# Impact of Microfinance on Women Entrepreneurial Development: A Case of ILO-PALM Joint Intervention in Eastern Sri Lanka

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## Introduction

Entrepreneurship is the dynamic process of creating incremental wealth (Donald and Richard, 2001). The development of microfinance institutions (MFIs) over the last two decades had a positive impact on making entrepreneurial development and it become a powerful instrument in combating poverty in developing countries (Ngozi, 2002) and contributed to empowering women and removing gender inequalities. Thilepan and Thiruchelvam (2011) proved that microfinance has a major role on entrepreneurial development through the favorable loan conditions, low interest rate, flexible repaying period and trainings in Sri Lanka.

Small and micro-enterprises (SMEs) is the major source of living of many people in the post conflict environment which also ensures sustainable livelihood of women headed families in North and Eastern provinces of Sri Lanka (Thilepan and Thiruchelvam, 2011). Government Organizations (GOs); and International and Local Non-Governmental Organizations (INGOs and NGOs) have become increasingly involved in providing financial services to women entrepreneurial development to ensure sustainable livelihood in these areas. However, the topic of women entrepreneurship development has been neglected in the social science research in the past (Sathibama, 2010). Consequently, few empirical research on impact assessment of microfinance on women entrepreneurial development in post conflict environment in Sri Lanka have been conducted and even they lacking empirical analysis. Therefore, this study attempts to fulfill this research gap by investigating the impact of the microfinance intervention on development of the women headed entrepreneurship in Sri Lanka.

### Objectives

The major objectives of this study are to investigate the impact of the microfinance intervention on development of the women headed entrepreneurship and to find to what extent the microfinance intervention affects the financial performance of women entrepreneurs.

#### Methodology

This study focuses on ILO and PALM initiated microfinance project implemented in the four Divisional Secretariat Divisions (DSDs) in the Batticaloa District of Eastern Sri Lanka. The data for this study was collected in 2012 and 2013 using semi-structured questionnaires from purposely selected 148 women entrepreneurs who were granted microcredit under the above project. First, the study is applied multiple regression model to investigate the impact of microfinance on women entrepreneurial development. The following functional model is used to investigate the impact of microfinance.

$$PRWE = \beta_0 + \beta_1 logALG + \beta_2 logELW + \beta_3 logROI + \beta_4 logLUE + \beta_5 D + U_1 \dots (1)$$

)

where, Profit Rate of Women Entrepreneurs (PRWE) used as a proxy to women entrepreneurship development. The independent variables;

Amount of Loan Granted (ALG), Education Level of Women entrepreneurs (ELW), Rate Of Interest (ROI), number of Labour Utilized in Entrepreneurial operation (LUE) and Market Opportunity as Dummy (D) = 1 if entrepreneurs access to external marketing opportunity, MO = 0 otherwise). Ui is error term.

Secondly, this study applied pair wise 't' test to examine effects of microfinance intervention on financial performance of women entrepreneurs. Here, change in income and change in saving due to microfinance intervention are used as proxies to measure the financial performance of women entrepreneurs.  $H_0$ : no mean difference of income and saving; and  $H_1$ : positive mean difference of income and saving are the hypothesis. The functional forms of the 't' tests are:

where,  $\Delta AY$  – change in average income,  $\Delta AS$  – change in average savings, N – total no. of sample.  $Y_{t-1-}$  income before MF intervention  $Y_t$  - income after MF intervention;  $S_{t-1}$  - savings before MF intervention and  $S_t$  savings after MF intervention; i – women entrepreneurs.

#### **Results and Discussion**

The regression results (See Table 1), reveals that the independent variables; amount of loan granted, education level of women entrepreneurs and interest rate are significant at 5% level while the amount of loan and level of education are positively and the interest rate of the loan is negatively impact on the rate of profit of women entrepreneurs. But, labour use in entrepreneurial operation and market opportunity are insignificant in determining the women

entrepreneurship development. This indicates that amount of loan, level of education and rate of interest are the important factors which determine the women entrepreneurship development.

Independent Variables	Coefficient	t	P>  t
LogALG	0.9251	-5.28	0.000*
LogEWL	-0.1866	-2.16	0.033*
LogROI	-0.6094	2.14	0.034**
LogLU	0.0796	0.74	0.459
MO (Dummy)	0.2274	1.72	0.059***
Constant	9.9096	5.69	0.000*

Table 1: Results of the Multiple Regression Analysis

Adj.  $R^2 = 0.4966;$ 

Note: \*, \*\*, \*\*\* significant at 1%, 5%, 10% level respectively

Table 1 and 2 in Annexure A, show that the results of pair-wise 't' tests on change in income and change in savings. According to these results, the null hypothesis for no change in income and saving is rejected at 5% significant level. It reveals that there is a significant income and savings difference between the periods of before and after the microfinance intervention. It further shows that average monthly per capita income generation and savings made by the women entrepreneurs after MF intervention are Rs. 6561.14 and Rs. 533.45 respectively.

### **Conclusion and Recommendations**

The study found that the amount of loan, level of education and rate of interest are the important factors which determine the women entrepreneurship development while labour use in entrepreneurial operation and market opportunity are insignificant in determining the women entrepreneurship development. The MF interventions on micro-financing the women headed enterprises showed a significant positive impact on financial performance by improving their income and savings. So, the study confirms that there is a positive impact of ILO and PALM joint microfinance intervention on livelihood development of war affected communities through women entrepreneurship development in Batticaloa district of Eastern Sri Lanka. Therefore, the study recommended to adopt MF interventions as a tool to ensure sustainable livelihood of conflict recovery communities as well as to develop women headed entrepreneurships.

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# Annexure A

Table 1: Results of the Paired t Test for Income Variable

Variable	Obs	Mean	Std. Error	Std. Dev.
Y <sub>t</sub>	148	19972.09	1702.936	20717.11
$Y_{t-1}$	148	13410.95	1108.145	13481.17
Different	148	6561.142	1150.041	13990.86
$\Pr(T > t) =$	= 0.0000	t = 5.7051	df : 147	

Table 2: Results of the Paired t Test for Saving Variable

Variable	Obs	Mean	Std. Error	Std. Dev.
St	148	1642.196	343.2046	4175.264
$\mathbf{S}_{t-1}$	148	1108.743	248.0958	3018.215
Different	148	533.4527	151.4552	1842.532
$\Pr(T > t) =$	0.0003	t = 3.5222	df : 147	