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RWANDA CREDIT UNIONS MEMBER & NON-MEMBER SURVEY 2002



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A. INTRODUCTION & METHODOLOGY

INTRODUCTION

The Rwandan economy suffered greatly from the 1994 war. The genocide took the lives of over 800,000 people. In addition to the great losses for the country, credit unions, which only re-opened their doors in 1995, suffered a 13% loss in the valuation of their balance sheets. Credit unions lost the majority of their employees and a large number of their members. The number of credit union members in December 2001 was 193,000, down from a level of 366,800 before the war.

WOCCU initiated a project in association with the Union of Rwandan Credit Unions (UBPR) in November 2000 with the goal of improving the credit union system. The project is funded by the United States Agency for International Development (USAID). To achieve their mission, WOCCU commissioned a survey on the economic activities of credit union members and non-members. This report describes the results from this survey.

SURVEY GOALS

The main goal of the survey is to gain a basic understanding of the economic activities of Rwandan credit union members and non-members. A secondary goal is to understand how the Rwandan people use the credit union and the commercial banking systems. The information derived from the survey is aimed to help WOCCU in its efforts to reinforce the credit union system and to improve the services that it offers.

In 2004, a second survey will be conducted in which the persons interviewed in 2002 will be re-interviewed. The results from the two surveys will be compared to assess how the economic situation of members and non-members has changed.

SURVEY DESIGN

The survey was designed to interview members and non-members living within the region of seven credit unions in Rwanda. Two credit unions would be chosen from the north of the country, two from the south, and three in Kigali. The seven credit unions actually chosen for the survey are listed in Table 1. At each credit union, we planned to conduct 100 interviews in total, 50 with members and 50 with non-members.

Because we wished to conduct the interviews with members and non-members, we needed to define who is a *member* and who is a *non-member*. For the purpose of the survey, a *member* is someone who is currently a member of the credit union being surveyed. Someone who was previously a member, but is not currently a member, is not classified as a member. A *non-member* is someone who lives in the region of the credit union being surveyed but who is not a member presently. He could have been a member previously, and he could be a member of another credit union outside of the region.

TABLE 1
Credit Unions Surveyed

NAME	Location	Region	Established	Number of members (after the 1994 war)
Rubavu	Gesenyi	North	1985	4,752
Kigombe	Ruhengeri	North	1986	5,155
Nyamirambo	Kigali	Kigali	1976	12,530
Muhima	Kigali	Kigali	1985	11,551
Remera	Kigali	Kigali	1990	12,135
Nyamabuye	Gitarama	South	1986	6,611
Ngoma	Butare	South	1986	6,035

Since it was impossible to conduct interviews with every member and non-member in each credit union region, we chose to interview a random sample from each credit union. That is, if we could speak with a representative sample of members and non-members in each credit union, we could extrapolate the results to the general population.

The random sample of members was chosen from a list of 300 active members compiled from each credit union. Active members were those that had conducted a transaction at the credit union during the months of June – August 2001. For non-members, the task was a bit more complicated. Even though non-members live in the region of the credit union, usually, there is not a list of their names. Luckily, there will be local elections in June 2002, so each administrative secteur had to have prepared an electoral list of voters living in the area. The WOCCU/Rwanda team prepared the random sample list based on the administrative secteur lists.

The interviews were conducted with a single person, the respondent, who was either a member or a non-member, but the survey questions were concerned with the activities of all household members. Therefore, the respondent answered on behalf of the other household members. The interviews were conducted at the credit union or at the administrative secteur offices.

All interviews were conducted in Kinyarwanda, the local language. The survey was first written in French and then translated into Kinyarwanda by a Rwandan national. The fieldwork team was entirely bilingual, in French-Kinyarwanda or English-Kinyarwanda, from the enumerators to the data entry people.

The fieldwork schedule, details of the team members, and practicalities concerning successfully completing random interviews with members and non-members are discussed in Annex I.

B. RESULTS

Completed Surveys

We completed 700 surveys in all, 100 surveys in each of the seven credit unions. Of the 100 surveys, 50 are with members and 50 with non-members. The only exception to this is at the Kigombe credit union where 51 surveys are with members and 49 are with non-members. Table 2 shows that we have 351 observations of members and 349 observations of non-members.

TABLE 2
SURVEYS COMPLETED

Name	Members	Non-Members	Total
Rubavu	50	50	100
Kigombe	51	49	100
Nyamirambo	50	50	100
Muhima	50	50	100
Remera	50	50	100
Ngoma	50	50	100
Nyamabuye	50	50	100
Total	351	349	700

The following analysis is based on these 700 surveys.

Members

Table 3 summarizes the characteristics of credit union members. On average, the length of membership is 5.76 years, and 7.4% of members are also members of another credit union, in addition to the credit union being surveyed. In general, members are satisfied with their credit union, but 33% are little satisfied and 5.2% are not at all satisfied. The majority of members get to the credit union by walking, but they also take the bus or drive by car.

TABLE 3
CREDIT UNION MEMBER CHARACTERISTICS

	(n=351)
Length of membership (average # of years)	5.76
% who are also member of another credit union	7.4
Satisfaction (%)	
Very satisfied	14.6
Satisfied	47.3
Little satisfied	33.0
Not at all satisfied	5.2
Mode of transport (%)	
Walking	61.5
Car	15.7
Bus	11.1
Bicycle taxi	3.7
Bicycle	6.8

Looking at the credit union services used by members, everyone has a savings account. A member is automatically given a savings account upon becoming a member. However, the use of all other credit union services is voluntary. Table 4 shows credit union service use by members. Roughly one third of all members have taken a credit or use direct deposit of their salary. But, virtually no one, or very few, use direct deposit of pension payments, retirement savings accounts, money transfer between credit unions, or housing savings accounts.

Why do members not use the services offered by credit unions? For services used frequently, the main reason is that members know the service exists, but they do not need it. However, for services used infrequently, the main reason is that members do not know the service exists. This means that members do not use retirement savings accounts, money transfers between credit unions, and housing savings accounts because they simply had not heard of these services before. For credit non-use, the reasons are more varied. Almost 20% do not use credit because the application procedure is too complicated, and 5.9% would like to apply for a credit but credit services have been suspended at the credit union.

**TABLE 4
USE OF CREDIT UNION SERVICES BY MEMBERS**

	Savings Account	Credit	Direct Deposit of Salary	Direct Deposit of Pension	Retirement Savings Account	Money Transfer between Credit Unions	Housing Savings Account
% who use the service	100.0	31.1	36.5	6.0	0.0	0.0	0.6
Why not? (%)							
No knowledge of existence		2.5	7.1	8.8	60.4	66.3	56.6
No need		43.5	88.9	90.5	37.9	33.4	35.3
Do not understand		3.8			1.4	0.3	2.6
Fear		8.4					0.3
Too complicated		18.4	0.4				1.7
Credit suspended		5.9	0.9	0.3			
No guarantee		6.7					
Will use it		1.3	0.4	0.3			1.4
Credit denied		2.1					
Slow credit dispersion		0.4	1.3				
Awaiting a response		4.6	0.4				
No financial means		0.4			0.3		1.4
No account			0.4				
Other		2.1	0.4				0.6

Are there other services not currently offered by credit unions that members would like to have available at the credit union? Table 5 shows the results from this question. The majority of members would like to have services that come with checking accounts. For example, they would like to have the ability to write and cash checks and have use of an automatic teller (ATM). A money advance by the bank and power of attorney services are also important. Finally, many mentioned during the interview that the credit unions should computerize their services.¹

TABLE 5
BANKING SERVICES DESIRED BY MEMBERS

	% that want this service
Checking account	27.4
Write a check	82.9
Cash a check	78.9
Money transfer between credit unions	44.2
Consolidation of payments	35.9
Credit for merchandise	5.7
ATM (automatic teller)	49.9
Caution solidaire	12.5
Insurance	18.2
Money advance by the bank	40.7
Procuration	38.5
Computerization of services	3.4
Salary advance	0.3
Faster service	0.3

Non-Members

Table 6 shows the characteristics of non-members. Non-members are not members of a credit union for various reasons. We gave people the option of responding to the question of non-membership in an open fashion. Therefore, the majority of non-members are not members for reasons different than the four reasons that we foresaw.² Roughly 10% are not members because to be a member is too expensive.

Interestingly, 8.6% of non-members are members of other credit unions. That is, even though someone is not a member of the credit union being surveyed, he could be a member of another credit union, either in the region or further away. In Kigali, there were a large number of respondents who were not members of the credit union closest to their home but were members of another credit union in Kigali but a little further away.

We also wanted to know if non-members were not members because the credit union was too far away, and we see that distance is not the reason. We also asked what mode of transportation non-members would take to go to the credit union if they were members. The majority of non-members would take the same type of transportation as members.

¹ The people being surveyed were not explicitly asked if they would like the credit unions computerized, as this was not on our list of services read to the respondents. The respondent would have to mention the need to computerize the credit unions. Even so, 5% mentioned the need for computerization without being asked.

² At some point, it may be beneficial to do an analysis on the open questions to understand why non-members did not choose to members. This would entail reading and organizing some 550 responses.

TABLE 6
CREDIT UNION NON-MEMBER CHARACTERISTICS

	(n=349)
Why are you not a member? (%)	
Too expensive	11.5
Too far	0.6
Too complicated	3.5
Bad reputation	5.6
Other	78.8
% who are members of another credit union	8.6
Mode of transport (%)	
Walking	72.0
Car	12.5
Bus	10.1
Bicycle-taxi	2.1
Bicycle	2.7
Motorcycle-taxi	0.6

Next, we asked, if non-members were members, what services would they use? Table 7 shows the response to this question. Most would choose to have a savings account and ask for a loan. This is the same response as members. It is interesting to note that non-members say they would use several services that members do not use. For example, many more non-members than members say they would use direct deposit of their salary, direct deposit of pensions, retirement savings accounts, money transfer between credit unions, and housing savings accounts.

If non-members say they would not use a service, why not? The main reason that non-members would not use a service is because they do not need it. It is only housing savings accounts that would not be used by non-members because non-members do not know of the service.

According to this evidence, non-members are more aware of the services offered by credit unions than members. Moreover, there are more non-members that *say* they would use services that members actually do not use. Perhaps there is a difference between *saying* you would use a service and actually *using* the service.

TABLE 7
USE OF CREDIT UNION SERVICES BY NON-MEMBERS

	Savings Account	Credit	Direct Deposit of Salary	Direct Deposit of Pension	Retirement Savings Account	Money Transfer between Credit Unions	Housing Savings Account
% who use the service	98.5	91.9	13.7	4.5	32.1	27.8	61.6
Why not? (%)							
No knowledge of existence	16.7	10.7	18.1	21.6	48.7	47.5	51.2
No need	83.3	53.6	81.3	78.1	49.1	50.4	47.2
Do not understand					0.9		
Fear		14.3					
Too complicated		14.3	0.3		0.9	1.7	0.8
Credit suspended							
No guarantee		3.6					
Will use it							
Credit denied							
Slow credit dispersion							
Awaiting a response							
No financial means		3.6	0.3	0.3	0.4	0.4	0.8
No account							
Other							

For the services currently not offered by credit unions but desired by non-members, non-members would also like services associated with checking accounts. Table 8 shows that most people want to be able to write a check, cash a check, and have use of an ATM. As members, non-members also want money advances from the banks and procurement.

The big difference between members and non-members is that many more members want services that come with checking accounts than non-members. This could be a reflection of the difference between those that live the situation of credit union membership (members) and those that do not (non-members).

TABLE 8
BANKING SERVICES DESIRED BY NON-MEMBERS

	% who want the service
Checking account	17.8
Write a check	58.2
Cash a check	58.5
Money transfer between credit unions	29.2
Consolidation of payments	23.2
Credit for merchandise	3.2
ATM (automatic teller)	33.0
Caution solidaire	20.6
Insurance	22.1
Advance by the bank	22.3
Procuration	45.0
Computerization of services	3.4
Seminars for credit union members	0.6

Monthly Household Expenses

Member households have higher monthly expenses than non-member households. Table 9 shows that for every monthly line item expense, member households spend more than non-member households. On average, member households spend 265,942 RWF per month, and non-member households spend 170,114 RWF per month. But, these expenses include business and farm expenditures. When monthly expenses are adjusted for business and farm expenditures, member households spend 118,359 RWF per month, and non-member households spend 73,007 RWF per month.

At the time of the survey, in March 2002, the exchange rate was US\$1 = 450 RWF. So, monthly expenses for member households, adjusted for business and farm expenditures, is US\$263.02 and US\$162.24 for non-member households.

If monthly expenses are adjusted by the number of people living in the household, then per capita monthly expenses for member households are still higher. In fact, per capita expenses for member households are 2,000 RWF (US\$4.44) higher than per capita expenses for non-member households.

In addition to lower monthly expenses, non-member households feed themselves more often from a little vegetable garden near the house than member households. Almost half of non-member households have a vegetable garden from which they eat the produce at home, but only a third of member households have a vegetable garden. Additionally, non-member households rely on the garden more than member households. For non-member households, the produce from the garden accounts for 57% of the food consumed by the household.

TABLE 9
MONTHLY HOUSEHOLD EXPENSES (IN RWF, US\$1 = 450 RWF)
AVERAGE

	Members	Non-Members	Total
% with a vegetable garden	33.0	48.4	40.7
If yes, % of household food rations	49.1	57.4	54.0
Monthly expenses			
Average	265,942.99	170,114.46	218,165.62
Per capita	39,230.52	40,568.22	39,897.46
Monthly expenses (without business and farm)			
Average	118,359.28	73,007.45	95,748.15
Per capita	17,753.25	15,878.03	16,818.32
Housing	24,363.64	15,438.76	19,546.44
Food	39,977.28	23,182.91	31,592.32
Electricity and water	5,912.90	3,880.34	5,043.05
Gas	2,937.60	1,504.87	1,982.45
School fees	9,240.86	7,448.02	8,451.73
Gas for vehicles	72,111.24	84,741.33	75,377.64
Transfers (within family)	6,803.50	6,844.42	6,821.60
Medical expenses	3,528.28	2,272.17	2,907.26
Clothing	6,974.11	3,474.05	5,241.81
Transport	8,946.76	5,907.41	7,473.88
Celebrations/Parties	3,584.01	5,889.31	4,666.63
Drinks (alcohol & other)	12,284.75	7,524.04	9,959.24
Leisure	5,093.00	9,071.09	6,848.85
Farm expenses	5,991.69	7,012.99	6,519.08
Business expenses	349,964.80	251,959.62	303,615.78
Domestic workers	5,994.01	5,262.53	5,728.33
Telephone	10,413.24	11,463.75	10,760.52
Charcoal or wood	4,809.96	2,953.02	3,877.50
Fuel for lighting	1,288.68	766.27	947.98

Household Demographics

Members have larger households than non-members. In Table 10, we see that, on average, there are 7.01 persons living in a member household and 5.64 persons living in a non-member household. But, the household composition is similar. Both members and non-members share the same proportion of men, women, and children.

TABLE 10
HOUSEHOLD DEMOGRAPHICS

	Members	Non-Members	Total
Number of persons (average)	7.01	5.64	6.33
Men	2.03	1.63	1.83
Women	2.28	1.72	2.00
Children (< 15 years)	2.70	2.29	2.49
Age of respondent (average)	38.27	36.10	37.19
Married - % saying yes	63.5	64.2	63.9
Education of respondent (average number of years of schooling)	10.53	7.43	8.99
Occupation of respondent (%)			
Salaried	49.6	19.7	34.6
Businessman/woman	34.8	32.5	33.6
Farmer	4.6	26.7	15.7
Student	1.7	2.0	1.9
Homemaker	2.6	8.7	5.6
Retired	3.1	1.2	2.2
Unemployed	1.4	2.3	1.9
Temporary work	2.0	7.0	4.5
Can read and write - % saying yes	96.6	89.9	93.3
% of other household members who are credit union members	22.6	2.5	13.2

The average age of the respondent is about 36 years old, and most respondents are married. Members are better educated than non-members. The average number of years of schooling of a member is 10.53 years, but non-members have only 7.43 years of schooling. However, even though the number of years of schooling differs, at least 90% of member and non-members know how to read and write.

As for the primary occupation of respondents, most members are salaried, and about one third of members and non-members run a business. Non-members are more often engaged in temporary work rather than permanent work.

Formal Credit

People do not receive formal credit very often. The main source of formal credit for member households is the credit union. But, for non-member households, the sources are more diverse. In Table 11, we see that the majority of formal credit comes from credit unions for both member and non-member households. However, roughly one quarter of non-member households receive formal credit from l'Union des Caisse des Travailleurs.

TABLE 11
FORMAL CREDIT CHARACTERISTICS

	Members	Non-Members	Total
Source (%)	(n=192)	(n=56)	(n=248)
Credit Union	85.4	32.1	73.4
BC du Rwanda	0.5	7.1	2.0
Banque de Kigali	3.6	8.9	4.8
BCDI	0.0	5.4	1.2
Cogebanque	0.0	1.8	0.4
Bacar	0.0	1.8	0.4
Cooperative	0.5	0.0	0.4
BN du Rwanda	1.0	3.6	1.6
Employer	0.5	0.0	0.4
Banque Mil (CSS)	2.1	1.8	2.0
UCT	1.0	25.0	6.5
COOPEDU	3.0	8.9	4.4
CODAF	0.5	0.0	0.4
Duterimbere	0.0	3.6	0.8
GEMECA	1.6	0.0	1.2
Reason for credit (%)	(n=191)	(n=56)	(n=247)
Business	12.6	21.4	14.6
Agriculture	1.6	3.6	2.0
Education	10.5	10.7	10.5
Consumption	4.7	7.1	5.3
Construction	52.9	42.9	50.6
Equipment	6.3	10.7	7.3
Transport	0.5	0.0	0.4
Marriage	1.6	0.0	1.2
Funeral	1.0	1.8	1.2
Salary advance	5.2	0.0	4.0
Personal problem	3.1	1.8	2.8
Money requested	(n=184)	(n=53)	(n=237)
(average)	544,935.02	1,343,075.47	723,422.13
Money received	(n=184)	(n=55)	(n=239)
(average)	526,682.10	1,308,054.55	706,495.84
Guarantee (%)	(n=191)	(n=56)	(n=247)
No guarantee	12.6	16.1	13.4
House	33.0	35.7	33.6
Savings	0.0	1.8	0.4
Physical assets	0.5	5.4	1.6
Salary	53.9	37.5	50.2

The reason for the loan is often for construction, but 21% of formal loans received by non-members are for business purposes. About 10% of formal loans received by members and by non-members are for education.

The amount of money received is often lower than the amount of money requested, but the proportion of money received to money requested is quite high at 96%. We saw earlier that non-member households have more active bank accounts. Also, they receive higher average loans than member households. On average, a non-member household receives a formal loan of 1,308,054 RWF (US\$2,906.79), but a member household receives a formal loan of only 526,682 RWF (US\$1,170.40).

This suggests that non-member households have easier access to the formal credit system than member households. It also implies that credit unions are not succeeding at dispersing large loan amounts.

TABLE 12
FORMAL CREDIT CHARACTERISTICS
FOR BUSINESS, EDUCATION, AND EQUIPMENT LOANS

	Business	Education	Equipment
Source (%)	(n=36)	(n=26)	(n=18)
Banque Populaire	47.2	73.1	66.7
BC du Rwanda	8.3	0.0	0.0
Banque de Kigali	2.8	11.5	5.6
BCDI	2.8	0.0	5.6
Cogebanque	0.0	3.8	0.0
Banque Mil (CSS)	0.0	3.8	5.6
UCT	5.6	0.0	16.7
COOPEDU	16.7	7.7	0.0
CODAF	2.8	0.0	0.0
Duterimbere	5.6	0.0	0.0
GEMECA	8.3	0.0	0.0
Money requested	(n=34)	(n=25)	(n=18)
(average)	979,911.76	169,801.76	262,666.67
Money received	(n=34)	(n=25)	(n=18)
(average)	941,676.47	168,201.76	257,444.44
Guarantee (%)	(n=35)	(n=26)	(n=18)
No guarantee	22.9	30.8	38.9
House	54.3	7.7	5.6
Savings	2.9	0.0	0.0
Physical assets	8.6	0.0	0.0
Salary	8.6	61.5	50.0

If we eliminate all loans but those for business, education or equipment, we see, in Table 12, that credit unions are more often the source of credit than any other source. For example, out of all education loans, 73.1% were from credit unions, 11.5% were from the Banque de Kigali, and 7.7% were from COOPEDU.

Business loans are higher than education and equipment loans, and education and equipment loans use salaries as guarantees more than any other guarantee.

Informal Credit

There is more informal credit than formal credit. For both member and non-member households, the most common source of informal credit is friends or neighbors. Table 13 also shows that one third of the loans are supplied by stores in which one can maintain an account that needs to be paid off at the end of the month. Most informal credit comes in the form of cash, and most credit is used for consumption and personal problems.

A big difference between member and non-member household informal credit use is in the amount of credit received. While non-member households received larger amounts of formal credit, member households receive larger amounts of informal credit. The average informal loan received by member households is two times higher than for non-member households. This difference is due to the credits received from friends and neighbors. That is, the average size of a loan received from a friend by a member household is 99,775 RWF (US\$221.72), but for non-member households, it is 48,007 RWF (US\$106.68). For accounts held in stores, non-member households have higher average levels of credit than member households.

While formal credit often comes with interest that needs to be paid, little informal credit has this added cost. Only 9.6% of informal loans have interest that needs to be paid in addition to the principal. Moreover, the interest rate on informal loans is lower than the interest rate on formal loans. The average interest on an informal loan is 14.2%. For formal loans, the interest rate ranges between 16-25%.

TABLE 13
INFORMAL CREDIT CHARACTERISTICS

	Members	Non-Members	Total
Source (%)	(n=216)	(n=251)	(n=467)
Store	33.8	31.1	32.3
Employer	3.7	6.0	4.9
Cooperative	9.7	5.6	7.5
Friend or neighbor	40.3	49.4	45.2
Other	0.5	0.0	0.2
Community group	0.9	0.8	0.9
Supplier	1.4	0.0	0.6
School	0.9	0.0	0.4
Family member	2.8	4.4	3.6
Tontine (savings group)	1.9	2.4	2.1
Association	4.2	0.4	2.1
Form of credit (%)	(n=217)	(n=251)	(n=468)
Cash	66.8	67.3	67.1
Merchandise	33.2	32.7	32.9
Credit use (%)	(n=216)	(n=251)	(n=467)
Farm supplies	1.9	3.2	2.6
Business supplies	15.7	17.9	16.9
Consumption	30.6	29.5	30.0
Personal problem	42.6	43.4	43.0
Construction	7.4	5.2	6.2
Marriage	0.9	0.4	0.6
Education	0.9	0.4	0.6
Loan amount (average)	(n=216)	(n=251)	(n=466)
Overall	105,623.61	58,655.20	80,425.97
From a store	28,506.85	46,703.85	37,906.62
From a friend or neighbor	99,775.86	48,007.26	69,352.61
% of loans with interest	11.1	8.4	9.6
Average interest rate	10.9	18.3	14.2

Demand for Loans

Very few people in the household asked for a loan from a commercial bank during the previous year. Table 14 shows that only 3.7% of the sample asked for a loan. However, among the non-member households that asked for a loan from a commercial bank, 70.6% received the amount they requested. Among member households though, only 18.2% received the amount requested. The reasons why people did not ask for loans are diverse but do not differ from member to non-member households.

Not surprisingly, many more member than non-member households asked for a loan from a credit union, but among those that asked for a loan, roughly 75% of member and non-member households received the amount requested. That is, across the two sources for loans, credit unions and commercial

banks, non-member households are more likely to receive the amount of money requested than member households.

TABLE 14
DEMAND FOR LOANS

	Members	Non-Members	Total
From a commercial bank (%)	(n=349)	(n=349)	(n=648)
Asked for a loan?	2.9	4.6	3.7
Percentage that received amount Requested	18.2	70.6	50.0
Why no loan request? (%)			
No need	16.4	13.0	14.7
No guarantee	7.4	5.7	6.6
Complicated procedure	11.6	10.0	10.8
Could not pay it back	1.8	5.1	3.4
High interest rate	0.9	1.8	1.3
Don't know how to do apply	4.2	9.1	6.6
Afraid to take out a loan	4.5	3.3	3.9
No account	48.5	50.8	49.6
Already have other loan	2.7	0.6	1.6
Other reasons	2.1	0.6	1.1
From a credit union (%)			
Asked for a loan?	26.5	2.0	14.3
Percentage that received amount Requested	73.9	75.0	74.0
Why no loan request? (%)			
No need	33.1	6.8	18.0
No guarantee	21.7	3.2	11.1
Complicated procedure	8.7	2.6	5.2
Could not pay it back	4.7	2.9	3.7
High interest rate	3.1	0.9	1.9
Don't know how to do apply	2.8	5.6	4.4
Afraid to take out a loan	5.5	1.2	3.0
No account	5.1	76.2	45.8
Credit suspended by bank	5.5	0.0	2.4
Already have other loan	5.9	0.3	2.7
Other reasons	3.6	0.3	1.6

Income Sources

TOTAL INCOME

Total household income is composed of income from business activities, agricultural activities, wages and salaries, and other sources of income (e.g. pensions, rent, inheritances, gifts, food aid, and other sources).

In general, Table 15 shows that average monthly total household income is 123,215 RWF (US\$273.81) and per capita total monthly income is 23,113 RWF (US\$51.36). Total household income is higher for member than for non-member households. Business income and agricultural income is also higher for member than for non-member households. However, on average, non-member households earn higher salaries and other sources of income per person than member households.

TABLE 15
HOUSEHOLD MONTHLY INCOME (IN RWF, US\$1 = 450 RWF)

	Members	Non-Members	Total
Total income	(n=336)	(n=311)	(n=647)
Average	160,771.27	82,640.77	123,215.50
Per capita	25,943.82	20,055.86	23,113.60
Business income	(n=127)	(n=114)	(n=241)
Average	611,778.33	210,926.32	422,163.70
Per capita	98,486.82	60,728.83	80,626.19
Agricultural income	(n=99)	(n=139)	(n=238)
Average	95,763.23	56,931.29	73,084.08
Per capita	14,583.20	10,378.00	12,127.22
Wages and salaries	(n=291)	(n=231)	(n=522)
Average	1,127,030.33	884,500.03	1,019,704.00
Per capita	182,578.87	197,894.36	189,356.40
Other income sources	(n=131)	(n=79)	(n=210)
Average	433,896.85	354,671.52	404,093.00
Per capita	81,088.57	109,730.81	91,863.51

BUSINESS INCOME

The most common business activity is general selling of goods. We can see in Table 16 that at least 41% of business activities are described as selling goods. One quarter have a shop, and 7.6% are beer vendors. In general, each business activity has an average number of employees of 1.52, with 0.46 from the household and the remainder from outside of the household.

In general, monthly household expenses reported by the respondents are higher than monthly income. This result is not surprising. People are often more willing to accurately say how much they spend than

how much they earn. This suggests that we could have more confidence in average monthly household expenditures than in average monthly household income.

TABLE 16
CHARACTERISTICS OF BUSINESS ACTIVITIES

	Members	Non-Members	Total
Type of business (%)	(n=213)	(n=206)	(n=419)
Selling goods	40.8	45.6	43.2
Shopkeeper	26.3	25.7	26.0
Beer vender	5.2	10.2	7.6
Car taxi	3.3	2.4	2.9
Wholesaler	2.8	2.4	2.6
Carpenter	1.4	1.5	1.4
Dress maker	2.3	0.5	1.4
Motorcycle taxi	1.4	1.0	1.2
Tailor	1.9	0.5	1.2
Other	14.6	10.2	12.5
Monthly revenue	(n=162)	(n=152)	(n=314)
(RWF, average)	536,444.53	361,985.42	451,992.99
Monthly expenses	(n=162)	(n=152)	(n=314)
(RWF, average)	390,322.42	518,406.69	452,325.00
Employees (average)	(n=182)	(n=172)	(n=354)
Total	1.85	1.17	1.52
From the household	0.56	0.36	0.46

AGRICULTURAL ACTIVITIES

For agricultural activities, non-member households have larger plots than member households but they also earn less money from their harvest. In Table 17, we see that the average plot size is 130 ares for member households and 1,397 ares for non-member households. For a member, it takes roughly 64 minutes to walk to his plot, and for a non-member, it takes him roughly 36 minutes. That is, a member household's plots are smaller and farther away from their homes.

For agricultural income and expenditures, member households earn more and spend less. That non-member households earn less agricultural income even though their plots are larger and closer could signify two things. Either, they are not as efficient as member households or they do not sell as much of their harvest as member households. The second reason may be a more plausible explanation as non-member households rely more on the land to feed the household than member households.

Most plots are formally titled or have been in the family for years, but some are rented. The sale price per are is similar for member and for non-member households and is roughly 21,500 RWF (US\$47.78) an are. While most workers in business activities are from outside of the household, most farm workers are household members.

TABLE 17
PLOT CHARACTERISTICS

	Members	Non-Members	Total
Ares (average)	(n=299)	(n=383)	(n=682)
	130.79	1,397.54	842.18
Number of minutes to walk to plot (average)	(n=307)	(n=420)	(n=727)
	64.20	36.19	48.02
Land tenure (%)	(n=315)	(n=429)	(n=744)
Formal title	72.1	72.3	72.2
Temporary title	1.9	2.6	2.3
No title	0.0	2.1	1.2
Rented	6.3	11.2	9.1
In the family	19.4	11.9	15.1
Sale price by are (RWF, average)	(n=277)	(n=334)	(n=611)
	22,305.10	21,377.62	21,798.09
Annual revenue (RWF, average)	(n=209)	(n=279)	(n=488)
	80,849.28	43,222.04	59,336.99
Annual expenses (RWF, average)	(n=209)	(n=279)	(n=488)
	36,693.49	15,726.59	24,706.27
Farm workers (average)	0.75	1.18	1.00
Farm workers from household (average)	3.70	2.02	2.73

WAGES AND SALARIES

Most households have at least one person who earns wage income, but not all. Wage income is an important source of income for the household. The average monthly salary per person is 189,356 RWF (US\$420,79), higher than any other source of monthly income.

OTHER INCOME SOURCES

Households also receive other sources of income. These sources are pensions, rental income, inheritances, gifts, food aid, and other sources. These can also be important for the household. The average amount received per month per person is 91,863 RWF (US\$204.14).

Bank Accounts

Most of the bank accounts reported in the survey belong to member households, and most of those accounts are savings accounts. Table 18 shows that few member households have checking accounts, but half of non-member households have checking accounts. Most of the checking accounts of non-member households are at the Banque Commerciale du Rwanda, Banque de Kigali, UCT and BCDI. Some non-member households have household members that hold accounts in credit unions.

TABLE 18
BANK ACCOUNT CHARACTERISTICS

	Members	Non-Members	Total
Type (%)	(n=661)	(n=235)	(n=896)
Savings (à terme)	2.6	1.7	2.3
Savings	68.1	45.5	62.2
Checking	28.0	49.8	33.7
BCDI Cash	1.2	2.1	1.5
Dollar Account	0.2	0.9	0.3
Where is the account? (%)			
Credit union	73.1	37.8	63.7
BC du Rwanda	3.9	8.8	5.2
Banque de Kigali	8.6	15.5	10.5
BCDI	6.4	14.3	8.5
Cogebanque	0.6	1.7	0.9
Bacar	1.5	4.6	2.3
Cooperative	0.3	1.3	0.6
UCT	3.8	12.2	6.0
Bancor	0.2	0.4	0.2
CSS	0.8	0.8	0.8
COOPEDU	0.3	1.7	0.7
CODAF	0.2		0.1
Other	0.5	0.8	0.5
Balance	(n=538)	(n=152)	(n=690)
(RWF, average)	88,065.44	173,471.71	106,879.57
Money deposited monthly	(n=521)	(n=156)	(n=677)
(RWF, average)	141,767.72	497,868.14	223,823.36
Money withdrawn monthly	(n=501)	(n=147)	(n=648)
(RWF, average)	113,696.18	441,126.53	187,974.36

An interesting result is that non-member households have higher bank account balances than member households, even though their monthly expenses and income are lower than member households. The account balances of non-member households are twice as high as member households, and account activity (deposits and withdrawals) of non-member households is higher.

Non-Members and Checking Accounts

Checking accounts are a desirable banking service, yet not all member households nor non-member households have one. Since credit unions do not currently offer checking accounts, there is no reason to expect member households to have one. But, why do some non-member households have them and some do not? Are there important differences in characteristics that could help credit unions better market their services or target micro-finance?

Non-member households with checking accounts are wealthier, better educated, more likely to be salaried, and have less land than those without checking accounts. Table 19 shows that the average monthly income of non-member households with checking accounts is more than three times higher than those without checking accounts. Monthly income is 182,049 RWF (US\$404.55) and 47,631 RWF (US\$105.85) respectively. Their income is also higher than member households, 160,771 RWF (US\$357.27).

TABLE 19
INCOME AND GENERAL CHARACTERISTICS OF
NON-MEMBER HOUSEHOLDS WITH AND WITHOUT CHECKING ACCOUNTS

	Non-Member with Checking Account	Non-Member without Checking Account
Expenses	(n=88)	(n=261)
Monthly	325,587.08	117,694.57
Per person	57,322.38	34,919.30
Monthly w/out business and ag expenses	153,215.61	45,964.08
Per person	30,874.99	10,821.59
Monthly Income	(n=81)	(n=230)
Average	182,049.13	47,631.74
Per person	45,335.06	11,153.19
Land	(n=39)	(n=344)
Average plot size (ares)	135.50	1540.62
Education	(n=87)	(n=252)
Number of years	11.55	6.00
Occupation (%)	(n=87)	(n=258)
Salaried	43.7	11.6
Farmer	3.4	34.5
Businessman/woman	28.7	33.7
Temporary Work	4.6	7.8

Almost half of non-member households with checking accounts are salaried, and they have almost twice as many years of education than non-member households without checking accounts. The latter group is more likely to farm and have larger farms.

TABLE 20
FINANCIAL CHARACTERISTICS OF
NON-MEMBER HOUSEHOLDS WITH AND WITHOUT CHECKING ACCOUNTS

	Non-Member with Checking Account	Non-Member without Checking Account
Where do they bank?	(n=169)	(n=69)
Credit union	24.9	69.6
BC du Rwanda	11.8	1.4
Banque de Kigali	21.3	1.4
BCDI	19.5	1.4
Cogebanque	2.4	0.0
Bacar	6.5	0.0
Cooperative	0.0	4.3
UCT	10.7	15.9
CSS	0.6	1.4
COOPEDU	1.2	2.9
COCOF	0.0	1.4
Bank account	(n=111)	(n=41)
Average balance	211,091.89	71,621.95
Where do they get formal credit?	(n=42)	(n=14)
Credit union	14.3	85.7
BC du Rwanda	9.5	0.0
Banque de Kigali	11.9	0.0
BCDI	7.1	0.0
Cogebanque	2.4	0.0
Bacar	2.4	0.0
Banque Nationale du Rwanda	4.8	0.0
UCT	33.3	0.0
COOPEDU	9.5	7.1
CSS	0.0	7.1

Table 20 shows that non-member households with checking accounts have bank accounts in diverse locations, including Banque de Kigali and BCDI. Their bank account balances are almost three times higher than households without checking accounts. Households with checking accounts also get loans from various places, including Banque de Kigali and UCT. Few get loans from credit unions.

Livestock

Almost half of all households have some livestock. Table 21 shows that 43.3% of member households and 47.3% of non-member households have livestock. The value of the livestock can be substantial. On average, the number of cows per household is 4.99, and each cow is worth 99,207 RWF (US\$220.46). In general, member households have more livestock than non-member households, except for animals that are lower in value, like goats and rabbits.

TABLE 21
LIVESTOCK
(prices in RWF, US\$1 = 450 RWF)

	Members	Non-Members	Total
% who have livestock	43.3	47.3	45.3
Cows	(n=81)	(n=58)	(n=139)
Number	6.38	3.03	4.99
Price	116,146.34	75,258.62	99,207.14
Pigs	(n=6)	(n=13)	(n=19)
Number	7.33	3.69	4.84
Price	35,833.33	26,615.38	29,526.32
Sheep	(n=8)	(n=13)	(n=21)
Number	2.88	3.00	2.95
Price	5,312.50	7,500.00	6,666.67
Goats	(n=52)	(n=80)	(n=132)
Number	3.94	2.68	3.17
Price	9,201.92	7,287.50	8,041.67
Chickens	(n=67)	(n=72)	(n=139)
Number	8.55	6.22	7.34
Price	1,745.60	1,780.28	1,763.32
Ducks	(n=10)	(n=10)	(n=20)
Number	5.30	3.70	4.50
Price	3,440.00	1,711.11	2,621.05
Rabbits	(n=7)	(n=6)	(n=13)
Number	6.71	8.67	7.62
Price	600.75	600.00	600.43

Physical Assets

In general, few in the sample own valuable physical assets. In Table 22, we see that only 2.1% of the sample own a truck, 7.6% own a small vehicle, and 4.0% own a motorcycle. A few more own bicycles, but only 13.3% do. Almost everyone owns tools, such as a shovel or hoe. Televisions and refrigerators are owned by about a quarter of the sample.

TABLE 22
PHYSICAL ASSETS
 (prices in RWF, US\$1 = 450 RWF)

	Members	Non-Members	Total
Truck			
% who own one	3.4	0.9	2.1
Value (RWF)	4,962,500.00	14,000,000.00	6,253,571.43
Small vehicle			
% who own one	10.5	4.6	7.6
Value (RWF)	1,772,297.30	2,763,157.89	2,108,482.14
Motorcycle			
% who own one	6.0	2.0	4.0
Value (RWF)	597,238.10	692,857.14	621,142.86
Bicycle			
% who own one	16.0	10.6	13.3
Value (RWF)	38,912.28	43,105.26	40,589.47
Tools (shovel, hoe)			
% who own one	58.1	64.8	61.4
Value (RWF)	1,678.45	2,110.86	1,902.46
Television			
% who own one	42.2	21.5	31.9
Value (RWF)	164,849.31	151,116.17	166,499.08
Refrigerator			
% who own one	29.1	16.0	22.6
Value (RWF)	169,753.42	167,462.96	156,885.63

Non-member households own more tools than member households, but that is it. For the other physical assets, there are more member households owning at least one of these assets than non-member households. However, the value of physical assets is higher for non-member than for member households for all assets but televisions and refrigerators.

Housing Quality

The quality of the house that the respondent occupies is lower for non-member than for member households. Table 23 shows that the estimated sale price of the house of members is two times higher than that of non-members. Members estimate that the sale price of their home is 4,695,732 RWF (US\$10,434.96) on average. However, the sale price of a non-member home is estimated at 2,183,656 RWF (US\$4,852.57).

TABLE 23
QUALITY OF THE HOUSE THAT THE RESPONDENT OCCUPIES

	Members	Non-Members	Totale
Estimated sale price (RWF, average)	4,695,732.4	2,183,656.3	3,532,008.9
Is the house owner occupied? (%)			
Owned	69.5	61.5	65.5
Rented	28.5	37.4	32.9
Housing comes with job	2.0	1.2	1.5
Number of bedrooms (average)	3.5	3.1	3.3
Electricity source (%)			
None	30.8	56.8	43.7
Generator	0.3	0.3	0.3
Electric company	68.6	42.4	55.6
Solar power	0.3	0.6	0.4
Water source (%)			
River	3.7	9.2	6.5
Spring	2.0	6.0	4.0
Central water tap	10.6	17.5	14.1
Electrogaz company	83.6	67.2	75.4
Walls made of (%)			
Bricks	26.9	17.5	22.2
Adobe	54.7	52.7	53.7
Wood and mud	12.6	26.1	19.3
Bricks and adobe	3.4	2.9	3.2
Roof made of (%)			
Metal sheets	84.2	78.7	81.5
Ceramic tiles	14.9	19.5	17.2
Grass	0.6	0.9	0.4
How was house construction paid? (%)			
Cash	72.1	92.3	81.4
Loan	16.7	2.9	10.3
Cash and loan	10.4	3.4	7.2

Most of the respondents in the sample own their home, but roughly a third more non-members are renters than members. Homes have an average of 3.3 bedrooms. The electricity source for member households is most often the electric company, and for non-member households, they often do not have electricity. For water, most receive it from the Electrogaz company. The quality of the walls and roofing are similar for member and non-member households.

Trust

The survey also wanted to get a sense of the level of trust in the general population, as this can reflect on the trust people place in banks. Table 24 shows the results of a question on general security. We asked how secure the respondent felt outside of the household compared to five years ago. In general, 62.3% of people feel more secure, and only 4.4% feel less secure.

TABLE 24
GENERAL SECURITY COMPARED TO FIVE YEARS AGO
PERCENTAGE

	More Secure	The Same	Less Secure
Rubavu	56.3	33.2	10.5
Kigombe	66.7	30.7	2.7
Nyamirambo	66.8	32.1	1.1
Muhima	67.0	32.0	1.0
Remera	68.4	28.6	3.1
Nyamabuye	57.5	35.5	7.0
Ngoma	54.6	40.4	5.0
Total	62.3	33.3	4.4

However, there are regional differences. In Gisenyi, 10.5% of respondents feel less secure, and in Kigali, at least two-thirds of respondents feel more secure. In the south of the country, people feel either more secure or about the same.

Concerning the trust people place in various groups, Table 25 shows the average trust people have in these groups now and in 1997. The respondent was asked how much trust he placed in each group, using a scale that ranged from one to five. The number 1 represents no trust at all, and the number 5 represents complete trust. Therefore, a higher number in the table means more trust.

In general, people have a higher level of trust in the various groups now than they had in them in 1997. They trust the extended family the most, with an average level of trust of 4.1 now and 3.4 in 1997. Also, people trust credit unions more than they trust commercial banks. On average, they have a level of trust of 3.5 in credit unions and 2.8 in commercial banks.

TABLE 25
TRUST IN DIFFERENT GROUPS
AVERAGE

	Now	In 1997	Total
Extended family	4.1	3.4	3.7
Commercial banks	2.8	2.3	2.6
Neighbors	3.5	2.6	3.0
Local leaders	3.5	2.8	3.2
Local government	3.6	2.9	3.3
Strangers	2.8	2.3	2.5
Credit Unions	3.5	3.1	3.3
Public media	3.1	2.7	2.9
Private media	2.5	2.1	2.3
Government takes care of the poor	2.5	2.2	2.4

Group Membership

The survey also wanted to get a sense of the level of membership in informal groups. From this, we can have an idea of the importance of informal groups in daily life. Table 26 shows the percentage of households in the sample where at least one household member belongs to the group listed.

TABLE 26
GROUP MEMBERSHIP
PERCENTAGE OF HOUSEHOLDS THAT BELONG

	Members	Non-Members	Total
Insurance group	29.3	18.9	24.1
Savings group (tontine)	25.9	15.8	20.9
Agricultural association	8.3	6.3	7.3
Business association	4.6	3.4	4.0
Artisan association	3.7	4.0	3.9
Sports group	5.1	3.2	4.1
Cultural group	2.0	1.1	1.6
Church group	12.2	10.9	13.6
Women's association	8.3	5.7	7.0
Men's association	0.3	-	0.1
School committee	7.1	2.3	4.7
Community group	6.6	7.4	7.0
Credit union administration	3.1	-	1.6

The most popular groups are insurance groups and savings groups (tontines). Between 20-25% of households belong to an insurance group or a tontine. Group membership is stronger for member households than for non-member households. This suggests that member households may have a greater need for insurance and savings groups as a way to access money, or they are more likely to have the financial resources to pay the membership dues needed to belong to such groups

C. IMPLICATIONS

The survey results have several implications:

Overall:

- People in Rwanda trust credit unions more than commercial banks. This suggests there is a favorable climate to augment the number of members and introduce new services.
- Members are better educated than non-members. On average, members have 3 more years of schooling than non-members.

On credit unions services:

- There is a large lack of knowledge of what services credit unions offer. Half of the services offered by credit unions are unknown to members, but they are better known to non-members.
- For the most part, members are satisfied with their credit union, but 38% are little or not at all satisfied.
- Most members would like to have checking account services.

On credit:

- There is a great need for credit in the country. An often cited reason for becoming a credit union member is to have easier access to credit. Nonetheless, members are not getting all the credit they would like. This could be due to the fact that loans were suspended for several years in many credit unions.
- For loans requested last year, non-member households have a greater chance of receiving the amount requested than member households.
- Even though credit union members have access to loans through credit unions, it is non-members who receive formal credit more often. Members tend to use informal credit.
- Credit unions are the primary source of credit for business, education and equipment loans.
- The purpose of most formal credit is for construction and business activities, but informal credit is mainly used for personal problems and consumption.
- Informal finance groups (e.g. insurance groups, tontines) are more important for member than non-member households. This suggests that member households may be resorting to informal mechanisms to satisfy (or supplement) their need for credit.

On income and economic activities:

- Member households earn more money and spend more money than non-member households. On average, monthly per capita income for member households is 25,943 RWF (US\$57.65) and 20,055 RWF (US\$44.57) for non-member households.
- Most member households are composed of wage earners, but at least a third of member households and non-member households engage in business activities.

On non-member households with checking accounts:

- Non-member households with checking accounts earn 182,049 RWF (US\$404.55) in monthly income. This is higher than for member households, 160,771 RWF (US\$357.27) and for non-member households without checking accounts, 47,631 RWF (US\$105.85).

ANNEX I

Field Work

SCHEDULE

The survey was conducted during the months of February and March 2002. The fieldwork began February 16, 2002 in the north of the country in Gisenyi with staff training. The survey interviews began February 18, 2002. The team started the survey work in the north, then proceeded to Kigali, and finally finished the surveys in the south. The field work finish on March 17, 2002 in Gitarama.

THE TEAM

The survey team was composed of one consultant, two supervisors, eight enumerators, and five data entry people. The consultant is from the United States, but the remainder of the team is local. One of the supervisors is a former WOCCU/Rwanda employee. The other supervisor is employed by UBPR but works regularly with WOCCU/Rwanda. The eight enumerators are all employed by UBPR, with three in Kigali and the other five as regional delegates. The director of UBPR accepted to release UBPR employees from their normal duties in order to participate in the survey. The five data entry people are from Kigali. Table 27 shows the survey team.

TABLE 27
SURVEY TEAM

Name	Position
PETRIE Ragan	Consultant
NZISABIRA Willy	Supervisor
MUREKEZI Dieudonné	Supervisor
SEKANYAMBO Sarah Alice	Enumerator
NYINAWABAYIRU Grace	Enumerator
UMUHOZA Edwidge	Enumerator
UGIRABE Ernest	Enumerator
NKAMIYUWENDA Innocent	Enumerator
KABUTO Michel	Enumerator
HAKIZIRANA Felician	Enumerator
DUHIMBAZE Guillaume	Enumerator
Nadine	Date Entry
Nuru	Date Entry
Paul	Date Entry
Kagisha	Date Entry
Terry	Date Entry

Practicalities

The major challenge facing the survey team was finding the people on the two random samples lists of members and non-members. Even though every credit union director in the sample promised to help us find the members listed on the sample, only the director and president of the Kigombe credit union actually helped us. They spent all of the three days we were there to conduct the survey helping us locate people on the list. The remaining six directors made little effort to help. For the non-members, the administrative secteur directors could not find the majority of people from the sample list. The secteurs are just too big, and the directors do not know everyone.

Therefore, for the members, we made every effort possible to find the people on the sample list. If we could not find them, first we took another random sample from the 300 names to see if we could find these additional people, next we randomly chose several members (no more than five people) from those using the credit union during our visit, and finally we sought the remainder from the neighborhoods surrounding the credit union. Roughly 50-90% of the interviews were conducted with members from the first random sample.

For the non-members, we adopted a system of looking for people in their homes. Because we could only find a few (between 5-33%) of the non-members from the random sample list, we dropped the enumerators off at various locations around the administrative secteur to find people to interview. The procedure was to start at a house (randomly chosen by the supervisors), conduct the interview, leave the house, turn left (or right), count a certain number (randomly chosen by the consultant) of houses, choose the one on the left (or right), conduct another interview, and repeat the procedure. If someone refused to be interviewed, the enumerator would try at the house next door until he found someone who agreed to be interviewed.

The enumerators followed the procedure to find non-members, and if necessary, they used the same procedure to find members.