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Viability and practices of interest-free microfinance in the state of Kerala: An analytical study based on customers' perceptions

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Abstract This is an empirical study on Interest-free (Islamic) Microfinance (IsMF) which is based on the Profit Loss Sharing (PLS) financial mechanism, conducted in the state of Kerala. In India, IsMF is at a nascent stage but many institutions have ventured into IsMF-type financial enterprises, especially after the recent microfinance crunch of 2011–12. This study explores the viability and practices of IsMF as an alternative to conventional microfinance in India. The main objectives of this study are to investigate the products and services of IsMF, to identify its operational methods and to analyse the perceptions of customers towards all these aspects.
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Introduction

Interest-free Microfinance (IsMF) is the *Shariah* based Profit Loss Sharing (PLS) mechanism which adheres to the principles of Islamic economy with balanced growth through poverty alleviation (Abu-Joudeh, 2011). It is a form of socially responsible investment. Many elements of microfinance could be considered to be in keeping with the broader goals of Islamic banking. Both systems advocate entrepreneurial risk sharing and believe that the poor should take part in such activities. The IsMF system believes that microfinance serves as social business; at the same time profit can be earned but not at high rates. Thus, it enables the financial inclusion of all people, thereby enabling stable economic progress.

The products and services of Islamic finance are feasible tools for rural and socio-economic development: the products include Micro-credit (*Qard*), Micro-equity and Micro-savings such as Trustee financing (*Mudaraba*) and Partnership (*Musharaka*). Such products are in use in many countries in a variety of settings, such as the Grameen Bank (a well-versed model in Bangladesh), and modes such as Village Bank, Self Help Group (SHG), and so on. In the Indian scenario, IsMF has replicated the models of specialised institutions such as Non-Banking Financial Companies (NBFC), Non-Government Organisations (NGO), and so on. Rural and uneducated people can easily access its wide services due to its prohibition of *Ribah* (interest), and as it eschews uncertainty and speculation. Moreover, the Zakat (charity) system, one of the poverty

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alleviation tools of IsMF, itself is a highly valuable service for the economic prosperity of the society.

Despite Islamic Microfinance or Interest-free Microfinance not being a mainstream channel in India, it plays all the roles of conventional microfinance such as accessing credit, venture capital, savings, insurance, remittance, and so on which enable the participation of those who are severely limited in accessing financial means. In Kerala, IsMF institutions are running in an organised way, such as the Alternative Investments and Credits Limited (AICL), as also in unorganised ways of operations. Kerala is the state with the highest number of interest-free funds, which crossed 500 in 2010 (Muhammed, 2012). Such institutions provide loans and advances ranging from Rs. 500 to Rs. 25,0000 without any collateral security and interest. There are 360 such registered units under the Interest Free Establishments Coordination Committee (INFECC), which was formed to coordinate and guide interest-free based institutional customers (Iran Daily, 2010).

Though the IsMF financial system has been widely explored in India, it has not been adopted by formal business channels and enterprises. Therefore, this study was conducted to understand demand and supply issues of financial services based on existing IsMF institutions in the state of Kerala. The study explores and analyses the operational methods, products and services of IsMF and the perceptions of customers towards all these aspects of IsMF.

The study was administered to understand the viability of IsMF models in order to apply them more intensively and usefully in the context of Kerala's microfinance sector. There have been few empirical studies so far on IsMF with reference to the state of Kerala. Studies such as the one by Safiuddin (2011) have pointed out that the interest ceiling on debts-based remittance is burdening local customers and has become a constraint to the easy access of funds for their immediate financial needs from conventional microfinance intermediaries. Therefore, this work presents an alternative system by applying Shariah principles to the existing microfinance methods in India.

Review of literature

Though much literature exists on the conventional microfinance system, work on Islamic (Interest-free) Microfinance is scanty. There are some studies in a Kerala context such as SHG based studies, NGO based studies and case studies such as that of Kudumbashree, poverty alleviation system, and so on (for instance, Lakshmi and Manoj,2015; Yaqoob, 2009; Joseph, 2007; George, 2002). But many of them are based on the conventional financial system and not focussed on the interest free mechanism. In this regard, some of the relevant studies are as follows.

Ahmad (1993) made an attempt to review financial partnership (*Shirkat*) in Islam. The study divided Shirkat into two parts: *Shirkat-ul-Milk* and *Shirkat-ul-'Aqd*. It provides an outlook on the common practices of Islamic banking with reference to the source of funds based on current assets, saving accounts, joint account and investment deposit. It also provides a general idea of the common practices of Islamic banking in the use of funds (Mudaraba, Musharaka etc.) and Islamic financing techniques which are cohesively followed in Pakistan and Iran.

According to Akhtar (1997) the conventional microfinance institutions do not fulfil all the demands of microfinance customers. Shortage of resources leaves only a small fraction of microfinance available to the poor, the needy and small entrepreneurs. The failure of the formal means of credit creation leads financial institutions into introducing a new group based on the lending system. In such instances, Musharaka instruments could be more widely utilised; Musharaka provides adequate commercial incentives for microfinance institutions as well as banks.

Dhumale and Sapcanin (1999) documented that at a very basic level, Islamic banking and microcredit programmes may complement one another in both practical and ideological terms. Both banking and microfinance share common objectives. The study explains different instruments and basic financial mechanisms such as Mudaraba, PLS and so on. It states that micro enterprises provide jobs and help the poor generate income and alleviate poverty.

Rahim and Rahman (2007) postulated that microfinance had been questioned on its overall desired impact since the poor are subjected to very high interest rates of up to 30%. The authors argued that disbursing credit to the poor for financial gain cannot be the aim of microfinance institutions. The interest rates charged are rather oppressive and thus fail to achieve the noble objectives of the microfinance system.

Obaidullah (2008) interpreted the Islamic institutional systems of *Zakat, Awqaf* and *Qard Hasan*. He classified the Islamic instruments of poverty alleviation into two categories, i.e. charity based-not for market and profit based. He considers Zakat, Awqaf and Qard Hasan as instruments that must be geared first to fulfil consumption needs. In the next stage of the economic empowerment programme, the emphasis of such financial instruments may be switched to profit based instruments where micro enterprises may be encouraged.

According to the Report of the Committee on Financial Inclusion (Rangarajan, 2008), creating an appropriate credit delivery system is a necessary condition for better financial inclusion. While banks and other financial intermediaries can make some efforts on their own to improve the absorptive capacity of their clients, it is equally important for the Government at various levels to initiate action to enhance the earning capacity of the downtrodden sections of society. Non-government organisations have played a significant role in promoting SHGs and linking them with banks. There is a need to recognise a separate category of Micro Finance – Non-Banking Finance Companies (MF-NBFCs) without any relaxation on startup capital and subject to the regulatory framework applicable to NBFCs.

Raghuram Rajan (2008) the former financial advisor to the Prime Minister of India has suggested interest free financial institutions in India as a remedy for financial exclusion, which is the main reason for extreme poverty in the country. He also argues that interest free finance, especially for microcredit, is an effective mechanism to strengthen the vulnerable class. A decision on this aspect is awaited from the Government of India.

Yaqoob (2009) explained that interest-free financing has acquired added significance at the global level. Interest-free financing achieved rapid growth as it promoted asset

creation rather than debt creation. The traditional formula of lending by charging fixed returns has given way to equity financing where asset creation takes place, in almost all cases of lending. More than 60 countries in the world practice interest-free financing in one way or another (Domat, 2018) which includes interest-free advances, deposits, non-banking functions, mutual funds, venture capital, leasing, mark-up sale and *Istisna* contracting.[1]

Iqbal and Mirakhor (2011) explained the fundamental principles of the economy with respect to the financial system governed by Shariah law (Islamic law). The study introduces the key elements and core concepts of Islamic finance. It shows how the surge of interest in Islamic finance practices is based on demand for more ethical investing and a greater appreciation of the principles and potential of Islamic law. This study also explores the features of an Islamic financial system, how they compare to those of more conventional financial systems, and how the Islamic financial system could improve upon conventional financial systems.

Jan Sofi (2012) documented that India with the second largest Muslim population in the world, has tremendous potential to move towards an interest-free system, which may heighten the requirement for Islamic microfinance. Keeping in view the main problems faced by conventional microfinance in India, the microfinance industry can learn valuable lessons and pave the way towards an interest-free system. In addition, India's financial market is moving towards equity culture.

Research gap

The studies by Obaidullah (2008) and Dhumale and Sapcanin (1999) among others throw light on many concepts and facts of Islamic microfinance, Islamic banking system and other Islamic financial services. Our study is an attempt to analyse the viability of applying such principles in the context of microfinance in Kerala in view of the existing microfinance system and customer perceptions. So far, there have been few detailed studies on Islamic microfinance with special reference to the state of Kerala.

Some studies have pointed out that the interest ceiling on debts remittance is burdensome to customers and has constrained easy access to funds to meet immediate financial needs from conventional microfinance enterprises. Thus, this work presents an alternative system by applying Shariah principles to the existing microfinance methods. The foregoing reasons provide the rationale for this study to investigate the products and services of IsMF in Kerala, the perspectives of customers towards IsMF practices, their different operational models and poverty alleviation programmes.

Need for the study

The Indian microfinance sector is largely based on the conventional financial system. Due to the high interest rates that prevail, rural people especially Muslims because of their religious inhibition on interest-based financial activities,[2] stay away from such conventional microfinance activities despite it being a mode of economic development and a means of regional economic balance of society. Interest free microfinance that advocates the prohibition of interest, and which curtails uncertainty and speculation is the most viable system whereby a majority of Muslims could avail the benefits of microfinance and participate in financial activities.

Conventional microfinance levies high interest of 10 to 30%, even on small loans which creates hurdles for people with limited means to receive loans for their industrial activities and reimbursement of liabilities. The IsMF system reduces possibilities of manipulative transactions and ensures accountability in its services due its adherence to Islamic Shariah principles. Therefore, a detailed review on such a system is required based on customer perceptions of existing IsMF methods in Kerala.

Objectives of the study

- To study the products and services of Interest-free Microfinance in the state of Kerala.
- To find out the different operational methods of Interest-free Microfinance institutions in Kerala.
- To analyse the perceptual experience of customers towards products, services and operational methods of Interest-free Microfinance in Kerala.

Hypotheses

- **H01-** There is no significant difference between perception of customers about Interest- free Microfinance and products and services of Interest-free Microfinance.
- **H02-** There is no significant difference between perception of customers about Islamic microfinance and its methods of operation.
- **H03-** There is no significant variation in the perception of customers towards Interest- free Microfinance across gender and age of customers.

Research methodology

This is an empirical research study based on qualitative impact studies and quantitative statistical assessment. Qualitative methods are used to analyse customer's perception towards IsMF. The objectives of the study were fulfilled through the following methods of data collection and analyses.

Methods of data collection

Primary data were gathered through the scheduled questionnaire (Appendix 2) prepared for the customers of Islamic microfinance. The secondary data has been collected through periodicals, brochures, theses and articles related to Islamic finance.

The questionnaire was prepared by considering core parameters of this study which pertain to operations of

[1] *Istisna* is a contract of manufacture. A seller under this agreement undertakes to develop or manufacture a commodity with clear specifications for an agreed price and deliver after an agreed period of time.

[2] The holy Quran prohibits interest (riba) by revealing the verses in four stages such as 30: 39, 4: 160-160, 3:130 and 2: 275-281. The fourth stage conclusively inhibits all the forms of interest.

Interest-free Microfinance, its products and services and customer perceptions of all these factors; the questionnaire covers nominal data (qualitative) and measurement data (quantitative). As measurement scaling technique, continuous scale (Likert five-point) has been used. Ninety-nine percent of the questionnaire items are close ended questions.

The reliability of the questionnaire was checked by using Cronbach alpha method. The value of internal consistency is 0.813. This is 11% higher than the acceptance level. The Content and Face validity of the questionnaire items were checked by referring the questionnaire to experts and through discussions with peer groups in the same area where the pilot study was conducted.

Sample size and design

As sample design, two methods of sampling have been used in this study. Convenient sampling method was used to select districts and cluster sampling method to select respondents from the selected districts. The study surveyed a cross section of local respondents and authorities of Interest-free financial institutions who were selected on a rational basis. The total sample size is 400 respondents.

Areas of the study

Two districts of the state of Kerala were chosen for this study.

Malappuram: This is a Muslim majority district (on the basis of Census, 2011) with prevalence of Islamic microfinance activities in the unorganised sector. Furthermore, people in this district have a large flow of funds from the Middle Eastern countries compared to the other districts of Kerala (Samuel, 2011; Viju, 2015).

Kozhikode: This is a developing district for many interest-free microfinance activities. Moreover, this is the second district with a majority of Muslims in Kerala, where many micro finance institutions, such as Kudumbashree, are running prominently.

Distribution of sample size

The district wise sample distribution has been detailed in Table 1. The total population of the two districts, on the basis of Census 2011 conducted in India, numbered 72,00,499. The total sample size of our study is 400, of which 228 respondents were chosen from Malappuram district, and 172 from Kozhikode district.

Data analysis methods

The data analyses of the study have focussed on three aspects of IsMF, these being (1) products and services of Islamic Microfinance (2) IsMF operational methods (3) perceptions of customers towards products and services of IsMF and its operational methods. For data analysis, descriptive statistics (Mean and Standard Deviation) and inferential parametric statistical test have been used. Aforementioned tests and analyses have been performed using SPSS v.23 and MS excel worksheet.

Data analysis for hypotheses testing

The hypotheses have been formulated based on the objectives of the study to test how customers of IsMF perceive its products and services and operational methods in Kerala. The study also tests how each gender (male and female), different age groups and professionally categorised groups of respondents perceive or behave vis a vis the IsMF system. To test the hypotheses two parametric tests have been used, these being *t*-test (independent sample *t*-test) and one-way ANOVA. To conduct an independent sample *t*-test, one categorical or nominal independent variable and one continuous or interval scaled dependent variable are required (Urdan, 2010). To make the decisions on outcomes of hypothesis testing, the generated p-value (estimated probability) has been considered.

Islamic (Interest-free) microfinance in Kerala

Micro financial activities are prevalent in Kerala among all communities irrespective of caste and creed. Interest-free microfinance is an emerging practice in India, especially in the state of Kerala. This state generally is known in India for its higher levels of socio-economic and political consciousness because of higher literacy, lingual unity and good economic system. Kerala has a large number of interest-free funds connected with various institutions but most of them are part of the indigenous financial system with unorganised way of operation. As the delivery methods of financing options such as Nidhis (funds collected through savings or donations which are utilised to give micro loans to the poor and the needy), NGOs and chit funds are registered under the existing financial acts in India, such institutions can play a significant role in the field of interest-free microfinance.

Interest-free microfinance institutions are growing in rural Kerala and providing relief to the poor and needy. In the state of Kerala, there are many region based indigenous arrangements which are known under different names such

Table 1 District wise sample size distribution.

SL No	Districts	Total population (Census 2011)	Sample size*	Percentage of distribution
1	Malappuram	41,10,956	228	57.09%
2	Kozhikode	30,89,543	172	42.90%
	Total	72,00,499	400	100

This was determined on the basis of proportion of population accounted by each district. E.g.: 41, 10,956 400/ 7,200,499 = 228.32.

Table 2 Types of registration of Interest-free microfinance institutions in study sample.

Forms	Frequency	Percentage	Cumulative percent
Unregistered	112	73.0	73.0
Society act	6	3	76.8
Trust act	7	5.0	81.8
Chit fund act	9	6.0	87.1
Nidhi	11	7.0	94.1
NBFC	3	2	96.5
Others (Such as Waqf act)	5	4.0	100.0
Total	153	100.0	

Source: Primary data.

as *Paraspara Sahaya Nidhi* (mutual help fund) or *Palisha Rahitha Nidhi* (interest free fund). In 2013, the Government of Kerala has launched a Shariah compliant financial institution named Cheraman Financial Services Limited (CFSL) at Ernakulam, Cochin as a full-fledged global Islamic bank (Abudheen, 2013).

Nature of institutions/ registration forms of IsMF

The survey conducted in the two districts of the state of Kerala yielded 153 IsMF institutions of which 112 institutions were not registered under any of the financial or corporate laws existing in India. amongst the registered institutions, most of the institutions were registered under the Nidhi act (11 in number). Other microfinance institutions have been registered under different acts, these being the Chit Fund act (9 institutions), Trust act (7), Society act (6) and NBFC (3), respectively. Table 2 reflects the number and the nature of Interest-free Microfinance institutions and their operational methods on the basis of registration.

Participation of respondents in organised or unorganised IsMF institutions in Kerala

Table 3 shows the cross tabulation of respondents' participation in different organised or unorganised microfinance institutions. Respondents have been characterised on the basis of their occupational group.

As Table 3 indicates, most of the IsMF affiliations are in the unorganised sector. The cross tabulation of occupation with nature of institution shows the highest number of participants among occupational groups are self-employed, and they mostly avail financial services from unorganised institutions. Out of 400 respondents, 330 respondents participate in unorganised microfinance activities and 41 respondents in organised activities.

Products and services of IsMF in Kerala

This section deals with facts and figures regarding the products and services IsMF. One of the primary objectives of this study was to collect data and to identify the products and services of IsMF, for which binary nominal (dichotomy) method has been used in the questionnaire (Yes/No). Table 4 shows the usage of product and services offered by IsMFs as availed by the 400 surveyed respondents. Fig. 1 shows the percentage of utilisation across products and services of IsMF.

Most of the customers use chit funds (334 respondents) and micro credit (338 respondents) among products and services offered by the microfinance institutions. Fewer people avail of Musharaka and Mudaraba related products and which constitute only 6% and 7% respectively across the overall utilisation of products services of IsMF in the surveyed districts as indicated in Fig. 1. It is possible that people may not use these products due to lack of awareness of their pros and cons . On the contrary, in the Middle East countries, both forms are the main products of Islamic finance (Iqbal and Mirakhor, 2011).

Outcome of hypothesis testing between IsMF products and services and perceptions of customers

H0-There is no significant difference between perception of customers about Interest-free Microfinance and products and services of Interest-free Microfinance.

This hypothesis test has been done by testing all products individually with the dependent variable, i.e. perception of customer. For this purpose, independent sample *t*-test was employed as there were two levels in each independent

Table 3 Tabulation of occupation of customers across organised or unorganised operations of IsMFs.

	Organised or unorganised			Total
	Organised	Unorganised	Both organised & unorganised	
Student	3	70	1	74
Self employed	25	133	22	180
Private sector employee	4	79	1	84
Government employee	2	13	3	18
Businessman	7	25	1	33
Unemployed	0	10	1	11
Total	**41**	**330**	**29**	**400**

Source: Surveyed data by the researcher.

Table 4 Products and services of IsMF availed by the surveyed respondents.

Sl. No	Products and services	Yes	Percent of cases (%)	No	Percent of cases (%)
1	Musharaka (Partnership)	109	27.5	291	72.9
2	Trusteeship venture (Darb)	129	32.6	271	67.9
3	Share saving (Wadiah)	214	54.0	186	46.6
4	Chit funds	334	84.3	66	16.5
5	Nidhis	125	31.6	275	68.9
6	Cost plus sale (Mudaraba)	181	45.7	219	54.9
7	Micro credit	338	85.4	62	15.5
8	Leasing	197	49.7	203	50.9
9	Takaful (Micro insurance)	147	37.1	253	63.4

Source: Primary data.

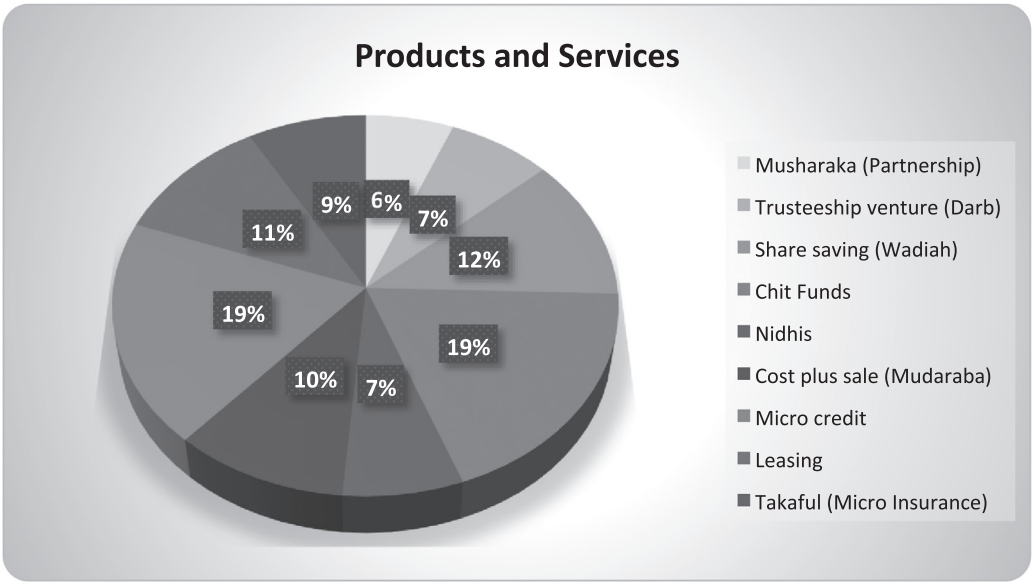

Fig. 1 Percentage of utilisation across products and services of IsMF.
Source: Primary data.

variable. Individual p values, which were the basis for making the decision on this hypothesis, have been furnished in Table 5.

As seen in Table 5, out of nine hypotheses, seven hypotheses accept the alternative hypothesis i.e. the null hypothesis is rejected. Therefore, it can be interpreted that customers' perception has significant association or positive relationship with almost all products and services of Islamic (Interest-free) microfinance in Kerala. More details of the output table (Table 5) on testing the hypothesis have been given in Appendix 1, Table 2.

Table 5 Significant values of independent samples test to ascertain the customers' perception on products and services of IsMF.

Sl. No	Products and services	Significant *P*-Value (0.05)	Decision on hypothesis
1	Trusteeship partnership	**0.040**	Significant
2	Leasing (Ijarah)	**0.013**	Significant
3	Micro insurance (Takaful)	**0.025**	Significant
4	Working capital loan	**0.043**	Significant
5	Nidhi	**0.021**	Significant
6	Chit fund	**0.017**	Significant
7	Share saving (Wadiah)	**0.036**	Significant
8	Micro credit	**0.611**	Not Significant
9	Musharaka (Partnership)	**0.172**	Not Significant

Source: SPSS analysis result on primary data.

Operational methods of Islamic microfinance in Kerala

Interest-free Microfinance has different ways of functioning which vary from one country to another. In Kerala, 11 methods of operation, belonging to both the organised and the unorganised sector, are commonly seen, especially in the surveyed districts. Table 6 shows the different modes of operations and the customer participation statistics, which have been collected through the survey questionnaire.

Table 6 shows that the predominant operational method under IsMF system is chit funds (regionally named as "Kuri" system) which accounts for 358 in number and 15% out of 11 surveyed methods based on percentages of customer participation. Self-help groups (SHGs) are the second most prevalent method in the surveyed districts, with 338 respondents

Table 6 Operational methods of IsMF and customer participation.

Methods	Yes	Percentage of participation (Out of 400)	No	Percentage of non-participation (Out of 400)
Neighbourhood Groups (NHGs) – Ayalkootam	170	42.5	230	57.5
Credit union	289	72.3	111	27.8
Self-help groups (SHGs)	338	84.5	62	15.5
Welfare societies	209	52.3	191	47.8
NBFCs	03	01.2	397	98.8
Association of persons	253	63.3	147	36.8
Nidhis	161	40.3	239	59.8
Chit funds or Kuris	358	89.5	42	10.5
Kurikalyanam	256	64.0	144	36.0
Non-government organisation (NGO)	57	14.3	343	85.8
Kudumbashree	220	55.0	180	45.0

Source: Primary data.

participating in SHGs. The institutional method with the least number of adherents in terms of customer participation is NBFC with only 3 participants, which constitutes 1% among total participation in the institutional methods. Apart from that, there are 289 Credit Unions, 209 Welfare Societies, 253 Associations of Persons, 161 Nidhis, 256 Kurikalyanam, 57 NGOs and 220 Kudumbashree units existing in the surveyed districts. From this data, it can be interpreted that Kerala has good operational methods in the field of Islamic (Interest free) Microfinance.

Hypothesis testing related to operational methods

H0- There is no significant difference between perception of customers about Islamic micro finance and methods of operation.

Table 7 Independent sample test related to operational methods of IsMF.

Sl. No	Methods	Significant *P*-Value (0.05)	Decision on hypothesis
1	Self-help groups (SHGs)	**0.043**	Significant
2	NBFCs	**0.021**	Significant
3	Nidhis	**0.012**	Significant
4	Non-government organisation (NGO)	**0.038**	Significant
5	Chit fund or Kuri	**0.016**	Significant
6	Credit union	**0.037**	Significant
7	Kurikalyanam	**0.049**	Significant
8	Neighbourhood Housing Group (NHG) – Ayalkootam)	**0.292**	Not significant
9	Welfare societies	**0.076**	Not significant
10	Association of persons	**0.386**	Not significant
11	Kudumbashree	**0.213**	Not significant

Source: SPSS result on analysis of primary data.

In this case, the two variables are perception of customers as the dependent variable and methods of operation as the independent variable. The independent sample *t*-test is conducted here as the independent variable has two levels or groups (Yes/No). The final outcomes of this hypothesis are as shown in Table 7.

Based on the result generated by SPSS for independent sample *t*-test, it can be interpreted that out of 11 methods of operation 7 methods accept the alternative hypothesis and 4 methods reject it i.e. they accept the null hypothesis. In summary, it can be said that customers have a positive perception towards almost all methods of operations of Interest-free Microfinance in Kerala. The group statistics on the output in Table 7 based on independent sample *t*-test have been annexed in Appendix 1, Table 3.

Customer perceptions towards Islamic microfinance in Kerala

To ascertain the customer perceptions on IsMF in Kerala, two sub-divided hypotheses have been formulated based on the variables gender and age group of customers. Their detailed analyses have been given below.

Sub hypothesis 1

H0- There is no significant variation in the perception of customers towards Interest-free Microfinance across gender.

This hypothesis seeks to test whether there is any significant difference in the perceptions of customers towards IsMF based on gender group of respondents (customers). In other words, what is the attitude of each gender group towards IsMF in the state of Kerala? To test this, gender (categorical data) has been taken as independent variable and perceptions of customers (metric data) as the dependent variable. Hence, *t*-test has been used to test this hypothesis, where one categorical or nominal data as an independent variable and one metric or interval data as dependent variable are required.

The group statistics table (Table 8) shows 32.06 and 31.56 as Mean Values across Male and Female genders respectively.

Table 8 Group statistics on gender-wise perception of customers of IsMF.

	Gender	*N*	Mean	Std. deviation	Std. error mean
Perception of customers	Male	331	32.0665	1.92632	0.10588
	Female	69	31.5652	1.82691	0.21993

Source: Primary data.

Table 9 Independent samples test with the variables gender and perceptions of customers of IsMF.

Dependent variable: perception of customers		Levene's test for equality of variances		*t*-test for equality of means			
		F	Sig.	*T*	Df	Sig. (2-tailed)	Mean difference
Gender	Equal variances assumed	0.398	0.529	1.983	398	**0.048**	0.50125
	Equal variances not assumed			2.054	102.04	0.043	0.50125

Source: SPSS result on analysis of primary data.

Table 10 Descriptive statistical values: Perception of customers across age group.

Dependent variable: perceptions of customers						
Age group	N	Mean	Std. deviation	Std. error	95% confidence interval for Mean	
					Lower bound	Upper bound
18-25	86	4.4910	0.29041	0.03132	4.4288	4.5533
26-40	228	4.4984	0.25755	0.01706	4.4648	4.5320
Above 40	86	**4.6062**	**0.22567**	0.02434	4.5579	4.6546
Total	**400**	**4.5200**	**0.26192**	**0.01310**	**4.4943**	**4.5457**

Source: SPSS outcome result on primary data analysis.

The output table (Table 9) shows the columns of Levene's Test for equality of variances and *t*-test for equality of means. In Levene's test for equality of variances, the significant value is 0.529 that is more than 0.05 (95% confidence level). Therefore the significant (2-tailed) value of *Equal variances assumed* has been considered in making the decision on acceptance or rejection of the null hypothesis. In this case, the t-statistic is 1.983 with 398 degrees of freedom. The corresponding two-tailed p-value is 0.048, which is less than 0.05. Hence the output of the test rejects the null hypothesis and asserts the alternative hypothesis. Thus, it can be concluded that there is significant variation in the perception of customers towards IsMF across gender.

Sub hypothesis 2

H0- There is no significant difference between the perceptions of customers on Interest-free Microfinance across the age group of the customers.

This hypothesis was formulated to test whether there is any significant difference between perceptions of customers towards IsMF across the age group of respondents. Here the age group is an independent variable that has more than two levels (18-25, 26-40 and Above 40). Therefore, one-way ANOVA has been used to test the hypothesis between these two variables (Age group v/s Perceptions of customers). The descriptive statistics of the data used in this one-way ANOVA is shown in Table 10.

The descriptive statistical table demonstrates the Mean value and standard deviation of the independent (age group) and dependent variable used in the ANOVA test. Table 10 shows that the Above 40 age group has the highest Mean (4.606) with a low standard deviation i.e. 0.22. Here the confidence interval is 95%. The above 4.4 Mean value across all age groups on the perception of the customers shows that each age group has positive responses towards IsMF that they recorded in the five-point Likert scale of the questionnaire. The output of one-way ANOVA result is as shown in Table 11.

In Table 11, F-value is 6.116 and corresponding p-value is 0.002. Since the p-value is less than the significant alpha value (0.05) or 95% confidence interval value (0.002 $<$0.05), the null hypothesis is rejected. Therefore, we can safely reject the null hypothesis (H0) and conclude that there is significant difference variation in the perception of customers towards IsMF across the age group of customers (Table 11). (i.e The post hoc results of above ANOVA test has been furnished in Table 12)

Post hoc test for ANOVA reveals the possible multiple comparisons of all items used in one-way ANOVA that tells us which groups differ from the remainder. It is evidenced when we obtain a significant F test result in an ANOVA, i.e. at the time of rejection of the null hypothesis.

Table 11 Output of one-way ANOVA.

Dependent variable: perceptions of customers					
	Sum of squares	Df	Mean square	F	Sig.
Between groups	0.818	2	0.409	6.116	**0.002**
Within groups	26.555	397	0.067		
Total	27.373	399			

Source: SPSS result on primary data.

Table 12 Multiple comparisons (post hoc test).

Age group	Dependent variable: perception of customers least significant difference (lsd)					
	(J) Age of respondent	Mean difference (I-J)	Std. error	Sig.	95% Confidence interval	
					Lower bound	Upper bound
18-25	26-40	−0.16259	0.72003	0.821	−1.5781	1.2530
	Above 40	−2.53488*	0.86769	0.004	−4.2407	−0.8290
26-40	18-25	.16259	0.72003	0.821	−1.2530	1.5781
	Above 40	−2.37230*	0.72003	0.001	−3.7878	−0.9568
Above 40	18-25	2.53488*	0.86769	0.004	0.8290	4.2407
	26-40	2.37230*	0.72003	0.001	0.9568	3.7878

*The mean difference is significant at the 0.05 level.
Source: SPSS output on analysis of primary data.

Major findings of the study

- It has been found from field survey that there are 9 products and services of IsMF and 11 operational methods in the surveyed areas. Customers have a good perception regarding almost all systems of IsMF i.e. this system has good viability and relevance to the microfinance sector in the state of Kerala.
- There is a significant difference among all products and services of IsMF and the perception of the customers, except in the case of micro credit and Musharaka products, in which there is no significant difference across perceptions of the customers.
- There is a significant difference between operational methods of IsMF and perceptions of the customers across all operational methods except neighborhood groups (NHGs), Welfare societies, Association of persons and Kudumbashree programmes.
- The hypothesis test on customer perception across gender indicates that there is no significant variation in between the gender of the customers and their perception towards IsMF in Kerala.
- Through the survey and electronic media, 153 institutions of IsMF have been found in the surveyed districts. Of them, 112 were unregistered units, 7 institutions were registered under the Chit Fund act, 3 institutions were registered under the Trust act, 11 institutions were registered under the Nidhi act, 3 institutions were NBFCs and the rest of the institutions were registered under the Waqf act, Kudumbashree, and so on.
- In Kerala, there are some region based indigenous arrangements which are known under different names such as Paraspara Sahaya Nidhi (mutual help fund) or Palisha Rahitha Nidhi (interest free fund), Kuri, Kurikalayanam, Pana payattu, Chit funds etc. Authorised sources noticed that more than 500 units such as Nidhis are working in Kerala (Padanna, 2010). Most of them are working in informal ways.
- We submit that in India, the present legal system of the Reserve Bank of India (RBI) is the major constraint to the wide and formalised channelisation of Interest-free finance since the system is based on interest and the discounting principle of Economics. Furthermore, legal hurdles in the execution of this system in India, misunderstanding of IsMF by non-Muslims as a system only for Muslims (due to its name), higher cost of operations, low capital yield, unprofessional management, and so on also stand as a challenge to smooth functioning of IsMF.
- The mode of financing of IsMF shows that most of the organisations are running with non-profit motives. Of them, 79.3% organisations working in different areas can be treated as social businesses for rendering financial services without the aim of profit making (Appendix 1. Table 1).
- There are reports of poor people committing suicide due to their inability to reimburse borrowed money and the multiplying interest on accessed funds (Ashta, Khan & Otto, 2015). Interest-free Microfinance definitely can play a pivotal role by lending interest free money and accepting interest free deposits. Hence, this system can alleviate the hardships caused by the bottleneck of interest levied by the conventional banks.

Conclusion

Interest-free Microfinance is regarded as one of the most powerful weapons in bringing the poor into the mainstream of economic development through its grassroots and

bottom-up approach. Though there are legal challenges to the practice of Islamic finance in India in its finest way due to current regulatory framework of the RBI, the demand for IsMF and its different operational methods such as NBFC, Trust acts, the Society acts, NGO and so on, show the ways in which the Islamic economic system can be applied in the Indian microfinance sector.

The outcomes of the survey conducted in two districts of Kerala as part this study reveal the optimistic results towards all elements which were tested to vindicate the objectives of the study. From the data collection and analysis, 9 products and services of IsMF and 11 different methods of operations have been explored which are mainly seen in the surveyed districts. As a summary of all statistical tests, it can be strongly concluded that Interest-free Microfinance has predominantly positive responses towards all its programmes and performances. The descriptive and inferential tools used for data analysis and interpretation, and their output reveals favourable results that justify the relevance of Interest-free Microfinance as a good mechanism for economic growth of all people, particularly those belonging to the middle- and lower-income groups. To further this system, comprehensive policies and monetary assistance must be brought to overcome the challenges prevailing in the present operating system. Thus, IsMF can play a significant role in the social, economic and infrastructural development of this nation, particularly to fulfil the dream of a prosperous rural economy in India.

Appendix 1: SPSS output tables on data analysis

Table A1, A2 and A3

Table A1 Respondent opinion towards mode of financing.

	Percent	Cumulative percent
Profit motive organisations	10.0	10.0
Non-profit motive organisations	79.3	89.3
Mixed objective organisations	10.8	100.0
Total	100.0	

Source: Primary data.

Table A2 Independent samples test to ascertain customers' perception of IsMF products.

Dependent variable: perception of the customers		Levene's test for equality of variances		*t*-test for equality of means			
		F	Sig.	T	Df	Sig. (2-tailed)	Mean difference
Trusteeship Partnership (Mudaraba)	Equal variances assumed	8.508	**0.004**	2.213	398	0.027	0.49395
	Equal variances not assumed			2.065	213.11	**0.040**	0.49395
Leasing (Ijarah)	Equal variances assumed	0.007	0.934	2.509	398	**0.013**	0.52271
	Equal variances not assumed			2.509	397.84	0.012	0.52271
Micro insurance (Takaful)	Equal variances assumed	1.984	0.160	2.256	398	**0.025**	0.48091
	Equal variances not assumed			2.235	327.66	0.026	0.48091
Working capital loan	Equal variances assumed	0.550	0.459	0.332	398	**0.043**	0.06991
	Equal variances not assumed			0.332	388.88	0.043	0.06991
Nidhi	Equal variances assumed	0.108	0.743	0.331	398	**0.021**	0.07272
	Equal variances not assumed			0.329	285.39	0.021	0.07272
Chit fund	Equal variances assumed	0.386	0.535	1.468	398	**0.017**	0.41408
	Equal variances not assumed			1.375	87.408	0.017	0.41408
Share saving (Wadia)	Equal variances assumed	1.097	0.296	−0.911	398	**0.036**	−0.19158
	Equal variances not assumed			−0.909	385.49	0.036	−0.19158
Micro credit	Equal variances assumed	3.754	0.053	0.509	398	**0.611**	0.14774
	Equal variances not assumed			0.452	77.598	0.653	0.14774
Musharaka (Partnership)	Equal variances assumed	0.280	0.597	1.369	398	**0.172**	0.30996
	Equal variances not assumed			1.338	224.74	0.182	0.30996

Source: SPSS output table on analysis of primary data.

Table A3 Independent samples test related to operational methods of IsMF.

		Levene's test for equality of variances		*t*-test for equality of means			
		F	Sig.	*T*	Df	Sig. (2-tailed)	Mean difference
Self-help groups (SHGs)	Equal variances assumed	9.427	**0.002**	2.257	398	0.025	0.66387
	Equal variances not assumed			2.060	79.093	**0.043**	0.66387
Neighbourhood groups (Ayalkootam)	Equal variances assumed	10.623	**0.001**	−1.101	398	0.271	−0.23836
	Equal variances not assumed			−1.056	300.27	**0.292**	−0.23836
Chit fund or Kuri	Equal variances assumed	5.786	**0.017**	3.158	398	0.002	1.09018
	Equal variances not assumed			2.509	46.504	**0.016**	1.09018
Credit union	Equal variances assumed	2.675	0.103	−0.882	398	**0.037**	−0.21085
	Equal variances not assumed			−0.924	220.13	0.035	−0.21085
Welfare societies	Equal variances assumed	0.429	0.513	.294	398	**0.076**	.06303
	Equal variances not assumed			.294	397.10	0.076	0.06303
NBFCs	Equal variances assumed	2.474	0.117	1.949	398	**0.021**	0.62857
	Equal variances not assumed			2.351	74.314	0.052	0.62857
Association of persons	Equal variances assumed	0.648	0.421	.869	398	**0.386**	0.19284
	Equal variances not assumed			.860	295.96	0.391	0.19284
Nidhis	Equal variances assumed	1.511	0.220	1.595	398	**0.012**	0.34731
	Equal variances not assumed			1.641	374.70	0.012	0.34731
Kurikalyanam	Equal variances assumed	0.848	0.358	1.824	398	**0.049**	0.40538
	Equal variances not assumed			1.892	330.02	0.059	0.40538
Non-government organisation	Equal variances assumed	0.318	0.573	.078	398	**0.038**	0.02394
	Equal variances not assumed			.071	71.118	0.043	0.02394
Kudumbashree	Equal variances assumed	5.472	**0.020**	1.278	398	0.202	0.27475
	Equal variances not assumed			1.249	336.55	**0.213**	0.27475

Source: SPSS output table on analysis of questionnaire data.

Appendix 2: Questionnaire on Islamic microfinance

Dear Respondent,

I am a Research scholar, conducting a survey on Islamic (Interest free) Microfinance, its products and services, customer attitudes towards IsMF etc. I would be thankful if you could spare some of your valuable time to help me by filling up this questionnaire. Please be assured that the data collected will be used only for academic purpose and information confidentiality shall be maintained.

Thanking you in advance.

SECTION-A: DEMOGRAPHIC PROFILE

1. Name (Optional) :……

2. Gender: Male ☐ Female ☐

3. Age……..…18-25…….26-40……Above 41

4. Profession

- ☐ Student
- ☐ Self-Employed
- ☐ Private Sector Employee
- ☐ Government Employee
- ☐ Business Man
- ☐ Unemployed

5. District…….

Section- B: NATURE OF ISLAMIC MICRO FINANCE INSTITUTIONS

1. Is there any Islamic (Interest free) Microfinance activity in your area?

☐ Yes ☐ No

2. If yes, please specify what kind of activity? Organasied or Unorgansed activity ?

☐ Organised activity ☐ Unorganised activity ☐ Both Org &Unorganised

3. Do you participate in any activities or works as a member of Islamic Microfinance?

☐ Yes ☐ No

4. If yes, what kind of programmes do you participate in? If not, why?

……

……

5. What are the features that attract you to participate in Islamic Microfinance?

a. New financing method ☐
b. Profit and loss sharing principle ☐
c. The concept of halal and haram in investment ☐
d. Interest free mechanism ☐
e. Help in alleviating poverty ☐
f. Others (Please state)……..

6. Is there any Interest free Micro Finance institution in your village/town?

☐ Yes ☐ No

7. If yes, has your institution registered under any act? : ☐ Yes ☐ No.

Registered with: NBFC☐ Society act☐ Trust☐ Chit fund Act☐ Nidhi ☐

Other …….

SECTION-C: REGARDING ISLAMIC MICROFINANCE PRODUCTS AND SERVICES

1. Did you use or are you using any products and services of Islamic (Interest Free) Microfinance?

☐ Yes ☐ No

2. If yes, what kind of Islamic Micro finance products and services are mainly used in your entities or transactions?

Products and Services	Mark (√) your used Products or Services

Micro Equity (Partnership contracts)		
A	Musharaka (Joint venture)	
B	Mudaraba (Trustee partneship)	
	1. Micro savings	
A	**Wadia** (Share savings)	
Deferred deliveries		
A	Cost plus fiancing/Murabaha	
B	Manufacture-Sale (*Istisna*) facility	
C	*Bai-Istijrar* (Repeated purchasing)	
	2. Micro-credit	
	3. Leasing (Ijara) facility	
	4. Micro-transfers	
	5. Micro-insurance *(Takaful)*	

3. What are your thoughts regarding Islamic microfinance products and financial service?

Statements	***Strongly Agree***	***Agree***	***Neutral***	***Disagree***	***Strongly Disagree***
Suitability to Micro financing	5	4	3	2	1
Useful to fulfil immediate needs	5	4	3	2	1
Reliability & accountability	5	4	3	2	1
A good vehicle to promote Islamic values	5	4	3	2	1
Prohibition of gambling, uncertainty and deception	5	4	3	2	1
No different from other banks except complying with Shariah prescriptions	5	4	3	2	1
Offering viable and competitive financial products	5	4	3	2	1

SECTION-D: SOCIAL BENEFICIARY ACTIVITIES

1. Is there any Islamic welfare or charitable organisation in your place?

Yes ☐ **No** ☐

2. Do you use any of the below given products or services which are mainly used for removing the financial inequalities? Please tick (√)

☐ Sadaqa (Charity)
☐ Waqf (Sadaqathun Jaria)
☐ Hibat (Gratuitous gift)
☐ Zakath (Compulsory payment)
☐ Qard Hassan (Lending money)
☐ Any other (specify)……

3. Please mark your opinion regarding social beneficiary systems of IsMF

Statements	*Strongly Agree*	*Agree*	*Neutral*	*Somewhat Disagree*	*Strongly Dis agree*
Useful to poverty eradication	5	4	3	2	1
Providing relief and charitable activities	5	4	3	2	1
Contribute in removing society's inequalities and improving general standard of living	5	4	3	2	1
Play mediatory role between have and have not	5	4	3	2	1
Comfortable in reimbursing loan and other remittances	5	4	3	2	1
Effective mechanism to fulfil basic needs of destitute people	5	4	3	2	1
Helpful to tackle urgent financial needs	5	4	3	2	1

SECTION-E: MODE OF FINANCING

1. What kind of financing is promoted by Islamic micro finance enterprises in your place?

☐ Profit based ☐ Non-profit based ☐ Mixed

2. How is it running in your area?

Government assisted ☐ Privately ☐ Semi organised by Govt. and private. ☐

3. Can you differentiate your Rural/ Urban enterprises to any below categories and how many entities are constituted by each mode?

Se: No	Models	If yes please mark (√)	Number of Units
1	Village Bank model		
2	Credit Union (CU)		
3	Self-Help Groups (SHGs)		
4	Non Banking financial company (NBFC)		
5	Association of Persons		
6	Nidhis		
7	Chit funds/ Kuri (Collective funds)		
8	Non Governmental Organisations (NGOs)		
9	Kudumbashree		
10	Welfare Associations		
11	Any other (Please specify)…….. ……..		

4. What is your opinion of the operational methods of Islamic (Interest free) Microfinance?

Statements	*Strongly Agree*	*Agree*	*Undecided*	*Disagree*	*Strongly Disagree*
It is a socially responsible business	5	4	3	2	1
Providing variety of optional services,	5	4	3	2	1

attributes and information					
Offering better investment and secure saving options	5	4	3	2	1
Terms and conditions and highly transparent and suitable to requirements	5	4	3	2	1
It can encourage rural development and industrial growth	5	4	3	2	1
It allows you to manage your activities conveniently and quickly	5	4	3	2	1
Completely serves as an alternative banking system	5	4	3	2	1

Any suggestions.....

.....

♦ ♦ ♦ Thank you very much for your patience, support and for sparing your precious time.♦ ♦ ♦

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