Impact of microfinance on household income: Special reference to Kopay DS division in Jaffna district

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Introduction

A Micro Finance Institution (MFI) is vital to provide the financial and non-financial services to poor in developing countries. It focuses on micro credit, savings and insurance and other financial and non-financial services to the low-income people of a country. More than Thirteen (13) million micro entrepreneurs worldwide have benefited through microcredit, by using the loan facilities in order to improve their wealth and their families out of poverty (Rathiranee & Semasinghe, 2015). Microfinance is not a new concept. It has existed since the 18th century. The first organization to receive attention was the Grameen Bank, which was started in 1976 by Muhammad Yunusin Bangladesh. It is visible that, although few are enjoying in a well-standardized lifestyle, many are living even without one-time meal in our society.

In Sri Lanka there is variety of MFIs providing financial and non-financial services for Poor people. According to Yogendrarajah (2014) and Premaratne (2009), Suchinstitutions are as follows: Licensed Commercial banks (eg:-HNB), Licensed specialized banks (eg:-RDB), Registered Finance Companies (eg:-The Lanka Orix and Leasing company, SANASA/TCCS, Samurdhi bank Societies (SBSs), Cooperatives, CRB, Women's Development Cooperatives, Other MFIs (NGOs/Limited Liability companies/Companies limited by guarantee). Income includes every form of income, e.g., salaries and wages, retirement income, near cash government transfers like food stamps, and investment gains. Generally, people can use their income to consume the day-to-day expenditures and any excess income could be saved by them in any financial institution like banks. Therefore, income level can be measured by the extent of increase or decrease in earnings or profit, saving, consumption of the people. Thus, this study attempts to investigate whether the microfinance impacts on household income level on the Kopay Ds division in Jaffna District.

There are many arguments on microfinance and the result has been an immense debates and inconsistent. Morduch(1998) argues that access to credit assists poor to smooth their income and consumption. Khandker (2005) also emphasizes that microcredit reduces the poverty among poor by increasing consumption and growing income. On the other hand, Ditcher (2007) strengthens that the provision of credit may jeopardize the livelihood of the poor by putting them further down in the valley of debt thus keeping them below poverty line instead of taking them out. Likewise, Khandker (1998) stresses that microcredit program should not be the sole instrument of poverty reduction.

Further, there are most of the researches have been done in the microfinance in global level as well as in the Sri Lankan level, however there is a limited Knowledge on the household income and poverty through the microfinance programs in Kopay DS Division. Since 39.47% of the total population of Kopay DS division is fallen into, the category of income is Under Rs. 5000 per month as at December of 2018 (Statistical handbook, 2019). Hence, there is a need to identify the poverty alleviation. Therefore, researcher could consider this gap and has formulated the problem statement as follows "To what extent the Micro finance impacts on the house hold income in the Kopay DS Division?" The main objective of the study is to investigate the impact of Microfinance on Household income level in Kopay DS Division. This study helps to accelerate effectiveness and efficiency of the Microfinance and provide the better suggestion to the government to adopt in their policies, which related to Micro finance. Academics can gain knowledge and ideas of Micro finance aspects and House hold income from this study, and this finding will be contributed to the empirical evidence to the future researchers.

Methodology

Cluster sampling method was used in this study and Samurdhi families were selected as sample from 4 Grama Niladhari(GN) division. In Jaffna district Kopay, division was selected. It consists 31 Grama Niladhari, where 4 GN were selected such as Kopay north(J/262) with the total of 427 Samurdhi families, Irupalai South (J/257) with the total of 510 Samurdhi families, Urelu (J/267) with the total of 579 Samurdhi families and Urumpirai south(J/265) with the total of 875 Samurdhi families. Fifty Beneficiary families from each Girama Niladhari division have been selected randomly and issued questionnaires per each GN divisions with total population of 2391 of Samurdhi families. From 200 samples, the researcher could only collect 177 Questionnaires and 23 were not responded. The following hypotheses have been formulated based on the literature review.

H1: There is a significant positive impact of microcredit on Household income

H2: There is a significant positive impact of livelihood on Household income

H3: There is a significant negative impact of welfare on Household income

Table 1: Operationalization for Concept and variables

Concept	Variables	Measurement Indicator	
Microfinance	Microcredit	Loan size Interest rate Repayment	
	Livelihood activity	Employment opportunity Training, Technical assistance	
	Welfare activity	Food stamp Housing Planning Social welfare payments	
Household income	Income level	Income Saving consumption	

The following model is expressed to investigate the impact of Microfinance on Household income in Kopay DS division.

Household income= $\beta 0+\beta 1$ MC+ $\beta 2$ LA + $\beta 3$ WA+ ϵit

 β 0, β 1, β 2, β 3 - Regression Coefficients,

MC - Microcredit

LA - Livelihood activity
WA - Welfare activity
ε - Error term.

Findings

Majority of the respondents that is 125(70.6%) of them are getting monthly transfer also more than half of the respondents (58.2%) never received any social welfare payments. Since this could only receive if they are receiving, monthly cash transfer. Around 84.7% of the total respondents are not getting any livelihood technical or training facilities, as this is not in active in the Kopay DS division except Kopay GN division (J/262). However, these activities are existing in the Samurdhi scheme but could not be in practical in Kopay DS division. Based on the discussion with the samples, only in J/262 (Kopay north) division has conducted this kind of training or assistance Activities like Providing saplings and seeds, training for cattle fostering & sewing, Training on Agriculture, embroidery training. According to the regression result, also it is noted that LA is not impact on household income.

Correlation Analysis

The Pearson correlation was made to identify the pattern of relationship or strength of the relation between the following two variables, microfinance and income level.

Table 2: Correlation Matrix

	Income level	Micro credit	Livelihood activities	Welfare activities
Income level	1			
Micro credit	0.451**	1		
	0.000			
Livelihood activities	0.244**	0.226**	1	
	0.001	0.002		
Welfare activities	0.202**	0.148	0.297	1
	0.007	0.049*	0.000	

^{**.} Correlation is significant at the 0.01 level (2-tailed).

The correlations table 4 reveals that there is a positive significant relationship between microcredit and income level (r=0.451**p=0.000<0.01) while Livelihood activity is significantly positively linked with income level (r=0.244**, p=0.001) at 1% level. Moreover, there is a positive significant link between welfare activity and income level. (r=0.202**, p=0.007) at 1% level.

Table 3: VIF Analysis

	Collinearity Statistics		
	Tolerance	VIF	
Micro credit	.942	1.062	
Livelihood activities	.878	1.139	
Welfare activities	.905	1.105	

Dependent Variable: Income level

Based on the table, the VIF values of 1.062, 1.139, 1.105, meaning that the VIF values obtained are between 1 to 10, it can be concluded that there is no multicollinearity symptoms. From the output of reliability statistics table obtained Cronbach's Alpha value of 0.704 is higher than 0.6, it can be concluded that this research instrument is reliable, whereas a high level of reliability.

Table 4: Regression Analysis

Table 4. Regression Analysis					
	Coefficient	Std. Error	t	Significant value	
Constant	1.643	.293	5.616	0.0000	
Microcredit	.398	.067	5.949	0.0000	
Livelihood activity	.107	.063	1.696	0.092	
Welfare activity	.115	.076	1.510	0.133	
R-squared	.234				
Adjusted R-squared	.221				
F-statistic	17.662				
Prob (F-statistic)	0.000				
Durbin-Watson	1.868				

Dependent Variable: Income level

The output coefficients table 5 shows the value of adjusted R Squared is 0.221. These statistics shows the ratio of explained variation to total variation converting the 0.221 to a percentage, it is concluded that approximately 22.1% of the total variance in income level can be determined by all dimensions of microfinance as the independent variable in this model. Further, the model reveals that the remaining 77.9% of variability was not explained in this model. It is observed that the model is good fit because the sig (F-statistic) is less than 0.05.

Further the table 05 presents the regression coefficients, their associated statistics and p values. The results indicated that the microcredit has a positive and significant impact on household income level (β =.398, p=0.0000<0.01). Therefore, Hypothesis 1 has been accepted. Meanwhile, Livelihood activity and welfare activity show insignificant impact on income level with the p value of 0.092 and 0.133 respectively. So that Hypothesis 2 and hypothesis 3 has not been accepted. Most of the beneficiaries are given Samurdhi loan to build or renovate the house, and to start or build a self-employment. Others do

^{*.} Correlation is significant at the 0.05 level (2-tailed).

Cattle fostering, Agriculture, extend the petty venture for example fruit shop, and consumption by using Samurdhi loan. Also, few of them get loan to fix electricity, to build a sanitary facility and to fix water facility for their house.

Conclusion

This study has been conducted to examine the impact of microfinance on household income level in Kopay DS Division. 177 Samurdhi beneficiary families have been selected as sample from 4 GN divisions in Kopay. The results of the study reveal that microcredit has a positive and significant impact on income level whereas livelihood activity and welfare activity have not significant impact on income level. Further this study suggests that the livelihood activity and welfare activity needs to improve its policies and services to achieve the objective of microfinance institutions. A livelihood activity is not active in huge extent. Therefore, it is suggested to adopt relevant technical training facilities for clients. This may lead to improve the employment of self-employment of clients especially in unemployed youngsters. For example, Sewing, agriculture, Handicraft business. For the future research, it can be suggested to observe other microfinance instruments too and can concentrate on women empowerment.

References

- Agbola, F. W., Acupan, A., & Mahmood, A. (2017). Does microfinance reduce poverty? New evidence from Northeastern Mindanao, the Philippines. *Journal of Rural Studies*, *50*, 159-171.
- Bhuiya, M. M. M., Khanam, R., Rahman, M. M., & Nghiem, H. S. (2016). Impact of microfinance on household income and consumption in Bangladesh: Empirical evidence from a quasi-experimental survey. *The Journal of Developing Areas*, 50(3), 305-318.
- Dichter, T. W., & Harper, M. (Eds.). (2007). What's wrong with microfinance? *Practical Action Pub*, 9-17.
- Fenton, A., Paavola, J., & Tallontire, A. (2017). The role of microfinance in household livelihood adaptation in Satkhira District, Southwest Bangladesh. *World Development*, 92, 192-202.
- Herath, H. M. W. A., Guneratne, L. H. P., & Sanderatne, N. (2015). Impact of microfinance on women's empowerment: a case study on two microfinance institutions in Sri Lanka. 38(1), 51-61
- Imai, K. S., Arun, T., & Annim, S. K. (2010). Microfinance and household poverty reduction: New evidence from India. *World development*, *38*(12), 1760-1774.
- Jolaoso, E., & Asirvatham, J. (2018). Impact of microfinance on poverty and household income in Rural Areas in Nigeria (No. 2015-2018-269).
- Khandker, S. R. (1998). Fighting poverty with microcredit: experience in Bangladesh. *Oxford University Press*.
- Khandker, S. R. (2005). Micro finance and poverty: Evidence using panel data from Bangladesh. *The World Bank Economic Review*, 19(2), 263-286
- Morduch, J. (1998). Does microfinance really help the poor? New evidence from flagship programs in Bangladesh. Princeton: Research Program in Development Studies, *Woodrow School of Public and International Affairs*.
- Moses, C., Agboola, F.A., & Faboyede, O.S. (2011). Empowering Women Entrepreneurs in Ogun State through Microfinance: Challenges and Prospects. *Journal of Research in National Development*, 9(1b), 245-257.

- Premaratne, S.P. (2009). Accessibility and Affordability of Rural Micro Finance Services in SriLanka. *Sri Lanka Economic Journal*, 10(2),109-136.
- Rathirani, Y.& Semasinghe, D.M. (2015). Factors determining the women empowerment through microfinance: An empirical study in Sri Lanka. *International Journal of Social, Behavioural, Educational, Economic, Business and Industrial Engineering*, 9(5), 2328-2185.
- Samer, S., Majid, I., Rizal, S., Muhamad, M.R. & Rashid, N. (2015). The impact of micro finance on poverty reduction: Empirical evidence from Malaysian perspective. *Procedia-Social and Behavioral Sciences*, 195,721-728.
- Sayvaya, I. & Kyophilavong, P. (2015). Does microfinance reduce poverty in Lao PDR?, *International Journal of Development Issues*, 14(3), 215-230.
- Ullah, I. & Khan, M. (2017). Microfinance as a tool for developing resilience in vulnerable communities, *Journal of Enterprising Communities: People and Places in the Global Economy*, 11(2), 237-257
- Yogendrarajah, R. (2014). Impacts of Microfinance Institutions: Issues and Concepts—An Empirical Study on Sri Lankan Context. *In 1st International Conference, Centre of Excellence for Scientific & Research Journalism*, (COES&RJ-SG14/1).