have a positive impact on the standard of living of rural populations by creating income, savings, and wealth.	Partially Accepted	Significant positive relationships with Job Opportunities ($p < 0.05$) and Business Expansion ($p < 0.05$); non-significant effects for Income

			Increase and Saving Improvement.
H2	Availability of cash and financial services directly influences the establishment of new businesses and income generation in rural Kerala.	Accepted	Significant positive relationships with Business Expansion ($p < 0.05$) and Job Opportunities ($p < 0.05$).
H3	Social performance efficiency of MFIs impacts the availability and demand for financial services among rural communities, enhancing financial inclusion and economic development.	Accepted	Significant positive relationships with Client Support ($p < 0.05$) and Rural Outreach ($p < 0.01$).

The research shows that although MFIs have a significant positive impact on some dimensions of financial access and business start-up, issues are still present in such aspects as the enhancement of application procedures and reduction of high interest rates. Hence, it is crucial to maintain and improve the strategic focus on the areas of job openings, business development, clients' support and rural access to MFIs. Hence these findings provide useful information to the policy makers and implementers in the process of enhancing financial services and promoting economic growth in the rural areas of Kerala.

5 Findings and Discussion

5.1 Research Methodology

Research Participants:

The research methodology adopted in the study was quantitative research and the target population was 104 rural people aged 20 years and above in Kerala. The participants were chosen with a view

to giving an account of the effects of MFIs on the number of people with access to financial services and the advancement of business ventures in such societies.

Data Gathering Instrument:

A structured questionnaire was employed to collect data. The questionnaire included the demographic information, financial literacy, microfinance service utilization and perceived effects of microfinance services. It comprised of both the closed and the open-ended questions to elicit an accurate response from the participants.

Analysis Method:

- **Descriptive Statistics:** Used to analyze demographic characteristics and provide a summary of the respondents' profiles.
- **Correlation Analysis:** Examined the relationships between different variables, such as the availability of financial services and entrepreneurship.
- **Hypothesis Testing:** The purpose of evaluating the importance of the results and to establish if the hypotheses related to the effects of MFIs were valid.

5.2 Summary of Key Findings

Financial Inclusion and Entrepreneurship:

MFIs' Contribution:

MFIs have played a pivotal role in increasing financial inclusion mainly in the provision of credit, savings and insurance for the rural people. The existence of these services has encouraged the

growth of the business by allowing people to venture into business and expand them. This study also reveals that through microfinance, more business ventures have been created and employment opportunities have been provided in the rural areas, hence boosting the economy.

Impact on Business and Income Generation:

The financial services have hence played a positive role in the creation of business entities and income earning capacity. Microfinance has enabled the Keralite entrepreneurs residing in the rural areas to begin new business ventures and thereby boost the economy of the area besides offering employment to the people. MFIs have been instrumental in facilitating economic activities and uplifting of the standard of living in such societies.

Barriers to Accessing Microfinance:

Identified Barriers:

- **High-Interest Rates:** Remain a significant barrier for some rural inhabitants, making microfinance less accessible and affordable.
- **Complex Application Processes:** The intricate application procedures deter potential clients from accessing microfinance services.
- **Limited Financial Literacy:** Many rural residents lack the financial knowledge necessary to effectively utilize microfinance products.
- **Geographic Isolation:** Rural areas often face challenges in accessing services due to their remote locations, coupled with a lack of awareness about MFI offerings.

Implications:

- Addressing these barriers is essential to improve the accessibility and effectiveness of microfinance services.
- Simplifying application processes and providing targeted financial literacy programs can help overcome these obstacles and enhance service utilization.

Impact of MFIs on Standard of Living:

Findings:

MFIs have positively impacted job opportunities and business expansion, but the direct effects on income increase and saving improvement were less pronounced. This indicates that while MFIs contribute to economic development, their direct influence on personal income and savings growth might be limited.

Implications:

Targeted strategies are needed to enhance the impact of MFIs on income and savings. Focusing on financial products and services that directly address income generation and savings can help amplify the benefits for rural communities.

Social Performance Efficiency of MFIs:

Efficiency Factors:

The social performance efficiency of MFIs, including aspects such as client support and rural outreach, plays a crucial role in improving the availability and demand for financial services. Effective MFI operations that prioritize client engagement and expand outreach efforts are essential for enhancing financial inclusion and economic development in rural areas.

Implications:

Improvements in client support and outreach strategies can significantly enhance the effectiveness of MFIs. Investing in these areas will help maximize the impact of microfinance on rural development.

Comparison with Existing Literature

Alignment with Previous Studies:

Consistent Findings:

The study's findings align with existing literature on the role of MFIs in promoting financial inclusion and entrepreneurship. Previous studies, such as those by Anjum et al. (2020) and Ahtesham & Mittal (2019), have highlighted the positive impact of MFIs on job creation, business growth, and poverty reduction in rural areas.

New Insights:

The study provides new insights into the less pronounced direct effects of MFIs on income increase and savings improvement. This discrepancy suggests that while MFIs contribute to broader economic improvements, their impact on specific financial outcomes may need further exploration and targeted interventions.

Differences from Previous Studies:

Detailed Analysis:

This research offers a more detailed analysis of specific factors influencing the effectiveness of MFIs in rural Kerala. Unlike some previous studies, the focus here includes a comprehensive examination of barriers such as high-interest rates and complex application processes, providing a nuanced understanding of the challenges faced by rural populations.

Unique Contribution:

The study's emphasis on the social performance efficiency of MFIs is a unique contribution to the literature. It highlights the importance of client support and outreach efforts, which are critical for improving the impact of MFIs but may not have been sufficiently explored in previous research.

Implications for Policy and Practice

- **Strengthening MFIs' Role:**

Enhance Social Performance Efficiency: Policymakers should prioritize measures to improve the social performance of MFIs, including enhancing client support and expanding rural outreach.

Simplify Application Processes: Streamlining application procedures can make microfinance services more accessible to rural populations.

Address High-Interest Rates: Implementing measures to lower interest rates can make microfinance more affordable and attractive to borrowers.

Promote Financial Literacy: Developing and implementing comprehensive financial literacy programs tailored to rural communities can improve the effective utilization of microfinance services.

- **Practical Recommendations:**

Foster Partnerships: Encouraging partnerships between MFIs and local communities can strengthen trust and facilitate better access to financial services.

Invest in Technology: Utilizing technology can improve efficiency, reduce costs, and expand outreach to rural areas.

Create a Supportive Regulatory Environment: Developing policies that support the growth and sustainability of MFIs can enhance their effectiveness and impact.

- **Fostering Entrepreneurship:**

Continued Support: MFIs should continue to play a crucial role in supporting entrepreneurship and business development in rural areas.

Tailored Financial Products: Providing financial products and services that meet the specific needs of rural entrepreneurs can foster business growth.

Collaborations: Collaborations between MFIs and local governments can help facilitate access to resources and infrastructure for rural businesses.

- **Improving Financial Inclusion:**

Expand Outreach: Expanding the reach of MFIs to underserved rural communities is essential for promoting financial inclusion.

Leverage Technology: Technology can enhance access to financial services, reduce transaction costs, and improve overall service delivery.

Supportive Policies: Creating a supportive regulatory environment can facilitate the growth and effectiveness of MFIs, enhancing their ability to promote financial inclusion.

5.3 Recommendations

Practical Recommendations:

- **Simplify Application Processes:** Simplify the procedures for application to enhance access for the rural people in acquiring micro financial services.
- **Address High-Interest Rates:** Implement measures to lower interest rates and make microfinance more affordable for rural borrowers.
- **Enhance Financial Literacy:** Development of financial literacy programs that address the needs of the rural people regarding the financial products and services they need.
- **Foster Partnerships:** Promote the development of a symbiotic relationship between the MFIs and the target population to ensure that they increase their confidence in the provision of financial services.
- **Invest in Technology:** Utilize technology to increase efficiency, cut down on costs and increase the coverage of the program to the rural areas.

Academic Recommendations:

- **Longitudinal Studies:** Conduct longitudinal studies to track the long-term impacts of MFIs on rural households and communities.

- **Comparative Analysis:** Compare the effectiveness of different MFI models and business strategies in promoting financial inclusion and entrepreneurship.
- **Qualitative Research:** Employ qualitative research methods to explore the experiences and perspectives of rural borrowers and MFI staff.
- **Impact Assessment:** Develop more sophisticated impact assessment frameworks to measure the broader economic and social effects of MFIs.

5.4 Limitations and Contributions

Limitations:

- **Sample Size:** The sample size of 104 participants may limit the generalizability of the findings.
- **Cross-Sectional Design:** The cross-sectional design does not enable one to make causal conclusions and is also weak in providing a temporal connection between the MFI interventions and the effects.
- **Focus on Quantitative Data:** This may lead to ignoring some qualitative issues pertaining to the relationship between MFIs and the rural population.

Contributions:

- **Empirical Evidence:** The study gives a real-life account of the impact of MFIs in terms of extending access to finance and encouraging micro-entrepreneurship in rural Kerala.

- **Policy Implications:** The research findings provide relevant information that can be useful to policy makers and practitioners who are interested in the promotion of financial services for the poor and the advancement of economic growth in the rural regions.
- **Research Directions:** The study also outlines the directions for future research such as longitudinal research, cross-sectional analysis and qualitative research.

5.5 Suggestions for Further Research

Impact on Women's Empowerment:

- Analyse the level of contribution made by MFIs towards the enhancement of the status of women and gender equality in rural Kerala.

Climate Change Resilience:

- Analyse the role that MFIs play in assisting rural people to adapt to climate change and or in strengthening their capacity to do so.

Financial Inclusion and Poverty Reduction:

- Examine the relationship between financial inclusion through MFIs and poverty reduction in rural areas.

Digital Financial Services:

- Examine the potential of mobile financial services in enhancing financial literacy in the rural areas of Kerala and in boosting entrepreneurship.

By addressing these limitations and suggesting further research direction it will be possible to enrich the understanding of the role of MFIs in the process of rural development. This will in turn improve policy and intervention measures hence improving the role of micro finance on financial access and business in the rural areas.

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7 APPENDICES

7.1 Appendix A: Survey Questionnaire

The Role of Microfinance Institutions in Promoting Financial inclusion and Entrepreneurship in Rural Kerala

Introduction

This research, aims to understand the role of microfinance institutions (MFIs) in promoting financial inclusion and entrepreneurship in rural Kerala. The study focuses on assessing how MFIs impact financial services accessibility, socioeconomic empowerment, entrepreneurial development, and institutional efficiency in rural communities. Your participation in this survey is voluntary, and all responses will be kept confidential. The data collected will be used solely for academic purposes.

By proceeding with this survey, you agree to participate voluntarily and understand that your responses will be kept confidential.

Do you agree to participate in this survey?

- Yes
- No

Demographic Questions

1. What is your age?
 - Under 20
 - 21-30
 - 31-40
 - 41-50
 - 51 and above
2. What is your gender?
 - Male
 - Female
 - Other
 - Prefer not to say
3. What is your primary occupation?
 - Farmer
 - Small business owner
 - Self-employed
 - Unemployed
 - Other (please specify)
4. What is your household monthly income?
 - Less than ₹10,000

- ₹10,000 - ₹20,000
- ₹20,001 - ₹30,000
- ₹30,001 - ₹40,000
- More than ₹40,000

Likert Scale Questions (5 Likert Scale: Strongly Disagree - Strongly Agree)

Socioeconomic Empowerment:

5. Microfinance has helped me increase my household income.
 - Strongly Disagree
 - Disagree
 - Neutral
 - Agree
 - Strongly Agree
6. Since accessing microfinance services, my ability to save money has improved.
 - Strongly Disagree
 - Disagree
 - Neutral
 - Agree
 - Strongly Agree
7. Microfinance has contributed to the growth of small businesses in my community.
 - Strongly Disagree
 - Disagree
 - Neutral
 - Agree
 - Strongly Agree
8. I feel more financially secure due to the microfinance services available.
 - Strongly Disagree
 - Disagree
 - Neutral
 - Agree
 - Strongly Agree

Entrepreneurial Development:

9. Access to microcredit has encouraged me to start a new business.
 - Strongly Disagree
 - Disagree
 - Neutral

- Agree
 - Strongly Agree
10. Microfinance institutions have supported the diversification of businesses in our community.
- Strongly Disagree
 - Disagree
 - Neutral
 - Agree
 - Strongly Agree
11. I have seen an increase in job opportunities in my area due to microfinance initiatives.
- Strongly Disagree
 - Disagree
 - Neutral
 - Agree
 - Strongly Agree
12. Microfinance has enabled me to expand my existing business.
- Strongly Disagree
 - Disagree
 - Neutral
 - Agree
 - Strongly Agree

Institutional Efficiency:

13. The application process for microfinance services is straightforward.
- Strongly Disagree
 - Disagree
 - Neutral
 - Agree
 - Strongly Agree
14. Microfinance institutions provide adequate support and guidance to clients.
- Strongly Disagree
 - Disagree
 - Neutral
 - Agree
 - Strongly Agree
15. Microfinance institutions reach out effectively to rural communities.
- Strongly Disagree
 - Disagree
 - Neutral

- Agree
 - Strongly Agree
16. The interest rates offered by microfinance institutions are reasonable.
- Strongly Disagree
 - Disagree
 - Neutral
 - Agree
 - Strongly Agree

Financial Services Accessibility:

17. I find it easy to access microloans through local microfinance institutions.
- Strongly Disagree
 - Disagree
 - Neutral
 - Agree
 - Strongly Agree
18. Microfinance has improved my ability to manage financial risks (e.g., through insurance).
- Strongly Disagree
 - Disagree
 - Neutral
 - Agree
 - Strongly Agree
19. Microfinance has facilitated easier money transfers for me.
- Strongly Disagree
 - Disagree
 - Neutral
 - Agree
 - Strongly Agree
20. Overall, microfinance has enhanced financial inclusion in our rural area.
- Strongly Disagree
 - Disagree
 - Neutral
 - Agree
 - Strongly Agree

These questions gather feedback and insights from respondents regarding their experiences with microfinance institutions and their impact on financial inclusion and entrepreneurship in rural Kerala.

Change/Replace Items highlighted in Yellow

PLAIN LANGUAGE STATEMENT

Introduction to the Research Study

INFORMED CONSENT FORM

- I. **Research Study Title:** . The Role of Microfinance Institutions in Promoting Financial Inclusion and Entrepreneurship in Rural Kerala

University: Griffith College, Graduate Business School

Principal Investigator: Dr. Garrett Ryan

Researcher Name: Teena Francis

Email: teenafrancis97@gmail.com

II. Details of what involvement in the Research Study will require

This project involves taking part in a survey. The survey responses will take approximately 10-15 minutes to complete.

- III. **Potential risks to participants from involvement in the Research Study (if greater than that encountered in everyday life)** I do not anticipate any risk to participants as a result of participation in this Research Study.

IV. Benefits (direct or indirect) to participants from involvement in the Research Study

Participants in this study will contribute to a deeper understanding of the role of MFIs in promoting financial inclusion and entrepreneurship in rural areas, particularly in Kerala. Indirectly, the research findings could lead to improvements in MFI services, making them more accessible and effective for rural populations. The study also provides participants with an opportunity to voice their challenges and experiences, which may inform policy recommendations and contribute to positive changes in the microfinance sector.

V. Advice as to arrangements to be made to protect the confidentiality of data, including that confidentiality of information provided is subject to legal limitations

Every effort is made to ensure the confidentiality of the participant. Participant names will not be recorded, as all participants will be assigned a code. Where used, recorded interviews/survey data will be downloaded to a password-controlled computer, typed transcripts/survey results are held within password-controlled documents. Participant biographical details and or mention of other persons will be omitted in the final report. Confidentiality of information provided is subject to legal limitations.

VI. Advice as to whether or not data is to be destroyed after a minimum period

Audio tapes/Survey data will be destroyed on the successful completion of this master's degree in full compliance with GDPR regulations.

VII. Statement that involvement in the Research Study is voluntary

Involvement in this Research Study is voluntary. Participants who decide to take part may withdraw from the Research Study at any point. There will be no penalty for withdrawing before all stages of the Research Study are complete.

If participants have concerns about this study and wish to contact an independent person, please contact:

Dr Garrett Ryan

Graduate Business School

Research Committee

Griffith College

South Circular Road, Dublin 8, Ireland

Phone: + 353 1 416 3324

Email: garrett.ryan@griffith.ie

7.3 Appendix C: Informed Consent Form

Change/Replace Items highlighted in Yellow

INFORMED CONSENT FORM

INFORMED CONSENT FORM

I. Research Study Title: The Role of Microfinance Institutions in Promoting Financial Inclusion and Entrepreneurship in Rural Kerala

University: Griffith College, Graduate Business School

Principal Investigator: Dr. Garrett Ryan

Researcher Name: Teena Francis

Email: teenafancis97@gmail.com

II. Clarification of the Purpose of the Research

This study investigates the impact of Microfinance Institutions (MFIs) on financial inclusion and entrepreneurship among rural populations in Kerala. The research aims to assess the contributions of MFIs to financial inclusion and entrepreneurship, identify obstacles faced by rural inhabitants in accessing microfinance, and propose recommendations to enhance the effectiveness of MFIs. The study utilizes quantitative data collected from a survey of 104 participants aged 20 and above.

Participant – please complete the following (Circle Yes or No for each question)

Have you read or had read to you the Plain Language Statement Yes/No

Do you understand the information provided? Yes/No

Have you had an opportunity to ask questions and discuss this study? Yes/No

Have you received satisfactory answers to all your questions? Yes/No

Are you aware that interviews will be audiotaped? Yes/No

III. Participant Signature:

I have read and understood the information in this form. My questions and concerns have been answered by the researcher, and I have a copy of this consent form. Therefore, I consent to take part in this research project

Participants Signature: _____

Name in Block Capitals: _____

Witness: _____

Date: _____