



## Microfinance and Clientele Description - Tanzania

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### ABSTRACT

Microfinance programs are considered as an effective tool for poverty alleviation among poor women who constitute over 80% of clients globally. The proliferation of the programs since their inception (1970s) is evident, but there is limited information on clients' characteristics and type of services accessed.

We conducted population based cross sectional study among 900 women to describe clients characteristics and type of services received from the programs in Moshi district, Tanzania

Clients reached were 38%, generally older ( $p < 0.001$ ) enjoyed credit related services. Illiteracy and unemployment rate was greater among non clients (76%) and (61%) respectively. Low income earners were more in non client category (67%).

The study concludes that microfinance industry is growing steadily, but the growth pace doesn't commensurate enrolment of the poor, strategies for reaching the poorest is important.

### KEYWORDS

Microfinance, clientele characteristics, Tanzania

### Introduction

Microfinance programs have been considered as one of the poverty-alleviation strategies and an effective tool for women's empowerment (Leach & Sitaram, 2010). The term microfinance refers to the broad range of financial and non financial services offered by Microfinance Institutions (MFIs), to low-income people, including credit, savings, insurance, education and money transfers (Leatherman & Dunford, 2010).

In Asian countries and South America, the uptake of microfinance services has been good

(Daley-Harris, 2006; Nawaz, 2010a). In contrast the uptake in sub-Saharan Africa (SSA) has been slow. Even where microfinance programs exist, many favor clients with previous business experience, often failing to reach those most in need (Wright & Dondo, 2001). For example, while there were nearly 1000 MFIs in 2005 providing services to more than 7 million people in SSA, many microfinance organizations admitted facing challenges in effectively reaching the very poorest clients (Daley-Harris, 2006; Daley-harris, 2009). Evidence has shown that enrollment in MFIs is associated with increased investments in business, increased food security in households, increased ability to pay for school fees and also improved access

and utilization of health care (Kim et al., 2007; Maes & Reed, 2012). Such information is less documented in Tanzania.

Micro-credit loan scheme to women's groups has become one of the predominant mechanisms to address poverty in Kilimanjaro where 31.3 percent of the households are categorized as poor (NBS, 2002). This paper aims to determine the proportion of women enrolled in Microfinance programs describe characteristics of the clients and the type of services they receive. Such information intends to broaden understanding on the extent that poor women are reached by MF programs

### Material and Methods Study design and site

This was a cross-sectional study conducted between October and December 2010, in Moshi Urban district, northern Tanzania. The district is one of the seven districts in Kilimanjaro region, with approximately 33,910 households and population of 200,000 out of which about 40% live below poverty line (i.e. living below \$ 1 a day). The district was sub-divided into 15 wards of which 5 are regarded as urban and 10 as peri-urban wards. The study was conducted in the peri-urban wards considered to have high population density with limited access

to formal financial institutions and guaranteed income, compared with urban wards.

### Study population

The study population included women aged 18 – 60 years who were residents of Moshi urban irrespective of microcredit programs membership status. We selected this group because more than 90% of clients in microcredit schemes are women. We excluded women who were not permanent residents and those who did not consent to participate in the study.

### Sample size and sampling procedure

Epi Calc2000 software was used for sample size estimation. Sample size was estimated based on proportion of National financial accessibility which covers about 40% (FinScope Survey, 2009) with 5% significance level and 80% power. The minimum sample size was estimated to be 900 women.

Multistage random sampling was used to select the study sites and participants. The first stage involved selection of five out of ten peri-urban wards using simple random sampling. Three streets were randomly selected from each of the five wards giving a total of 15 streets. Women meeting the inclusion criteria at households of selected streets were eligible to participate.

### Data collection methods and tools

Face to face interviews were conducted with the consenting women. The questionnaire was used to collect information on social-demographic information, socio-economic status, and on status of MFIs enrollment. Detailed information about microcredit programs was obtained on: type of MFI women enrolled, financial and non-financial services received, amount of money borrowed, payment schedule, and conditions attached to the credit. Information on perceived advantages and challenges in using such programs was also collected.

Questions on key variables were the same questions used in the National Demographic and Health Survey by the National Bureau of Statistics (NBS 2002) which is a validated tool.

Pilot-testing of the study tool was conducted in boma street which was not part of the study sites.

### Data management and analysis

During data collection, the questionnaires were checked and corrected for consistency. Data were using Statistical Package for Social Sciences Version 17 (SPSS Chicago). The same software was used for data analysis.

Proportions were used to summarize the data. The chi-square tests were used to evaluate difference between groups for categorical variables respectively. Odds ratio (OR) with their 95% confidence interval were calculated to assess the strength of association between dependent and independent variable. Logistic regression analysis was done to control for confounders. The  $\chi^2$  value was two tailed, and value of less than 0.05 indicated the statistical significance of the findings.

Ethical clearance was approved by the Kilimanjaro Christian Medical University College Research and Ethical Review Committee, ethical permission number 533. The women gave their written consent to participate in the study.

## Results

### Characteristics of the participants

Description of their socio-economic characteristics is presented in Table 1. Age of the women ranged from 15 – 60 years, with a mean age of 36.2 years. Among them, 85.1 % (n=766) had primary education. About 71.7% (n=644) were married or cohabiting. Women with > 2 living children were 52% (n= 455). About 92% (n=829), had no formal employment and (61.4%) were non clients of MF programs. Low income earners (below \$1 per day) were 40.2% (n=296) and out of these 67.2% (n=199) were non clients of MFIs. Majority of the household had 3 -5 members 60.9% (n=540).

### Proportion reported to use MFI services

Proportion of participants reported to use MF services is presented in Table 2: Women who reported to have ever been enrolled in the programs was 43% (n= 385). At the time of interviews, 38% of the women (n=346) were active clients in MF programs in which 97% were receiving only financial-associated services. Out of the total clients 55% were in semi-formal institutions, 36% were in informal groups, and 9% got their services from formal institutions.

Group-based lending was a common way of getting loans. Amount of loans received varied widely and ranged from 5,000 to 1 million Tanzanian shillings (TZS), which is equivalent to 3 to 670 USD (During the study 1 USD = 1500 Tsh). One fourth of the clients used more than one microcredit program at a time, and only 5 (1.6%) reported to have failed to repay the loan.

### Factors influencing women to use MF programs

Factors influencing uptake of microfinance services is presented in Table 3. Age, income, number of living children and partners age were associated with using microfinance programs. Older women aged 25 years or older had 2-4 times higher odds of using MF services compared to <25yrs. In logistic regression analysis, primary and secondary education and an income of 45,000 – 150,000 TZS remained associated with using MF programs.

### Table 4 shows association between socio-economic factors and using MF programs

Women with higher socio-economic status were significantly more likely to use MFIs than the ones with poor indicators. Owning land (p=0.006), having brick walls (p=0.001), being able to pay rent for a whole house (0.03), owning a TV (p=0.014), mobile phone (0.01) or using gas/ electricity or kerosene for cooking (p=0.04) remained independent predictors of using microfinance programs after controlling for other factors. Women who were enrolled in the MF programs were older than the non clients as shown in the mean number and proportion of age groups (p<0.001). Number of women with no education was higher (75.9%) among the non clients group.

## Discussion

The study showed five main findings; the uptake of microfinance programs was promising. Physical collateral does not seem to be main barrier for accessing micro-credit facility for the poor. Women who were relatively better socially and economically were more likely to be enrolled in MF programs. The majority of women in MF programs received only financial-associated services. None of the participants were exposed to health-related education. Nearly a quarter of women were in two or more programs at the same time.

At least 40% of women had been in an MF program in the district where about 50 MFI programs were operating. The findings reveal promising uptake of microfinance services compared to the experienced countries like Bangladesh and other South American countries, whose uptake is more than 50% (Daley-Harris, 2006). The current uptake status may be attributed to infancy stage of MF operations in the region and risk-averse culture. However the promising uptake seems to discriminate the poorest. Poverty was more prevalent among non clients in the MF programs as 67.2% of low income earners found in the group. This suggests that MF programs hardly reach the poor but clients who are relatively better economically. This is in line with another study which revealed that key challenges affecting MFIs include marginalization of the poor (Maes & Reed, 2012), and study in Bangladesh which revealed that microfinance programs have not reached many of the poorest (Nawaz, 2010a). This challenge impedes achievements of the MFIs' primary objective.

The study also revealed that, majority of women in MF programs are receiving only financial-associated services. Only two women reported receiving financial and health education

training services. Many voices are calling for innovative means of combining MF and health interventions, to make microfinance more beneficial to the women. Recognizing the potential synergy between economic and health gains, a number of microfinance programs have sought to provide additional inputs to their financial products such as basic health services, health education or health insurance products (Leatherman & Dunford, 2010).

**Conclusion and recommendations**

In Moshi urban where more than 50 MFIs are operating, it seems microfinance industry is growing steadily, but the pace of the growth does not commensurate enrolment of the poor clients. The physical collateral does not seem to be main barrier for accessing MF services either. Other strategies and innovations in the Microfinance programs to target the poorest women in the community are needed. Qualitative studies are also important to explore factors that influence uptake of microfinance services in Tanzania.

**Competing interests**

The authors declare they have no competing interests.

**Table 1: Socio-demographic and economic characteristics participants (n=900)**

Characteristics	Total N(%)	Client status n (%)		P-value
		Clients (n=346)	Non-clients (n=554)	
Age (years) (n=890):				
15 – 24	120 (13.5)	19 (15.8)	101 (84.2)	
25 – 34	310 (34.8)	111 (35.8)	199 (64.2)	
35 – 44	260 (29.2)	117 (45.0)	143 (55.0)	<0.001
45+	200 (22.5)	99 (49.5)	101 (50.5)	
Education level (n=900)				
None	29 (3.2)	7 (24.1)	22 (75.9)	
Primary	766 (85.1)	294 (38.4)	472 (61.6)	0.184
Secondary or higher	105 (11.7)	45 (42.9)	60 (57.1)	
Marital status (n=898):				
Single	87 (9.7)	26 (29.9)	61 (70.1)	
Married/cohabiting	644 (71.7)	246 (38.2)	398 (61.8)	
Separated/widow/divorced	167 (18.6)	73 (43.7)	94 (56.3)	0.097
Employment status: (n=900)				
Employed	71 (7.9)	26 (36.6)	45 (63.4)	
Unemployed	829 (92.1)	320 (38.6)	509 (61.4)	0.742
Income level (TZS*) (n=737):				
< 45,000	296 (40.2)	97 (32.8)	199 (67.2)	
45,000 - 150,000	298(40.4)	172 (57.7)	126 (42.3)	<0.001
>150,000	143 (19.4)	61 (42.7)	82 (57.3)	
Number of living children (n=875):				
≤ 2	420 (48.0)	138 (32.9)	282 (67.1)	
> 2	455 (52.0)	198 (43.5)	257 (56.5)	0.001
Number of members of household (n=857):				
1 – 2 people	85 (9.9)	27 (31.8)	58 (68.2)	

3 – 5 people	540 (63.0)	206 (38.1)	334 (61.9)	0.091
> 5 people	232 27.1)	110 (42.0)	152 (52.0)	

\*1 USD = 1,500 TZS at the time of data collection

**Table 2: Micro-finance programmes (MFI) offered to 346 clients in Moshi urban, Tanzania**

Variables	Clients (%)	n
Type of MFI (n=342):		
Formal (banks)	31 (9.0)	
Semi-formal (Companies, SACCOS)	187 (55.0)	
Informal (VICOBA, ROSCAs)	124 (36.0)	
<b>Services offered in the MFI program (n=323):</b>		
Loan only	186 (57.6)	
Loan & business education	128 (39.6)	
Loan & health education	9 (2.8)	
Main Collateral for getting loan (n=349):		
Social Collateral	167 (48.0)	
Physical Collateral	182 (52.0)	
Received loan and failed to pay back (n=311):		
Yes	5 (1.6)	
Participated in more than 1 group at a time (n=322):		
Yes	84 (26.1)	
How was the loan spent (n=313):		
Improve business	159 (50.8)	
Pay school fees	100 (31.9)	
Pay house rent	27 (8.6)	
Buying housing materials	17 (5.5)	
Improve diet	10 (3.2)	

\*1 USD = 1,500 Tanzanian Shillings (TZS) at the time of data collection

**Table 3: Association between socio-demographic characteristic and participating in micro-finance programmes in Moshi urban, Tanzania**

Characteristics	COR (95% CI)	AOR (95 % CI)
Age (years) (n=890):		
15 – 24	1	1
25 – 34	2.84 (1.65-4.89)	2.10 (0.42-10.41)
35 – 44	4.48 (2.59-7.72)	3.11 (0.47-20.75)
45+	4.82 (2.75-8.45)	3.31 (0.30-37.09)
Education level(n=900):		
None	1	1
Primary	1.96 (0.83-4.64)	4.95 (1.58-15.54)
Secondary or higher	2.36 (0.93-5.99)	5.50 (1.63-18.62)
Marital status (898):		
Single	1	1
Married/cohabiting	1.26 (0.89-1.77)	1.01 (0.65-1.55)
Separated/widow/divorced	0.69 (0.42-1.12)	0.71 (0.40-1.26)
Employment status (n=900):		
Employed	1	1
Unemployed	1.09(0.66 – 1.80)	
Income level (TZS*) (n=737):		
< 45,000	1	1
45,000 - 150,000	2.80 (2.00-3.91)	2.85 (1.99-4.09)
>150,000	1.53 (1.01-2.30)	1.33 (0.85-2.08)
Number of living children (n=875):		
≤ 2	1	1
> 2	1.57 (1.20-2.07)	0.96 (0.65-1.42)
Number of members of household (n=887):		
1 – 2 people	1	1
3 – 5 people	1.32 (0.81-2.16)	1.59 (0.87-2.95)
> 5 people	1.55 (0.93-2.61)	1.59 (0.81-3.10)
Partners age (years) (n=890):		
15 – 24	1	1
25 – 34	2.97 (1.72-5.10)	1.19 (0.24-5.97)
35 – 44	4.35 (2.52-7.52)	1.11 (0.17-7.45)
45+	5.21 (2.97-9.15)	1.40 (0.13 – 15.60)

COR = Crude Odds Ratio

AOR = Adjusted Odds Ratio

**Table 4: The socio-economic indicators among clients and none clients women in micro-credit programmes in Moshi urban, Tanzania**

Variable	None clients (n=554)	Clients (n=346) n (%)	OR (95% CI)	AOR (95% CI)*
<b>Walls in house (n=883):</b>				
Mud	102(79.1)	27 (20.9)	1	1

Bricks	442(58.6)	312 (41.4)	2.67 (1.71 -4.18)	3.74 (1.72 -8.16)
			p < 0.001	p = 0.001
Floor material (n=885):				
Mud	115(72.3)	44 (27.7)	1	1
Cement/tiles	430(59.2)	296 (40.8)	1.79 (1.23 -2.63)	0.54 (0.27 -1.07)
			p < 0.02	p < 0.078
Electricity (884):				
No	319(68.3)	148 (31.7)	1	1
Yes	221(53.0)	196 (47.0)	1.91 (1.45 -2.51)	1.07 (0.69 -1.65)
			p < 0.001	p < 0.761
<b>House assets Own land (n=874):</b>				
No	426(65.5)	224 (34.5)	1	1
Yes	107(47.8)	117 (52.2)	2.08 (1.53 -2.83)	1.75 (1.18 -2.60)
			p < 0.001	p < 0.006
Accommodation (n=879):				
Rent a room/relative	231(69.0)	104 (31.0)	1	1
Own house	181(60.1)	120 (39.9)	1.47 (1.06 -2.04)	1.03 (0.67 -1.57)
Rent a whole house	126(51.4)	119 (48.6)	2.10 (1.49 -2.95)	1.56 (1.03 -2.36)
			p < 0.001	p < 0.91; p=0.034
<b>Own a radio (n=881):</b>				
No	127(71.4)	67 (28.6)	1	1
Yes	372(57.5)	275 (42.5)	1.84 (1.33 -2.55)	1.07 (0.70 -1.62)
			p < 0.001	p < 0.761
Own a TV (n=876):				
No	510(66.6)	256 (33.4)	1	1
Yes	19(20.0)	76 (80.0)	7.97(4.72-13.47)	1.77 (1.12 -2.78)
			p < 0.001	p < 0.014
Own a mobile (n=884):				
No	108(82.4)	23 (17.6)	1	1
Yes	435(57.8)	318 (42.2)	3.43 (2.14 -5.51)	2.03 (1.15 -3.57)
			p < 0.001	p < 0.014
Fuel for cooking (n=886)				
Firewood	340(64.0)	191 (36.0)	1	1
Charcoal	172(59.5)	117 (40.5)	1.21 (0.90 -1.63)	0.95 (0.65 -1.39)
Gas/electricity/kerosene	32(48.5)	34 (51.5)	1.89 (1.13 -3.16)	1.97 (1.03 -3.79)
			p < 0.036	p < 0.041

\* AOR = (Adjusted Odds Ratio); adjusted for income, floor material, wall material, electricity, own land, radio, TV, mobile, accommodation and fuel

COR= Crude Odds Ratio

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