Rural Women Borrowers: Do They Consume the Loan or Invest Productively an Empirical Study in Wolaita Zone, Southern Ethiopia

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Abstract

Finance is an important instrument in rural development. Providing low-cost, efficient credit services and recovering the loans granted are fundamental functions in rural finance. Low repayment rate affects the liquidity of lenders and discourages them to extend further credit. Investigation of credit utilization is of great importance both for policy makers and the lending institutions. The objective of this study was to assess the status of credit utilization choice and socio-economic, demographic, psychological and institutional characteristics of rural women members of RuSACCOs (Rural Savings Credit Cooperatives) of Kindo Koysha Woreda in Wolaita Zone, Ethiopia. In the course of this study, primary data were collected from 96 sample women borrowers. The analysis was done using descriptive statistics such as mean, standard deviation and percentage. In addition, t-test and chi-square test were employed to compare groups which used the loan for productive purpose and those used for consumption purpose with respect to borrowers' characteristics. The following categories of women borrowers were found to have higher tendency to use the loan for productive purposes rather than consumption purpose : Younger women, more educated, married, with lower dependency ratio, with higher household income and expenses, with higher livestock holding, with prior business engagement, having better access to road and market, who availed higher loan amount and having higher amount as savings from/in RuSACCO, higher level of training, following weekly repayment rather than fortnightly or monthly and higher economic motivation. The study recommended that RuSACCOs need to follow up closely with women borrowers having the characteristics opposite of those aforementioned for ensuring productive use of credit and offer adequate training to them. Keywords: Women Borrowers, Microcredit utilization, micro-finance, rural credit, RuSACCO

1. INTRODUCTION

1.1 Background of the study

In most African countries women account for an average 51% of the population, and make up about 65% of the rural labour force. In addition, women tend to shoulder greater burden of child and family welfare, social and community obligations, engaging in more than one economic activity. Women constitute absolute majority of the poor throughout the developing world. Micro-credit has been recognized as the most effective tool in reducing poverty of the poorest of the poor. Many rural based micro-finance programmes have attempted to address the women specific need for micro-credit. Rural Savings and Credit Cooperatives (RuSACCOs) have been important rural institutions making credit available to the rural poor. RuSACCOs are community based financial intermediaries set up in each village in Ethiopia to cater to the needs of low-income households.

Credit availability to low income households is constrained by inefficient utilization among credit recipients. Majority of small credit programmes have been affected by serious defaults, such as high default rates ranging from 50 percent to as high as 80 percent have been reported in small credit programmes in Africa, Asia and Middle East. Defaults adversely affect credit institutions solvency, liquidity and the capacity to issue loans to other clients. These situation further results in a negative impact on potential borrowers, who may find their access to credit delayed, restricted or denied because of the declining liquidity of the lender. Thus, the utilization of the loan received is the determining factor for borrowers' income and consequent prompt repayment of the loan. Studies investigating the utilization choice of borrowers would be paramount to understand the finer aspects of the issue and propose solution.

This study examined the utilization choice of microcredit among women borrowers and their characteristics in RuSACCOs.

1.2 Objective of the study

The objective of the study was to assess the utilization choice of microcredit among women and their characteristics in Rural Saving and Credit Cooperatives (RuSACCOs) in *Kindo Koysha Woreda, Wolaita Zone, Ethioia.*

2. METHODOLOGY

2.1 Description of the Study Area

The study area, Kindo Koysha Woreda is located 370 km south of Addis Ababa and 290 km south west of

southern nations, nationalities and people's regional town *Hawassa* and 40 km west on the way to *Jimma from* Wolaita sodo town. *Kindo Koysha Woreda* is one of the 12 districts of Wolaita zone with a geographic area of 52,623.3 km². The land characteristics of the *woreda* are; forest land 4957 ha, cultivated farm land 37,566 ha, pasture land 6922ha, cultivable land 338ha, and non-cultivable land 695ha.

2.1.1 Population

Kindo Koysha Woreda is one of the densely populated districts of *Wolaita* zone especially in the upper terrains. The density of population is in average 222 households per km² of area. There is continual land fragmentation due to increasing population pressures coupled with steep slopes of land making agricultural production difficult. As a result, majority of the young married youths are landless and continuously migrate as livelihood strategy as casual labours in the different parts of the country. The total population of the *woreda* is 131,785 of which 64,630 male and 67,154 female (CSA, 2012). Fifty percent was unproductive labour force (children: 0-14 years) of the *woreda* : Male 28,908 female 29,765 and total 58,673. The productive labour force of the *woreda*, (15-64 years years of age) : Male 27,947 female 28,775 and total 56,722 constituted 48.39% of the total population of the *woreda*. The total number of households in *Kindo Koysha Woreda* is 28,592 with average household size of 4.6 persons.

2.2 Sampling Techniques

2.2.1 Sample Size

The data for this research were obtained from women recipients of microcredit loans from rural saving and credit cooperatives in *Kindo Koysha Woreda*. Taro Yamane (1970) mathematical formula was used to determine sample size as shown below:

$$n = \frac{N}{1 + N(e)^2}$$

Where N is the total members of rural women saving and credit cooperatives in *Kindo Koysha Woreda, e (margin of error) was* 0.1(10%) while the confidence level was 95% and the precision level was 90% (that was 10% (0.1) margin error) was used. Using the total population of 2695 women members of RUSACCOs in twenty three *kebeles* and error margin of 0.1, the sample size was calculated as follows:

$$n = \frac{2695}{1+2695(0.1)^2} = 96$$

Hence, out of the total women RuSACCO members of 2695 in four *kebeles*, a sample size of 96 women was taken.

2.2.2 Sampling Design

This research was conducted in *Kindo Koysha* district of *Wolaita* zone, southern Ethiopia. *Kindo Koysha woreda* is one of the 12 districts of *Wolaita* zone, is among the food insecure district of the zone where continuous fragmentation of land and rain-fed agriculture is the mainstay of the local economy. From the total of 31 rural saving and credit societies in the *woreda*, randomly four rural saving and credit societies were selected. Then simple random sampling technique was employed to select 96 sample participants.

Data for the study was collected from 96 sample women borrowers using structured interview schedule. This was according to the list of women microcredit recipients in each saving and credit cooperative societies.

2.3 Data Type and Source

The major research method employed in this study was primary (cross sectional field survey) and secondary data which was supplemented by review of existing literature. The main reporting unit in this study was microcredit recipient woman and hence the data was collected from women members of RuSACCO and analysed. Data collection included documentary review, interviews and discussion with key informants. Interviews with individual woman were carried out using a semi-structured interview schedule, while interviews to key informants were conducted using an unstructured open ended checklist. In addition to this, documentary reviews were collected from secondary data like (books, journals, manuscripts and research and official reports).

2.4 Methods of Data Analysis

A single method of analysis may not capture issues with regard utilization of microcredit and repayment performance among women recipients. For this reason, different techniques of analysis including descriptive and inferential statistics such as Chi-square tests and t-tests as well as econometric models were employed using statistical packages for social sciences (SPSS, V.20) software for the descriptive. Moreover, data obtained through interviews were triangulated with description obtained from survey.

2.5 Working Hypothesis and Definitions of Variables

2.5.1. Dependent Variable:

The Dependent variable was Microcredit utilization: The dependent variable is a dummy variable (1 if the

borrower utilized the loan for productive investment such as production and income generating activities otherwise 0, if the borrower diverted the loan for unintended household consumption purposes).

2.5.2. Independent Variables: The summary of independent variables used for analysis is presented in Table1. Table1 Summary of Independent Variables and their definition

S.No	Independent	Description of	Unit of	Definition
	Variable code	Variable	Measurement	
1	Age	Continuous	year	Age of women recipient
2	Marital Status	Dummy	categorical	Marital status of woman is unmarried =0,
				married= 1, divorced =2, and widowed=
				3.
3	Dependency Ratio	Continuous	Ratio	The ratio of non-working age groups to
				the working age (adult) group.
4	Education	Continuous	School grade	School grade completed by a women
		~ .		recipient.
5	Household Size	Continuous	Person	A person or group of people occupying a
			771	single dwelling
6	Market Access	Continuous	Kilometre	Proximity to near-by urban market.
7	Road Access	Continuous	Kilometre	Proximity to near-by motor vehicle
0	T T I I		D (transport access road.
8	Loan Interest	Continuous	Percentage	Percentage of interest rate
9	Savings in SACCO	Continuous	Birr	Amount of money saved in an individual
10	II	Continuous	Dian	account.
10	Household Income	Continuous	Birr	Total income gained in a year
11	Business	Dummy	Categorical	Engaged in business before loan=1 no
10	Engagement	D	T '1 / 1	engagement in business $= 0$
12	Economic	Dummy	Likert scale	Level of motivation (no= 0, low= 1, $\frac{1}{2}$
10	Motivation	D	T '1 / 1	medium= 2, and high =3).
13	Perception towards	Dummy	Likert scale	Perception towards SACCO (Negative
14	SACCO Loan Amount	Continuous	Birr	=1, neutral =2, and positive =3)
14	Loan Amount	Continuous	BIII	Amount of money in birr a woman borrowed.
15	Farm Size	Continuous	Hectare	Hectare of cultivable land a woman
13	Falm Size	Continuous	nectare	household owns.
16	Livestock holding	Continuous	Animal in TLU	Number of animals owned by women
10	LIVESLOCK HOLUM	Continuous		borrower household.
17	Training	Continuous	Session	Number of credit management &skill
1/	undergone	Continuous	56581011	training sessions provided to women
	undergone			recipient.
		l		recipient.

3. Results and Discussion

3.1. Choice of Credit Utilization and Loan Default

The survey results as shown in Table 2 revealed that out of 96 respondents, 56 (58.3%) utilized the loan for productive investments and the remaining 40 (41.7) utilized for household consumption purposes. Of those utilized for productive purposes, 9.4% used for farm inputs, 22.9% for livestock production, 26% for non-farm businesses. These utilization choices of women respondents varied based on their characteristics of demographic factors, economic factors, institutional factors and psychological factors.

S.No	Consumpt	tion		Productive Purpose						
	Purpose	e	Farm	Farm Inputs		Livestock		Non-farm		al
				-		Production		siness		
	No	%	No	%	No	%	No	%	No	%
1	40	41.7	9	9.4	22	22.9	25	26	56	58.3

Table 2: Credit Utilization Choice of Women Borrowers

Further, the utilization choice had implications on the repayment performance as well. RuSACCO provides credit for its members to invest in productive purposes, encourage farm production, and promote non-farm business enterprises in rural area. In this study Table 3 shows that from the total 96 respondents, 34 (70.8%) defaulters utilized their loans for household consumption purposes whereas, 14 (29.2 %) of defaulters utilized their loan for an intended productive investment purposes. Similarly, 42 (87.5%) non-defaulters properly used their loan for an intended productive investments and the remaining only 6 (12.5%) utilized their loans for

household consumption purposes. Thus, the survey result showed that majority of non defaulter borrowers used the loan for productive investments rather than defaulters. Similarly, the Chi-square value of (33.600***) showed there was statistically significant difference at less than 1 percent level between non-defaulters and defaulter borrowers in credit utilization choice. The result indicated that there was strong relationship between credit utilization and repayment performances.

Table 5. Credit utilization vs. repayment periormance							
	Def	aulters	Non-defa	aulters	Chi-square value		
Microcredit utilized for						Total	
	Ν	%	N	%		Ν	%
Consumption purposes	34	70.8	6	12.5	33.600***	40	41.7
Productive investments	14	29.2	42	87.5		56	58.3
Total	48	100	48	100		96	100
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Table 3: Credit utilization vs. repayment performance

Source: computed from data 2016 P value = 0.000 *** significant: at less than 1% level of significances

3.2 Socio-demographic characteristics of Borrowers

3.2.1 Age of the sample women

Age of the women is one of the factors affecting the utilization choice of microcredit loans. As age progresses the capability of women to engage in productive activities declines. Majority of those allocated the money in productive investments 29 (51.8%) were in the age group of 36-45 and majority of those utilized the borrowed money for consumption purposes 25 (62.5%) were in the age group of 46-55. The chi-square value of 36.829*** revealed that there was significant relationship between age groups and the dependent variable microcredit utilization (Table 4).

	Consumption purpose		Productive investment		Chi-square		
Age group					value	Total	
	Ν	%	Ν	%		Ν	%
Age group (25-35)	0	0	15	26.8		15	15.6
Age group (36-45)	7	17.5	29	51.8	36.829***	36	37.5
Age group (46-55)	25	62.5	10	17.9		35	36.5
Age group (56-65)	8	20	2	3.6		10	10.4
Total	40	100	56	100		96	100
Overall mean age	51	.33	41.63			4	5.67
Standard deviation	6.074		7.78	80		8	8.561
Maximum	60					60	
Minimum	25					2	25

Table 4: Age of the women

Source: computed from data 2016 P value = 0.000 *** significant: at less than 1% level of significances **3.2.2 Education status of the respondents**

Education is a social capital which has a positive impact on household ability to understand and utilize new technological information and also to know their rights and obligations. It can help them to understand their rights to borrow microcredit loans and also their obligation to repay their debt on time. The level of education was found to be having a positive relationship with credit utilization (Table 5). Out of the total 96 respondents, 56 were utilized the loan for the intended productive investments and 40 utilized for household consumption purposes. The majority of respondents, 29 (51.8%) illiterate and 25 (44.6%) elementary school complete effectively utilized the microcredit loan for productive investment purposes whereas, out of 40 loan consumption users 38 (95%) were illiterate. Pearson chi-square value (20.710***) revealed that there was significant relationship between microcredit utilization and educational attainment of the respondent women.

Table 5: Education status of women respondents

	Consu	mption	Produ	ictive			
	purp	purposes		ment			Fotal
Education group	Ν	%	Ν	%	Chi-	Ν	%
Illiterate	38	95	29	51.8	square	67	69.8
Elementary	2	5	25	44.6	value	27	28.1
Junior	0	0	2	3.6	20.710***	2	2.1
Total	40	100	56	100		96	100
Overall mean education	().13	2.	25		0.781	
Standard deviation	(0.563		843			2.263
Maximum		10					10
Minimum		0					0

Source: computed from data 2016 P value = 0.000 *** significant: at less than 1% level of significances

3.2.3 Family size of the sample households

The family size of the respondents was categorized into three groups. As Table 6 reveals that majority of the respondents, 36 (90%) utilized for consumption purposes and 53 (94.6) utilized for productive investment activities are having at 4-6 family size. The computed $\chi 2$ -value (1.969) revealed that there was statistically no significant relationship between the productive investment choice and family sizes.

Consump	tion	Productiv	/e			
-		investment			Т	otal
N	%	N	%	Chi-square	N	%
3	7.5	1	1.8	value	4	4.2
36	90	53	94.6		89	92.7
1	2.5	2	3.6	1.969	3	3.1
40	100	56	100		96	100
4	.80	4.84				4.82
0.	992	0.968				0973
	8					8
	3					3
	purpose N 3 36 1 40 4	3 7.5 36 90 1 2.5	purposes investmer N % N 3 7.5 1 36 90 53 1 2.5 2 40 100 56 4.80 4.	$\begin{tabular}{ c c c c c c c } \hline purposes & investment \\ \hline N & \% & N & \% \\ \hline 3 & 7.5 & 1 & 1.8 \\ \hline 36 & 90 & 53 & 94.6 \\ \hline 1 & 2.5 & 2 & 3.6 \\ \hline 10 & 100 & 56 & 100 \\ \hline 4.80 & 4.84 \\ \hline \end{tabular}$	$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$	$\begin{array}{c c c c c c c c c c c c c c c c c c c $

Table 6: Family sizes of respondents

Source: computed from data 2016

3.2.4 Marital status of the sample respondents Marital status of women is an important factor which influences credit utilization. It is expected that when a woman is married she has better chances of involving in non-farm income generating activities and hence better utilization of microcredit on productive activities and better loan repayment. This is because husbands are supposed to share domestic labour and also contribute substantial amount in provision of food for household consumption and hence more chances of loan being invested productively. As Table 7 shows, marital status of the respondents were: unmarried, married, divorced and widowed categories were 1 (1%), 25 (26%), 15 (15.6%) and 55 (57.3%) respectively. Majority of the respondents, 30 (75%) of those utilized for consumption purposes and 25 (44.6) utilized for productive investment activities were widows. The computed $\chi 2$ -value (13.674***) revealed that there was strong relationship between marital status and credit utilization.

Consumption Productive purposes investment Total Marital status group Chi-square Ν % Ν % Ν % Unmarried 2.5 0 0 value 1 1 1 25 Married 8 20 17 30.4 26 13.674*** Divorced 1 2.5 14 25 15 15.6 Widowed 30 75 25 44.6 55 57.3 40 100 56 100 96 100 Total

Table 7: Marital statuses of respondents

Source: computed from data 2016 P value = 0.000 *** significant: at less than 1% level of significances

3.2.5 Dependency ratio

Dependency ratio is the ratio of non productive labour to productive labour of the household. Dependency ratio is believed to affect the consumption pattern of the household and hence affecting utilization of microcredit either to invest or allocate for household consumption purposes. The average dependency ratio of the total

P value = 0.374

sample respondents was 1.433 with standard deviation of 0.941 and it was also 1.65 with standard deviation of 1.105 for consumption groups and 1.27 with standard deviation of 0.775 for investment group. From the table the computed t-value of (1.982*, p-value 0.05) indicated that there was statistically significant relationship between microcredit utilization and dependency ratio of the respondents. The result showed that the higher dependency ratio there was a high likelihood of the money diverted to consumption purposes.

investme Mean	ent SD	t-value	Total Mean	SD
Mean	SD	t-value	Mean	SD
1.27	0.775	1.982**	1.433	0.941
5.00			5.00	
0.00			0.00	
			0.00	0.00 0.00

Table 8: Dependency ratio of respondents

Source: computed from data 2016 P value = 0.050 *** significant: at less than 5% level of significances

3.3. Economic characteristics of women Borrowers

3.3.1 Household annual income

Household annual income from both farm and non-farm sectors believed to have a positive impact on repayment performance of the borrowers and also utilization of microcredit. It was revealed that those households with relatively better-off household income repaid the loan regularly and on due time without default. Various literatures revealed that borrowers of microcredit with relatively better-off household income utilize the money for productive investment activities. This is mainly because household income is very important to stimulate the household economies that they have relatively better source of income for household consumption during the emergency situation while those with low income tend to consume the loan during emergency situation. The survey result indicated that out of the total 96 respondents, the majority 22 (55%) of those utilized their loans for consumption purposes have annual household income of 3501-4500 Birr (ETB) while the majority of 24 (42.9%) of those utilized their loans for productive investments have annual income of 4501-5500 Birr (ETB). The chi-square value (18.40***) indicated that there was significant relationship between utilization of microcredit and household income. The mean annual household income of the respondents is 4080.52 Birr.

	Consum purpor	-	Productive			Total	
Household income	N	%	N	%	Chi-square	N	%
2500-3500	14	35	6	10.7	value	20	20.8
3501-4500	22	55	23	41.1		45	46.9
4501-5500	3	7.5	24	42.9	18.40***	27	28.1
Above 5500	1	2.5	3	5.4		4	4.2
Total	40	100	56	100		96	100
Overall mean income	3710.50		4344.82			4080	0.52
Standard deviation	658.892		813.	.333		813.	583
Maximum		6300				630	0
Minimum		2200		de de ale si si si	<u> </u>	220	0

Table 9: Household annual income

Source: computed from data 2016 P value = 0.000 *** significant: at less than 1% level of significances **3.3.2 Household annual expenditure**

Household total expenditure indicated the income level of a household which includes household expenditure on purchase of agricultural inputs, education expenses; health treatments expenses, food purchase and industrial products purchase expenditures etc. On the other hand household social ceremony expenditures had expenses of holly day's ceremony, wedding, funeral etc.

	Cons	umption					
Household social ceremony	pur	poses	Prod	luctive			
expenditure			inve	stment		Tota	1
	Ν	%	Ν	%		Ν	%
100-400	10	25	4	7.1	Chi-square value	14	14.6
401-800	29	72.5	51	91.1	6.125**	80	83.3
801-1200	1	2.5	1	1.8		2	2.1
Total	40	100	56	100		96	100
Overall mean social expense	50	508.50		5.89		53	6.15
Standard deviation	13	0.375	133	3.400		13	3.538
Maximum	1100		0			1	100
Minimum		290)			2	290
Source: computed from data 2016		P val	ue =	0.047	** significant: at less that	1 5% l	evel of

significance

The result in Table 10 & 11 revealed that household social ceremony expenditure and total annual expenditure had significant relationship with microcredit utilization. The survey results revealed that 29 (72.5 %) of those utilized their loan for consumption purposes and 51 (91.1%) of those utilized their loan for productive investments have social ceremony expenditure of 401-800 Birr annually. The average annual social ceremony expense of consumption group was 508.50 Birr whereas, the average annual social ceremony expense of productive investment group was 555.89 Birr and the total mean annual social ceremony expense was 536.15 Birr. Pearson Chi-square value 6.125** indicated that there was statistically significant relationship between social ceremony expenditure and microcredit utilization. Similarly, majority of 25 (62.5%) of those utilized their loan for productive investment have total annual expenditure of 3501-4500 Birr. The average annual household total expenditure of consumption and productive investment group were 3148.75 Birr and 3578.57 Birr respectively. This implies that those women utilized their loan for productive activities had improved their income source and household budget for utilities. Pearson Chi-square value 7.386** showed that there is statistically significant relationship between the credit utilization and annual household expenditure. **Table 11: Household total expenditure**

Source: computed from data 2016

P value = 0.061

* significant: at less than 10% level of

	Consum	ption Productive		ive			
Household total annual	purpos	ses	investment			Total	
expenditure	Ν	%	N	%	Chi-	Ν	%
1500-2500	4	10	3	5.4	square	7	7.3
2501-3500	25	62.5	23	41.1	value	48	50
3501-4500	10	25	23	41.1	7.386*	33	34.4
4501-5500	1	2.5	7	12.5		8	8.3
Total	40	100	56	100		96	100
Overall mean total expense	31	48.75	3578	3.57		3399.48	
Standard deviation	64	7.826	710	.773		714.247	,
Maximum		55	00			5500	
Minimum		15	1560			1560	

significances

3.3.3 Total livestock ownership and credit utilization

Household total livestock ownership is an indicator of the wealth status of a household and be likely to affect the credit utilization. Ownership of oxen enhanced the capability of a household to properly cultivate their land, engage in share cropping and rent out oxen as additional income source. The survey result indicated that out of the total 96 respondents, 22 (22.9%) were with no livestock, 35 (55.2%) were having livestock of 0.71-1.40, and 21 (21.9%) were having 1.41-2.00 livestock in tropical livestock unit. Similarly, the majority of 20 (50%) of those households utilized the loan for consumption purposes and the majority of 33 (58.9%) of households utilized the loan for productive investment purposes were having 0.71-1.40 livestock in tropical livestock units. The average livestock ownership for those utilized the loan for consumption and productive investment activities were 0.61 and 0.97 respectively. The overall mean livestock ownership of the sample respondents was 0.82 with maximum 1.65 and minimum of 0.00. Pearson's chi-square value of 6.187** indicated that there was statistically significant relationship between livestock ownership microcredit utilizations at P-value of 0.05. On the other hand the majority of 27 (56.2%) of loan defaulters and the majority of 26 (54.2%) of non-defaulters were having

livestock unit of 0.71-1.40. Therefore, the Pearson's chi-square value of 10.32*** indicated that there was
statistically significant relationship between livestock ownership repayment performance at P-value of 0.01.
Table 12: Livestock ownership

	Cons	umption	Prod	uctive				
	pu	rposes	inves	tment		Total		
Livestock	N	%	Ν	%	Chi-square	Ν	%	
owned(group)					value			
0.00	14	35	8	14.3	6.187**	22	22.9	
0.71-1.40	20	50	33	58.9		35	55.2	
1.41-2.00	6	15	15	26.8		21	21.9	
Total	40	100	56	100		96	100	
Overall mean	(0.61	0.	97		0.82		
livestock								
Standard deviation	0	.580	0.5	533		0.578		
Maximum		1.65				1.65		
Minimum		0.00				0.00		
Source: computed from data 2016 P value = 0.045 ** significant: at less than 5% level of								

significances

3.3.4 Size of land and credit utilization

Household total cultivable land ownership is an indicator of the wealth status of a household and expected to affect the credit utilization. Wealthier households with relatively higher farmland holdings expected to utilize the loan for farm improvements and new inputs and technologies. It was revealed that households with relatively better cultivable land holdings had better adaptation of new and improved agricultural technologies and get higher farm income which as result led to better saving and repayment of the loan on time. On the other hand, when the cultivable farmland holding was minimum a household would be forced to seek for other livelihood strategies like off-farm and non-farm sectors to sustain their life. The survey result in Table 13 indicated that out of the total 96 respondents, the majority of 17 (42.5%) of the households utilized the loan for consumption purposes were having cultivable land of 0.26-0.35 hectare. Similarly, majority of 31 (55.4%) of households utilized the loan for productive investment purpose 0.10-0.25 hectare. The average landholding for consumption group was 0.30 hectare and also similar for productive investment groups. The overall mean landholding of the sample respondents is 0.30. Pearson's chi-square value of 3.418 was not significant indicating no relationship between landholdings microcredit utilizations.

Farmland owned(group)	Consumption purposes		Productive investment			Total	
	N	%	N %		Chi-square	Ν	%
0.10-0.25	18	45	31	55.4	value	49	51
0.26-0.35	17	42.5	14	25	-	31	32.3
0.46-0.55	5	12.5	11	19.6	3.418	16	16.7
Total	40	100	56	100		96	100
Overall mean farmland	0.30		0.30			0.30	
Standard deviation	0.937		0.113			0.105	
Maximum		0.50				0.50	
Minimum		0.13				0.13	
Source: computed from data 2016 P value = 0.181							

Table 13: Total cultivable farmland owned

3.3.5 Prior business and credit utilization

Business skill is one of the important factors in utilization of microcredit. Business engagement enabled the women to invest in high risk but high return non-farm business activities and determines the success and profitability from the business. Those households having prior business engagements but lacked capital were more successful when access to credit was provided. The result in Table 14 depicts that, the majority of 25 (62.5%) of those utilized the credits for consumption purposes have never been engaged in business activities before the loan. Similarly, the majority of 42 (75%) of those households utilized the loan for productive investments were having prior business engagements before the loan. From Table 14 the computed Chi-square value of 13.60*** indicated that there was statistically significant relationships between microcredit utilization and respondents business skill.

Table 14: Prior business engagement

Tuble I if I fibi bush	ess engagemen	•					
	Consumption Productiv		ive	Chi-square value			
Prior business	purposes		investment			Total	
engagement	N	%	N	%		Ν	%
No	25	62.5	14	25	13.603***	39	40.6
Yes	15	37.5	42	75		57	59.4
Total	40	100	56	100		96	100
Source: computed from	P value	= 0.000	*** significant: at less than 1% level of				

significances

3.4 Institutional access to Borrowers

3.4.1 Access to transport road and credit utilization

Access to motor vehicle transport road indicated that proximity of the respondent's household to the nearest transport access roads in the area. Longer distance from transport access road indicated the remoteness of the area from different institutional facilities. Access to transport road tend to affect the ability of women to engage in productive business activities, enhanced their success, reduces time required for travelling, and enable women to be accessible to current market information. The average road access of the total sample respondents is 7.9 km with it was also 9.6 km for those utilized the loan for consumption purposes and 6.9 km for those utilized the loan for productive investment activities. From the table the computed t-value of (2.25***, at p-value 0.00) indicated that there was statistically significant relationship between microcredit utilization and transport road access of the respondents.

Table 15: Access to transport roads

Tuble Tel Recess to thubsport rouds									
	Consumption purposes		Produ	uctive	t-test value	Total			
			investment						
	Mean	SD	Mean	SD		Mean	SD		
Transport road access	9.3	6.476	6.9	4.770	t-value	7.9	5.183		
Maximum			24.0		2.259**	24.0			
Minimum			0.5			0.5			
bource: computed from data 2016 P value = 0.026 ** sig			** significant	at less than 5%	level of				

Source: computed from data 2016 P value = 0.026 ** significant: at less than 5% level of significances

3.4.2 Access to market and credit utilization

Access to market indicated that the relative proximity of the respondents household to the largest market in the area. Long distance from market affects the decision of women to involve in non-farm business activities because of cost of travel and transport, time and energy consumption. The average market access of the total sample respondents was 10.5 km of 5.79 and it was also 12.3 km for those utilized the loan for consumption purposes and 9.1 km 5.43 for those utilized the loan for productive investment activities. From the table the computed t-value of (2.728***) indicated that there was statistically significant relationship between microcredit utilization and market access of the respondents.

Table 16: Market access of respondents

	Consumption		Productive			Total	
Market Access (Km)	purpo	ses	investment				
	Mean	SD	Mean	SD	t-value	Mean	SD
Market access	12.3	5.837	9.1	5.434	2.728***	10.5	5.792
Maximum		24.0				24.0	
Minimum		2.5				2.5	
Source: computed from data 2016 P value = 0.008 *** significant: at less than 1% level						b level of	

significances

3.4.3 Amount of loan and credit utilization

The amount of loan provided by the microcredit programs is likely to affect the utilization choice and also repayment performance of the clients. When the loan amount was very small it could not stimulate the household economy of sample respondents. Similarly when the loan amount was very large it could be beyond the capacity of a household and could lead to default cases. The survey result indicated that out of the total 96 respondents, majority 18 (45%) had received the amount of 2001-3000 birr and utilized the money for consumption purpose. Similarly, the majority of 34 (60.7%) of respondents had received the loan amount of 2001-3000 birr (ETB) and utilized the money for productive investment activities. The overall mean of loan amount for sample respondents were 2371.71birr and the average loan amount for those utilized the loan for consumption and productive investments were 2178.75birr and 2416.96birr respectably. The chi-square value (3.762) indicated that there was statistically no significant relationship between loan amount and microcredit utilization.

Loan amount (group)	Consumption purposes		Produc			Total	
(Broup)	N	%	N	%	Chi-square	N	<u>%</u>
1000 or less	4	10	5	8.9	value	9	9.4
1001-2000	17	42.5	14	25		31	32.3
2001-3000	18	45	34	60.7	3.762	52	54.2
3001-4000	1	2.5	3	5.4		4	4.2
Total	40	100	56	100		96	100
Overall mean loan amount	2178	.75	241	6.96			2371.71
Standard deviation	671.6	587	767.	243		734.667	
Maximum		4000			4		4000
Minimum		500					500
Source: computed from data 2016 P value = 0.288							

Table 17: Total amount of loan received

3.4.4 Amount of savings and credit utilization

There are two types of savings for members in their individual account in RuSACCOs. The first one is compulsory saving that member has to save fixed amount of money regularly on weekly, fortnightly or on monthly bases depending on the preference of RuSACCO societies. The second type of saving is optional saving that members save chosen amount of money in their account based on their interest. Hence, saving amount indicates the households' income status and commitment to perform better in the RuSACCO and also related to the repayment performance of an individual member. Larger amount of saving enables to borrow higher amount of microcredit loans and have better opportunity to invest on high return productive activities which can able to stimulate the household economies. The overall mean amount of saving is 610.64birr and it was 513.38birr and 680.11birr for those utilized the loan for consumption purposes and productive investments respectively. The maximum amount of saving is 1200.00birr and minimum amount is 125.00birr and the average saving for defaulters are 520.52birr and 700.75birr for defaulters and non-defaulters respectively. From the table the computed t-value of (3.530***, p-value 0.00) indicated that there is statistically significant relationship between microcredit utilization and total amount of savings of the sample respondents.

Table 18: Total amount of saving in RuSACCO

	Consumption	Productive		t-test value			
Total saving amount	purposes	purposes investment		nt		Total	
	Mean	SD	Mean	SD	t-value	Mean	SD
	513.38	169.937	680.11	261.724	3.530***	610.64	241.539
Maximum		1200				1200	
Minimum		125				125	
Comments of from	· data 2016		D	0.000 *	** aiguifigante	A laga Alaga 1	$0/1_{arral}$ of

Source: computed from data 2016 P value = 0.000 *** significant: at less than 1% level of significances

3.4.5: Training and credit utilization

Trainings related to business skills, cooperative administration, and enterprise promotions are most likely to have important role in microcredit utilization. But, the outcomes of training could be determined partly by the types and topics of skill trainings, facilitation skills of trainers, education status and interest of trainees etc. The result shown in Table 19 depicted that, majority of 19 (47.5%) of those utilized the credits for consumption purposes have been rendered with only one session trainings on business skills. On the other hand, the majority of 46 (82.8%) of those sample households utilized the loan for productive investments have received business skill trainings at least three sessions. From the same Table 19 the computed Pearson's Chi-square value of 22.547*** indicated that there was a statistically significant relationship between microcredit utilization and number of training sessions rendered to sample respondents.

Table 19: Trainings

	Consum purpos		Productive investment			Total	
Trainings	N	%	N	%	Chi-square	Ν	%
provided					value		
No training	4	10	2	3.6		6	6.2
One times	19	47.5	6	10.6	22.547***	25	26
Two times	12	30	23	41.1		35	36.5
Three times	4	10	23	41.1		27	28.1
Four times	1	2.5	2	3.6		3	3.1
Total	40	100	56	100		96	100
Source: computed from	n data 201	.6	P va	lue = 0.00	0 *** signif	icant: at less	than 1% level of

significances

3.4.6 Loan repayment frequency and credit utilization

Repayment frequency is also an important factor for timeliness of loan repayment before default dates. The result in Table 20 depicted that, the majority of 24 (60%) of those utilized the credits for consumption purposes have repaid their loans on fortnightly bases. On the other hand, the majority of 33 (58.9%) of those sample households utilized their loan for productive investments have repaid their loans on weekly bases. From the same Table 19 the Pearson's computed Chi-square value of 29.774*** indicated that there was a statistically significant relationship between microcredit utilization and repayment frequency of the microcredit loans.

Table 20. Repayment frequency of respondents									
	Consum	Consumption		ive					
	purposes		investment			Tota	1		
Repayment frequency	Ν	%	N	%	Chi-	Ν	%		
Weekly	3	7.5	33	58.9	square	36	37.5		
Fortnightly	24	60	20	35.7	value	44	45.8		
Monthly	13	32.5	2	5.4	29.774***	16	16.7		
Total	40	100	56	100		96	100		

Table 20: Repayment frequency of respondents

Source: computed from data 2016 P value = 0.000 *** significant: at less than 1% level of significances

3.4.7 Loan interest rate

Loan interest rate was not described and included in the model because of its constant value throughout the data. It was found that the loan interest rate was 10% for all RuSACCOs in the study area and thus it could not be considered as variable in this study.

3.5. Psychological characteristics of Borrower

3.5.1: Economic motivation and credit utilization

Economic motivation is one of the important psychological factors that affect credit utilization and repayment performance of women respondents. Economic motivation was an indication for women's commitment to create an economic asset soon and invest in high risk non-farm business enterprises. It was also an indicator for high commitment of women to increase regular saving and repayment instalment amount and getting higher amount of loans to invest in productive activities. The survey result indicated that out of the total 96 respondents, the majority 28 (70%) of those utilized the loans for consumption purposes have got medium score to the economic motivation statements. On the other hand, the majority of 37 (66.1%) of those utilized the loans for productive investment purposes have got high score to the statements of economic motivation. Therefore, the Pearson's chi-square value 15.790*** indicated that there was statistically significant relationship between economic motivation and microcredit.

Microcredit	Consun	Consumption		ctive						
utilization	purpo	oses	investment			Tota	al			
	Ν	%	N	%	Chi-square	N	%			
Low	2	5	1	1.8	value	3	3.1			
Medium	28	70	18	32.1	-	46	47.9			
High	10	25	37	66.1	15.790***	47	49			
Total	40	100	56	100		96	100			
Source: computed from	n data 2016		P value	= 0.000	*** significan	t at less that	n 1% level of			

Table 24: Economic motivation

Source: computed from data 2016 P value = 0.000 *** significant: at less than 1% level of significances

4. Conclusion and Recommendations

4.1 Conclusion

Borrowers of credit are expected to utilize the borrowed money for the intended productive investments purpose and repay their debt in time. This would help the borrower to enhance their standard of living and the credit provider the much needed liquidity and financial sustainability. The study brought to light characteristics of women borrowers of RuSACCO and their loan utilization choice in Kindo koysha woreda, Ethiopia.

The descriptive analysis showed that from a total of 96 respondents, 40 (41.7%) them have utilized there loans for unintended consumption purposes while, 56 (58.3%) properly utilized their loan for productive investment purposes.

The following categories of women borrowers were found to have higher tendency to use the loan amount to productive purposes rather than consumption purposes:

Younger women, more educated, married, with lower dependency ratio, with higher household income and expenses, with higher livestock holding, with prior business engagement, having better access to road and market, who availed higher loan amount and having higher amount as savings from/in RuSACCO, higher level of training, following weekly repayment rather than fortnightly or monthly and higher economic motivation.

4.2 Recommendations

- RuSACCO management need to motivate aged borrowers to use the loan amount for productive purposes and their follow up should be closer.
- Less educated women and single women will have to be followed up closely and be trained for use of loan for productive purposes.
- The women having higher dependency ratio need more support to use the loan for productive purposes.
- Interestingly, those women with higher income and expenses have the tendency to use the loan for productive purposes. This might be because of their skill to use loan for productive purpose earning more income and consequently spending more as well. RuSACCOs need not be concerned about the higher expenses of women borrowers as long as they earn higher income and hence lend them without much hesitation.
- Women lower livestock possession, not having any business engagement, lower savings with RuSACCO, residing in remote locations need higher level of training to use the loan for productive purposes.
- The higher loan size with weekly mode of repayment appears to favour productive investment of loan obtained. RuSACCO may consider adequate loan amount so as to encourage women to invest in productive investment. Similarly, RuSACCO may try to collect loan in weekly instalments.

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