World Council of Credit Unions, Inc.

THE ROAD TO JINOTEGA

PART I: COUNTRY BACKGROUND INFORMATION

PART II: TOWARDS MAXIMIZING CREDIT UNION FINANCIAL SUSTAINABILITY

PART III: TOWARDS MAXIMIZING CREDIT UNION OUTREACH

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WOCCU

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FOREWORD:

Juxtaposing national income growth with a stagnant and widespread level of poverty in Nicaragua conveys an international phenomenon, popularly referred to as "the widening gap between haves and have-nots". The widening gap between the haves and the have-nots has taken priority in international development policy. The most recent, and potentially most influential, publication addressing the widening gap worldwide is the World Bank Development Report 2000/2001, *Attacking Poverty* (World Bank 2001). This report recognizes that improved macroeconomic performance does not necessarily result in improvements of poverty related issues. The report stresses that although growth is central to reducing poverty, a multi-faceted approach to poverty alleviation is also necessary to ensure that growth is both sustainable and inclusive.

This report considers one of the necessary facets of poverty alleviation in Nicaragua, namely improving domestic financial intermediation by broadening access to quality financial services to those conventionally excluded, such as rural residents and the poor.[1] As noted in the World Bank Development Report 2000/2001, access to credit, savings and insurance services help low-income households and micro-enterprises manage risk and smooth consumption. This access is perhaps even more important for low-income households and microentrepreneurs who are relatively more vulnerable to price fluctuations, economic shocks and natural disasters.

Beginning in the early 1990s, recognition of vacuums in the Nicaraguan financial sector led to a series of programs of non-conventional financial intermediation. Since then, these programs have proliferated. In this policy environment, credit unions received support to expand community access to their financial services, including credit and savings products. The ability of non-conventional financial intermediation initiatives, collectively termed microfinance, to alleviate poverty depends on their ability to reconcile financial sustainability with a broad outreach that includes poor and rural residents.

ABBREVIATIONS

BANADES (Banco Nacional de Desarrollo)- National Development Bank

BOD- Board of Directors

DIGECOOP- Dirección General de Cooperativas

Manzana- 1 mz=.7 hectares

N= sample size

PEARLS- a monitoring tool developed by WOCCU that measures a credit union's performance in Protection, Effective Financial Structure, Asset Quality, Rates of Return & Costs, Liquidity, Signs of Growth.

RCUP- Rural Credit Union Program

RCUP CUs- Rural Credit Union Program Credit Unions

USAID- United States Agency for International Development

WOCCU- World Council of Credit Unions, Inc.

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THE ROAD TO JINOTEGA

PART I: Country Background Information

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EXECUTIVE SUMMARY:

Part I of this report discusses developments in the banking sector over the last two decades in Nicaragua, and points to some implications for the widespread poverty in Nicaragua.

Nicaragua's Transition 1980-1999

During the 1980's Nicaragua was characterized by a state-dominated economy that favored medium and small size producers. Public expenditures were fueled by an ambitious political agenda and by defense expenditures due to the armed conflict with the US-backed opposition force, the Contras. The crux of an overall weak economic policy was financing an escalating fiscal deficit by printing increasing amounts of money. The resulting severe economic disequilibria became apparent in the late 1980's. These included hyperinflation, which peaked at 33,657.3 % during 1989; and negative growth of real gross domestic product (GDP), which declined to a growth rate of –12.4% in 1988. National living standards also deteriorated; by 1990 GDP/capita had dropped to one-third of its 1980 level.

Severe economic disequilibria led to impending reform during the 1990's under new leadership of Violetta Chamorro (1990-1996). During 1990's Nicaragua's economic disequilibria were addressed by economic stabilization measures including fiscal austerity measures, a tightening of monetary policy and currency devaluations. Economic stabilization measures were accompanied by structural adjustment policies, which aimed to create a market-oriented framework. Structural adjustment policies included a re-privatization of institutions that had been nationalized during the 1980's.

The stabilization and adjustment policies managed to correct structural inefficiencies and economic imbalances created in the 1980's. Structural achievements included reducing the public sector deficit; general government consumption decreased from 20% of GDP in 1980 to 14% of GDP in 1998. Positive economic developments included resumed growth in real GDP starting in 1994 and an increase in gross domestic investment from 17 % of GDP in 1980 to 33% of GDP in 1998, which supported a shift from a negative growth rate of –4.8% during the mid 1980s to a positive growth during 1990-98 (see Table 1 & 2 respectively).

Despite these positive developments, growth in gross domestic investment occurred with only a very modest growth in gross domestic savings. Gross domestic savings, which was –2% of GDP in 1980, increased only slightly to 1% of GDP in 1998. This raised concerns about the state's ability to garner support from domestic investors, despite having created market-friendly structural changes. Moreover, despite positive economic developments the national incidence of poverty remained very high; according to recent estimates approximately half of the population (2.4 million) fall below the poverty line.

Developments in the Banking Sector

The nationalized banking system of the 1980's allowed for a large flow of relatively cheap and abundant credit to the Nicaraguan majority. In 1986 small producers and coops absorbed 63% of long-term credit, compared to medium and large producers who only received 24-27% of this credit in 1983-86. In contrast, as the nationalized banking system was curtailed during the 1990's, credit to smaller producers contracted.[2]

By 1995 the 11 private banks, guided by a profit motive rather than a political agenda, limited their lending mainly to the commercial and financial sector. One estimation attributes 60% of agricultural production in the 1990's to small and medium producers, whose share of credit fell from 56 % in 1990 to 23 % in 1993.

One of the most apparent shortcomings of Nicaragua's banking sector reforms has been the creation of vacuums in financial services access, notably excluding small-scale producers, which are a majority of Nicaragua's economically active population. For example, instead of reforming a state monopoly on grain trading (ENABAS) during the reforms of the 1990's, the agency was closed and agricultural credit was restricted. The subsequent vacuum was filled by a few agricultural monopolies in rural commerce, excluding the average small-scale producer. Credit restrictions, which reduced the agricultural area financed from 560,500 manzanas to 214,800 over four agricultural cycles, were particularly harsh on the rural poor.

Another example of a contraction in national financial outreach was the contraction of the National Development Bank (BANADES), which used to be the largest state bank. The contraction of BANADES resulted in a reduction of 46 % in its branch offices. The number of rural families that received services from BANADES, which had expanded from 16,000 to 102,200 during the 1980's was reduced to 12,000 in 1995. In other words, outreach was reduced by 88% over approximately 15 years.

Developments in the banking sector illustrate the strengths and weaknesses of the market-oriented reforms implemented during the 1990's. Positive results of banking sector reforms during 1990-96 include liberalized interest rates and the creation of an independent banking superintendency in 1991. Further structural progress was made in 1998 as new prudential norms were approved, which raised the capital adequacy standard, increased provisions of non-performing loans, and regulated credit risk.

Despite successfully curtailing an inefficient banking system and a implanting a more enabling framework that encouraged the entry of private commercial banks, reform of the banking sector failed to create an efficient system benefiting the majority of Nicaraguan residents. The new private banks did not fill the vacuums that arose during the banking sector's transition.

Policy Response

A surging unemployment and an overall stagnant and widespread national poverty level underscore the limits of Nicaragua's recent positive economic developments. National living standards have remained among the lowest in Latin America despite resumed growth in GDPs. Central American comparative indicators for 1998 rank Nicaragua as the poorest Central American country.

Providing access to credit has been central to poverty alleviation policy. Microfinance institutions (MFIs) in Nicaragua, more accurately microcredit institutions, have received unprecedented support from international donors.[3] It is estimated that since 1990, donors have provided about US$ 100 million in soft loans and grants to 285 MFIs. This high number suggests Nicaragua may have the highest concentration of MFIs in the Western Hemisphere. As of early October 1998 a representative sample of Nicaraguan MFIs had a total of $20 million in loans outstanding, reaching a total of 115,500 clients. Growth in microlending is rapid; outstanding loans had increased to $ 20 million from $14.6 million at the end of 1997, a growth rate of 37% in 9 months.

Nevertheless these seemingly optimal conditions have failed to generate a strong MF system. In general Nicaraguan MFIs have high operating expenses, which is reflected in interest rates that rank among the highest for microcredit in Latin America. These trends suggest inefficient operations that will undermine MFIs' ability to contribute toward poverty alleviation. Indeed, the ability of microfinance practices to alleviate poverty depends on the institution's ability to reconcile financial sustainability with a large-scale outreach to those excluded from conventional financial sources.

I. Transition to a Market-Oriented Economy

The last two decades in Nicaragua have witnessed a transformation from a highly regulated state-dominated economy to a market-oriented economy. Weak economic policy of the 1980's was motivated by ambitious political goals, which during the 1990's was replaced by a stringent corrective economic policy that ignored political considerations. During the 1980's policy explicitly supported and fostered small and medium scale producers, who formed the majority of Nicaraguan socioeconomic structure. In contrast, the market-oriented policies of the 1990's were most favorable to the small Nicaraguan business sector. Part I discusses developments in the banking sector during this transition period and its implications for the widespread poverty in Nicaragua.

The Sandinista government (1979-1990) brought 40% of the Nicaraguan economy under state control, which included nationalizing the banking sector and controlling foreign trade (Stahler-Sholk 1997, 78). The Sandinistas defined the nationalized land (Area de Propriedad del Pueblo) and state enterprises as the centerpiece of the national economy. In contrast, the role of the private sector was to be subordinate (Spalding 1994, 65). The favoring of small and medium size producers over the private sector was reflected in Sandinistan economic policy. They implemented expansionary economic policies favorable to these sectors, including increased social spending, expansionary credit policies for primary production, subsidies for production and basic consumption, and an elaborate public investment scheme. The resulting socioeconomic structure of the country was predominantly comprised of small and medium size producers.

The Sandinistan political agenda of the 1980's fueled massive public expenditures. Furthermore, the government faced escalating defense expenditures due to the armed conflict with the US backed opposition force, the Contras.[4] The average fiscal deficit from 1983 to 1988 was approximately 23 % of gross domestic product (GDP) (Arana 1997, 83). The government's response was to print increasing amounts of money. This shortsighted inflationary financing of public sector deficits was the crux of an overall distorted economic policy. The resulting severe economic disequilibria became apparent in the late 1980's. These included hyperinflation, which peaked at 33,657.3 % during 1989; and negative growth of real GDP, which declined to a growth rate of –12.4% in 1988. National living standards also deteriorated; by 1990 GDP/capita had dropped to one-third of its 1980 level.

Table 1: Basic Economic Indicators, 1985-1990

	1985	1986	1987	1988	1989	1990
Inflation (Dec.-Dec.) (%)	334.3	747.4	1,347.3	33,657.3	1,689.1	13,490.3
Real GDP growth (%)	-4.1	-1.0	-0.7	-12.4	-1.7	-0.1
Real GDP growth per capita (%)	-6.7	-3.5	-4.0	-15.4	-4.9	-3.4
Real GDP/capita (1980=100)	89.6	86.5	83.8	70.7	67.7	65.7
Real wages (1980=100)	48.5	20.3	8.2	4.7	7.8	12.6
Unemployment (%)	23.1	25.7	28.9	32.5	39.4	44.3
Fiscal deficit/GDP (%)	23.4	18.0	16.4	26.6	6.7	17.1
Trade balance (in US$ mill.)	-579	-549	-570	-583	-326	-290
Exports (FOB)	344	287	325	273	341	392
Imports (FOB)	924	837	895	856	667	682

Foreign Debt (in US$ mill.)	4,936	5,760	6,270	7,220	9,741	10,616

Source: United Nations Economic Commission for Latin America & the Caribbean (ECLAC), cited from Stahler-Sholk 1997, 81.

During 1990's economic disequilibria were addressed by economic stabilization measures including fiscal austerity measures, a tightening of monetary policy and currency devaluations. Economic stabilization measures were accompanied by structural adjustment policies, which aimed to create a market-oriented framework. Structural adjustment policies included a re-privatization of institutions that had been nationalized during the 1980's.

Stabilization and adjustment measures were first implemented under the Sandinista regime during 1988 and 1989. Under the new leadership of Violetta Chamorro (1990-1996) these measures were expanded and intensified. Restrictive fiscal policy included cutting military spending and introducing tax reform. Structural measures included privatization of state enterprises, trade liberalization, agrarian reform and redistribution of state-owned lands to individual farmers. The financial sector was reformed, allowing the entry of private commercial banks. In 1991 an independent superintendency of banks was created.

Monetary reform included the creation of a new currency, the *córdoba oro*. This currency was fixed at a 1-to-1 parity with the US dollar. Meanwhile the old currency was rendered worthless through a series of devaluations. The old and new currencies coexisted while prices were expected to stabilize. The application of this policy is exemplary of the high social cost accompanying the policy agenda of the 1990s; wages were compensated in the old córdoba whereas prices were set and accounting transactions were made in the new dollarized currency.

In 1993, the dollarized currency was abandoned and a crawling peg exchange rate system was introduced, with a monthly depreciation of the exchange rate to the US dollar of 12 % per annum. In July 1999, the annual rate of depreciation was reduced to 9%.

The stabilization and adjustment policies managed to correct structural inefficiencies and economic imbalances created in the 1980's. Structural achievements included reducing the public sector deficit; general government consumption decreased from 20% of GDP in 1980 to 14% of GDP in 1998.

Table 2: Real GDP Growth, 1994-1998

	1994	1995	1996	1997	1998
Annual percentage change					
Real GDP Growth	3.3	4.3	4.7	5.1	4.0

Note: 1998 data is preliminary

Source: IMF 1999, Statistical Annex

Positive economic developments included resumed growth in real GDP starting in 1994. Another positive development was an increase in gross domestic investment from 17 % of GDP in 1980 to 33% of GDP in 1998, which supported a shift from a negative growth rate of –4.8% during 1980-1990 to a positive 11.4% during 1990-98 (see Table 3).

Despite these positive developments, growth in gross domestic investment occurred with only a very modest growth in gross domestic savings. Gross domestic savings, which was –2 % of GDP in 1980, increased only slightly to 1 % of GDP in 1998. This raised concerns about the state's ability to garner support from domestic investors, despite having created market-friendly structural changes.

Table 3: Structure of Demand

(a) General Government Consumption as % of GDP		(b) Gross Domestic Investment as % of GDP		(c) Gross Domestic Savings as % of GDP	
1980	1998	1980	1998	1980	1998
20	14	17	33	-2	1

(a) General Government consumption includes all current expenditures for purchases of goods and services (including wages and salaries). It also includes most expenditures on national defense and security, but excludes those that are part of government capital formation.
(b) Gross Domestic Investment includes any additions to fixed assets for the economy, including drains, fences, machinery equipment construction of roads, commercial and industrial buildings.
(c) Gross Domestic Savings are the difference between GDP and total consumption.

Source: World Bank 2000

When comparing gross domestic investment to international aid assistance, both the dependency on international aid and lack of locally generated gross domestic investment are clear.

Table 4: Aid Dependency

Aid per capita as % of GNP		Aid as % of Gross Domestic Investment	
1993	1998	1993	1998
23.0	31.6	95.5	83.8

Note: Aid includes net official development assistance and official aid.

Source: World Bank 2000

II. Developments in the Banking Sector

Developments in the banking sector illuminate the social cost of Nicaragua's economic transition. The 1980's were characterized by abundant and relatively cheap credit accessible by the majority of Nicaraguan residents. During the 1990's credit availability was suddenly contracted as policy was guided by macroeconomic principles rather than political considerations.

Following the nationalization of the banking system in 1979 there was an explosion of bank credit (Spalding 1994, 85). Bank loans increased from C$2,522 million to C$4,308 million in 1981 (Spalding 1994, 253). Despite this credit boom the portion of bank credit received by medium and large sized producers declined from 96 % of the total in 1978 to only 43% in 1981 (Spalding 1994, 85). By 1986 small producers and coops absorbed 63% of long-term credit, compared to medium and large producers who only received 24-27% of this credit in 1983-86.

In contrast, as the nationalized banking system was curtailed during the 1990s credit to smaller producers contracted. In 1998 the largest state bank Banco Nacional de Desarrollo (BANADES) was sold; in 1999 51% of the Banco Nicaraguense de Industria y Comercio (Banic) assets were sold to private investors. Today only the Banco de Crédito Popular, which was created to serve small-scale borrowers and microentrepreneurs, remains state operated (ICC 2000, 74). However, Banco de Credito Popular has recently had to reduce its operations due to recent intervention by the Superintendency due to signs of bankruptcy (ibid).

By 1995 the 11 private banks, guided by a profit motive rather than a political agenda, limited their lending mainly to the commercial and financial sector. One estimation attributes 60 % of agricultural production in the 1990s to small and medium producers, whose share of credit fell from 56 % in 1990 to 23 % in 1993 (Stahler 1997, 91).

Further developments that underscore the unresponsiveness of institutions to the demands of small and medium producers include the reformation of the ENABAS agency, which represented the state monopoly on grain trading during the 1980s. Instead of reforming the agency, the structural adjustment policies of the 1990s closed the agency and restricted agricultural credit. This subsequent vacuum was filled by a few agricultural monopolies in rural commerce, excluding the average small-scale producer (Stahler 1997, 90). Credit restrictions, which reduced the agricultural area financed from 560,500 manzanas to 214,800 over four agricultural cycles, were particularly harsh on the rural poor (ibid).

Similarly, the contraction of the National Development Bank (BANADES), which used to be the largest state bank, was harsh on the rural poor. In the early 1990's its branch offices were reduced by 46 % (World Bank 1993, 8).[5] The multiple benefits of reducing this inefficient state behemoth are noted in the positive economic developments starting in the mid 1990s. However, the number of rural families that received services from BANADES, which had expanded from 16,000 to 102,200 during the 1980's was reduced to 12,000 in 1995. In other words, outreach was reduced by 88% over approximately 15 years.

The new private banks did not fill the vacuums that arose during the banking sector's transition. Critics of the government's failure to provide credit to small and medium farmers included the United States Agency of International Development (USAID), who described this sector as having the ' the greatest potential to work with market interest rates of credit, repay loans, and generate the greatest amount of savings' (USAID 1995, 40).[6]

Developments in the banking sector illustrate the strengths and weaknesses of the market-oriented reforms implemented during the 1990s. Reform of the banking sector during 1990-96 had included liberalizing interest rates and the creation an independent banking superintendency in 1991. Further structural progress was made in 1998 as new prudential norms were approved, which raised the capital adequacy standard, increased provisions of non-performing loans, and regulated credit risk. Despite successfully curtailing an inefficient banking system and a implanting a more enabling framework that encouraged the entry of private commercial banks, reform of the banking sector failed to create an efficient system benefiting the majority of Nicaraguan residents.

III. Characteristics of Poverty

A surging unemployment and an overall stagnant and widespread national poverty level underscore the limits of Nicaragua's recent economic successes. National living standards have remained among the lowest in Latin America despite resumed growth in GDP (IMF 1999). Central American comparative indicators for 1998 rank Nicaragua as the poorest Central American country.

Table 5: Comparative Economic Indicators, 1998

	Guatemala	El Salvador	Costa Rica	Honduras	**Nicaragua**
GDP ($ bn)	19.0	11.9	10.3	5.4	**2.1**
GDP/capita ($)	1,756	1,969	2,944	821	**445**
Consumer price inflation (avg. %)	6.6	2.5	11.6	13.7	**13.0**

Source: EIU 2000

According to the most recent estimates, half of the population (approximately 2 million people) fall below the poverty line. (WB, 1995) Twenty percent of the population fall below the extreme poverty line and are food poor. In other words, even if all consumption was spent on food, 20% of Nicaraguans could not meet the minimum daily caloric intake. National social indicators are among the lowest of Latin America. More than half of the rural and more than one-third of urban poor adults are illiterate (IMF, 1999). Only 54% of the population has access to potable water. Approximately 28% of children under five suffer from malnutrition.[7]

According to the *1995 World Bank Poverty Assessment*, poverty has the following characteristics:

- Rural poverty is much higher and deeper than urban poverty
- The poorest regions are the Nothern (Jinotega and Matagalpa) and the Segovias (Estelí, Madriz, and Nueva Segovia) regions. These regions contain 23 % of total population and harbor 46% of the country's extreme poor.
- The key poverty issue in the labor market is not unemployment but underemployment, which is characterized by small-scale self-employed informal sector entrepreneurs. Overall unemployment is 13.4 %, but with wide regional variations. The Western, Southern, and Managua regions have the highest unemployment, comprising over 80% of the country's unemployed. The poorer regions have the highest underemployment.[8]

Both unemployment and underemployment were aggravated during the economic agenda of the 1990's, namely by the cuts in public expenditure, the privatization of state enterprises, and the demobilization of the opposition forces (the Contras) and the government soldiers. In contrast, the expansionary policies of the 1980's had brought unemployment and underemployment to the lowest level known in modern economic history (Arana 1997, 82), although this was not necessarily productive employment. By 1990 unemployment was five times higher than it was in 1984. Beginning in 1995 unemployment reached 20.2 % while underemployment was approximately 54%. In short, by 1995 the unemployment rate was twice that of 1990 and five times that of 1984.

Although free trade zones have absorbed some of the unemployed, improvements in both unemployment and underemployment are very modest, despite the annual GDP growth of 4%. The majority of job creation is taking place in the informal sector. According to the Central Bank, the informal sector accounted for 55.6% of all jobs in 1998 (IMF 1999). This estimate was even higher according to a 1995 World Bank study, which suggests that seventy percent of the employed work in the informal sector (WB 1995, vol.1 section III). For those that are employed, real wages have not kept pace with inflation (see Table 6). According to the United Nation's Economic Commission for Latin America (CEPAL), wages in the agricultural sector dropped to 65 % of the national average during the first half of the 1990s (Stahler 1994, 91). Wages for coffee and cotton pickers were set at US$ .97 a day, which is only 60% of the rural minimum wage in Guatemala where basic consumer goods were cheaper. (ibid).

Table 6: Prices and Earnings, in Córdobas

	1994	1995	1996	1997	1998
Inflation (%)	20.0	11.2	11.6	9.3	13.0
(a) Cost of a basic needs basket	971.0	1,079.0	1,226.0	1,403.0	1,578.0
(b) Nominal Wages	1,198.0	1,358.0	1,482.0	1,617.0	1,964.0
(b) Real Wages % change	5.3	1.9	-2.2	0.0	7.4

(a) Cost of basket of 53 basic goods in Managua.
(b) Central government employees paying national insurance contributions.

Sources: IMF 2000; Banco Central de Nicaragua, *Indicadores Economicos*, cited from EIU 2000

Few natural disasters have exacerbated the incidence of poverty more than the hurricane that struck in late 1998 — Hurricane Mitch. Hurricane Mitch was one of the most destructive natural disasters to hit Central America in decades. Heavy rain, flooding and winds of up to 180 mph caused an estimated total direct and indirect damage to $1.2 billion, which is 57% of 1998 GDP (Cardemil et.al 2000, 3). The human toll included death or injury of 323,000 and displacement of one-fifth of the population (870,000 people) of which 45% were children. Over 250,000 homes, 500 schools and 300 health centers were affected (IMF 1999, 7).

IV. Policy

A response to the surge of unemployment and widespread poverty was the implementation of several employment programs during 1990s. These programs failed to integrate people into the productive sector of the economy. As previously discussed, unemployment and underemployment remained high in Nicaragua.

Failure to respond to the needs of small and medium producers, who comprised the majority of domestic producers, was criticized by national and international policy makers. The general recommendation among these critics was to provide access to credit. Policy proposals to improve access to credit for small and medium producers began in the early 1990s. An IDB/IDRB/FAO mission during this time emphasized a broad approach to reactivating the agricultural sector that would include a special program to finance small and medium producers (Stahler 1997). Similar conclusions were made by the World Bank Poverty Assessment team in 1995, which recommended that "a viable rural financing system for small and medium size farmers" be developed as part of a poverty alleviation policy (World Bank 1995).

During the 1990s a focus on microproducers as central to alleviating poverty and re-stimulating productivity also led to similar policy conclusions; that developing sustainable microfinance institutions will provide credit access to microentrepreneurs. Microfinance institutions (MFIs) in Nicaragua, more accurately microcredit institutions, have received unprecedented support from international donors.[9] It is estimated that since 1990, donors have provided about US$ 100 million in soft loans and grants to 285 MFIs (Von Stauffenberg 1998). This high number suggests Nicaragua may have the highest concentration of MFIs in the Western Hemisphere. As of early October 1998 a representative sample of Nicaraguan MFIs had a total of $ 20 million in loans outstanding, reaching a total of 115,500 clients. Growth in microlending is rapid; outstanding loans had increased to $ 20 million from $14.6 million at the end of 1997, a growth rate of 37% in 9 months.

Nevertheless these seemingly optimal conditions have failed to generate a strong MF system. In general Nicaraguan MFIs have high operating expenses, which is reflected in interest rates that rank among the highest for microcredit in Latin America (Von Stauffenberg 1998). These trends suggest inefficient operations that will undermine MFIs' ability to contribute toward poverty alleviation. Indeed, the ability of microfinance practices to alleviate poverty depends on the institution's ability to reconcile financial sustainability with a large-scale outreach to those excluded from conventional financial sources.

WOCCU is among the organizations that address the complexities of poverty by providing financial services to underserved rural and poor communities. In contrast to many credit-driven microfinance institutions, the credit union approach is characterized by savings mobilization.

In August 1996 the USAID-Nicaragua Rural Credit Unions Program (RCUP), implemented by World Council of Credit Unions (WOCCU), initiated a program of voluntary stabilization and innovative service development to re-establish the capability of participating credit unions (RCUP CUs) to mobilize local savings for reinvestment in productive loans. Part II of this report will discuss the progress made by RCUP to assist RCUP CUs in achieving financial sustainability. Part III describes the socioeconomic characteristics of RCUP CU membership and explores changes in their economic behavior, income and wealth.

Notes

[1] The analysis focuses on the ability financial service providers to incorporate rural and poor residents. For a review on the importance of well-functioning financial markets for macro economic growth see Levine, Ross. 1997. "Financial Development and Economic Growth." In *Journal of Economic Literature*, 35(2):688-726.

[2] In 1998 the largest state bank Banco Nacional de Desarrollo (BANADES) was sold; in 1999 51% of the Banco Nicaraguense de Industria y Comercio (Banic) assets were sold to private investors. Today only the Banco de Credito Popular remains state operated.

[3] Microfinance is associated with alleviating many facets of poverty, ranging from post-conflict reconstruction, income generation, social empowerment and after hurricane Mitch, disaster relief.

[4] Concurrent international economic trends exacerbated pressures on the domestic economy, namely a declining terms of trade and the recession affecting the Latin American region during the 1980's. In addition, Nicaragua lost access to international aid; in May 1985 the US imposed a trade embargo and Mexican petroleum credits were suspended. After 1985 credits from the USSR and Eastern Europe declined.

[5] Cited from Stahler 1997.

[6] Cited from Stahler 1997, 91

[7] The 1995 World Bank Poverty Assessment is based on the nationally representative 1993 Living Standards Measurement Survey; http://www.worldbank.org/lsms/guide/select.html# table

[8] The World Bank's study suggests this is because these residents are "too poor to be unemployed". The wealthier regions have the highest proportion of unemployed and the lowest proportion of underemployed. One reason may be that more wealth allows for people to search for a better job. The highest rates of underemployment are found in the rural areas where employment in the agricultural sector predominates.

[9] Microfinance is associated with alleviating many facets of development ranging from post-conflict reconstruction, income generation, social empowerment and after hurricane Mitch, disaster relief.

Part I

BIBLIOGRAPHY

Arana, Mario. 1997. "General Economic Policy." In *Nicaragua Without Illusions: Regime Transition and Structural Adjustment in the 1990s*, edited by Thomas W. Walker, 81-97. Delaware: Scholarly Resources Inc.

Banco Central de Nicaragua Indicadores Financieros

Cardemil, Leonardo, Juan Carlos Di Tata and Florencia Frantischek. 2000. "Central America: Adjustment and Reforms in the 1990s", *Finance & Development*, vol.37, no.1, March.

EIU (Economist Intelligence Unit). 2000. *Country Profile: Nicaragua*

ICC (International Consulting Consortium). 2000. "Amplicación del marco normativo de las microfinanzas: Las cooperativas comunales y las organizaciones privadas de microcrédito".

IMF (International Monetary Fund). 1999. *Nicaragua: Recent Economic Developments and Statistical Annex*. Washington DC.

IMF. 2000. *International Financial Statistics*.

Living Standards Measurement Survey. 1993.
http://www.worldbank.org/lsms/guide/select.html# table

Spalding, Rose J. 1994. *Capitalists and Revolution in Nicaragua*. Chapel Hill: The University of North Carolina Press.

Stahler-Sholk, Richard. 1997. "Structural Adjustment and Resistance: The Political Economy of Nicaragua under Chamorro." In *The Undermining of the Sandinista Revolution*, edited by Gary Prevost and Harry E. Vanden, 74-113. New York: St. Martin's Press.

Superintendencia de Bancos y de Otras Instituciones Financieras Nicaragua, C.A. 2000. *Informe del Sistema Financiero Nacional a Marzo de 2000*. Managua.

Von Stauffenberg, Damian, Todd Farrington, and Luca Tortorelli. 1998. *Microfinance in Nicaragua : an Assessment prepared for the United Nations Development Program* Washington DC : Private Sector Initiatives Corporation.

World Bank. 1993. *Nicaragua-Stabilization and Adjustment: Enabling Private Sector-Led Growth*. Consultative Group Meeting for Nicaragua. Paris, April 2.

World Bank. 1995. *Republic of Nicaragua Poverty Assessment*. Vol. I and II. Washington DC, June 1.

World Bank. 2000. *2000 World Development Indicators*.

World Bank. 2001. *World Development Report 2000/2001: Attacking Poverty*.
http://www.worldbank.org/poverty/wdrpoverty/

THE ROAD TO JINOTEGA

PART II: TOWARDS MAXIMIZING CREDIT UNION FINANCIAL SUSTAINABILITY

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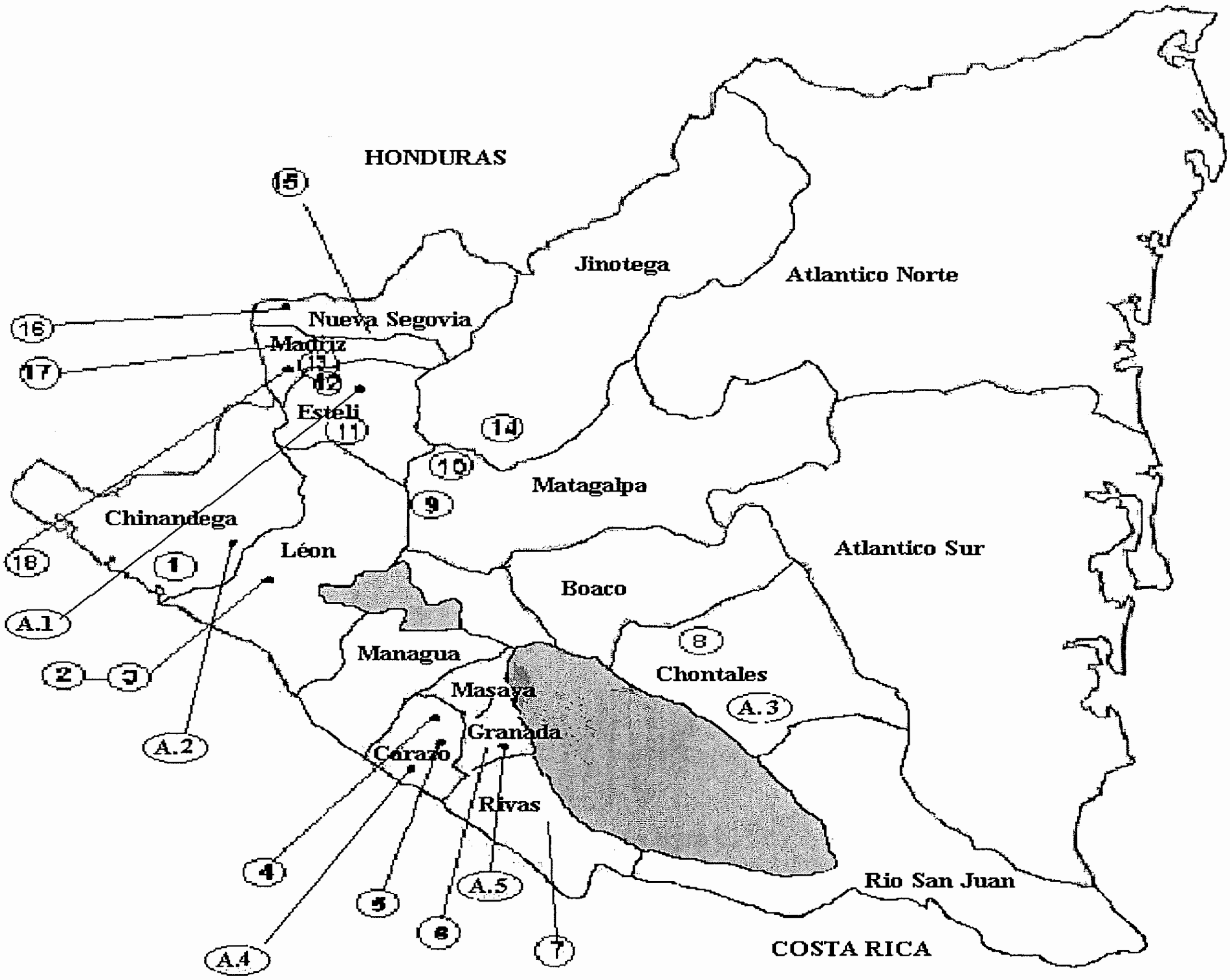
USAID Contract 524-C-00-96-90031-0

GEOGRAPHIC LOCATION OF CREDIT UNIONS
WOCCU Rural Credit Union Program, Nicaragua



CREDIT UNIOINS

1. CAC Iaguei	Corinto, Chinandega
2. CAC Unica	León
3. CAC Mujeres Agropecuarias	León
4. CAC Profesional	Masatepe, Masaya
5. CAC Central	Jinotepe, Carazo
6. CAC La Armonía	Nandaime, Granada
7. CAC COODEPARI	Rivas
8. CAC Avances	Santo Tomás, Chontales
9. CAC Integral	Sébaco, Matagalpa
10. CAC La Unión	Matagalpa
11. CAC Moderna	Estelí
12. CAC Nueva Alianza	San Juan de Limay, Estelí
13. CAC Pueblo Nuevo	Pueblo Nuevo, Estelí
14. CAC Visión	Jinotega
15. CAC Ciudad Antigua	Ciudad Antigua, Nueva Segovia
16. CAC Capitalizadora	Ocotal, Nueva Segovia
17. CAC Dinámica	Yalagüina, Madriz
18. CAC Económica	Somoto, Madriz

CREDIT UNION AGENCIES

A.1 Agencia Moderna - Estelí
A.2 Agencia Iaguei - El Viejo, Chinandega
A.3 Agencia Avances- Santo Tomás Chontales
A.4 Agencia Armonía- Sta. Teresa, Carazo
A.5 Agencia Armonía-Nandaime, Granada

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EXECUTIVE SUMMARY

The purpose of this report is to review the methodology and results of WOCCU's Nicaraguan Rural Credit Union Program (RCUP) in order to evaluate its ability to help participating credit unions (RCUP CUs) reconcile financial sustainability with an expanded outreach to their communities. Part II of this report documents the methodologies and steps used to reform and strengthen RCUP CUs as financially sustainable institutions. The results of these efforts are presented through key operational and financial performance indicators.

RCUP moves credit unions towards a savings based model, which reduces dependence on external capital while strengthening the credit union to become competitive and focus on savings mobilization. Savings mobilization is accompanied with the generation of adequate capital reserves and loan loss provisions to protect those savings. RCUP CUs use aggressive savings mobilization campaigns to greatly increase the liquidity available for lending.

Risk-based credit analysis improves asset quality by reducing the reliance on automatic loans or loan-to-share lending practices. Risk-based credit analysis more accurately measures credit risk when loans are processed on the basis of repayment capacity (income and expenses of the borrower), amount of assets owned, and the expected return on the borrower's investment.

RCUP CUs expand outreach to include a more diverse membership, attracting net savers. By expanding membership and the attractiveness of savings services, credit unions have converted from small-scale dependent borrower associations to full and balanced financial intermediaries of funds from net savers to net borrowers.

At RCUP's inception, consolidated delinquency for RCUP CUs stood at 65%. Despite destruction and temporary increases in delinquency due to Hurricane Mitch, continued focus on collections and improved risk analysis in credit decisions reduced consolidated delinquency below 10% by September of 2000. Lower levels of delinquency in new loans reflected stricter lending policies practices and extensive training of new technical credit committees.

Improved collection efforts recovered delinquent loans, but a large portion remained unrecoverable. During the first stages of the loan portfolio clean up, unrecoverable loans were written off. The first group of RCUP CUs wrote off fictitious assets, reducing the reported loan volume by approximately 50%. As RCUP CUs wrote-off historically delinquent loans and Mitch-related lost loans, the volume of reported capital reserves declined as well. However, as RCUP CUs mobilized increasing volumes of savings the loan portfolio grew and overtook the originally reported levels of volume and capital levels rebounded as profitability was improved. Further work needs to be done to establish new lending products suitable to the needs of the poorest and most remotely located residents.

RCUP assisted RCUP CUs to adapt savings mobilization efforts to overcome liquidity shortage and external dependency. RCUP introduced new more accessible (withdrawable) products, tailored products to particular market niches and improved the return on savings products. Training provided credit union staff with requisite skills in savings services, marketing, interest rates and liquidity management. To launch the marketing campaign, RCUP assisted RCUP CUs to develop a new standardized credit union image by establishing and implementing common logos, standardizing RCUP CUs' infrastructural aesthetics and standardizing account application forms. To participate in RCUP's marketing program, credit unions needed to meet a number of financial and operational targets. The marketing program's success has sparked healthy competition amongst credit unions; which credit union has the most appealing savings products, institutional image, range of services and convenience of services?

All RCUP CUs now offer passbook savings, which are withdrawable on demand. This feature has become the principle savings base in RCUP CUs. Members can deposit and withdraw funds at any moment. RCUP CUs offer a variety of program savings, in addition to fixed term savings products.

During 1996, before RCUP was underway in the credit unions, the credit unions held US$8,527 (C$106,588) in savings deposits. By June 2000, RCUP CUs increased savings to US$1,055,038 (C$ 13,187,975). Real savings deposit growth grew 390% in 1997, 181% in 1998, 315% in 1999 and 90% in 2000.

RCUP CUs' source of funds is maturing as credit unions have increasingly mobilized the more robust market-rate with-drawable deposits rather than depend on traditional forced-savings shares or external credit. Deposit savings as a source of funds is overtaking both shares and external credit. Deposits have risen from 2% of assets in 1997 to 22% of assets as a source of funds for the consolidated groups and 38% for credit unions longest in the program. Shares show the reverse pattern falling from 12% of assets to 9% of assets. External credit shows a more accelerated decrease as well.

Loans have increased their participation in assets from 67% to 80% of total assets for the consolidated groups. As RCUP CUs removed non-earning assets from their balance sheet, more funds became available for loans to members.

RCUP CUs' net income has fallen from 4% of assets in 1997 to 0% in June 2000. This reflects several changes in both rates of return and financial structure. RCUP CUs' profitability has been affected:

- Positively as the average return on loans has increased from 22% in 1997 to 34% in 2000 and positively as the portion of assets earning as loans increased from 67% to 80%,
- Negatively as the cost of deposits has decreased from 11% to 17% and negatively as the share of deposits funding assets increased from 2% to 22%,
- Negatively as credit unions have undertaken the clean up process of provisioning for and writing off long time historical losses in the loan portfolio,
- Negatively by the increasing cost of external borrowings from 4% to 14% and negatively (in the short run) as the portion of assets funded by external credit fell from 57% to 64%,
- Negatively by the decreasing returns on liquid investments from 24% to 13% and negatively as the portion of assets in the form of liquid investments increased from 5% to 10%,
- Negatively by the increasing operating costs from 13% to 15% of assets,
- Negatively as the return which credit unions pay on shares has increased from 9% to 15%,

The negative impact of increasing volume of deposit savings and decreasing dependence on external credit is a positive indication of maturity and financial sustainability. The negative impact of increased cost of shares is also an indication of maturity and competitiveness. RCUP CUs have implemented market interest rates, paying members a market return on savings products and on their shares, which paid no return prior to RCUP. RCUP CUs are moving to a more competitive equilibrium of financial intermediation, which has higher costs. RCUP CUs' net income in the future will depend on the credit union willingness to raise loan interest rates to cover these higher costs.

The fall in net income ratios reflects temporary costs to make RCUP CUs safer places for members to place their savings. The largest negative impact on profitability has been the improved discipline of provisioning for long time un-collectible loans, rising from 1% in 1997 to 3% in 1999 and 2% of assets in 2000. This cost will fall again as historical losses are charged-off and as risk-based credit analysis improves. Profitability will improve as historical losses are cleaned up and the absolute amount allocated to loan loss provisions decreases.

Currently, RCUP CU management has committed to charging and paying market interest rates on financial products. RCUP CUs use WOCCU's business planning methodology to calculate the entrepreneurial interest rate, which covers finance costs, operating costs, loan loss provisions and contributions to capital.

A mark of financial sustainability is the ability of the institution to pay market rates for all sources of funds and operate at a positive net profit. Each RCUP CU's financial statement is adjusted to reflect the real costs of funds. Costs of savings products and the cost of external credit is calculated at current market rates to provide an adjusted return as if the credit union were operating on market costs funds. With the adjustments made, six credit unions continue to show negative adjusted net income for both 1997 and 2000. Two credit unions change from a positive adjusted net income in 1997 to a negative adjusted net income in 2000, while four credit unions show positive adjusted net income in both years. Six credit unions show a change of negative adjusted net income in 1997 to positive adjusted net income in 2000.

A simplified formula measures the internal or external subsidies where the credit union does not pay the full market rate for return on deposits, where profits are less than the market rate of return on equity and where the rate paid on external credit is less than the market borrowing rate. During 1997-2000 RCUP's subsidy dependence index has decreased for 12 of the 18 RCUP CUs.

In conclusion, RCUP has improved the market competitiveness, the safety and soundness and the financial sustainability of RCUP CUs. It has moved the credit unions closer to the frontier in demonstrating greater financial sustainability for the clientele served.

Poverty lenders feel that it is important to reach the poorest possible people. Many in the sustainability camp are more interested in opening access to the full spectrum of the poor who lack access to financial services; although most do include the poorest in that spectrum.

In fact the focus of many people in the sustainability camp is on scale of outreach as opposed to depth of outreach ... They argue that mixed programs which can become large and sustainable are preferable to small exclusively focused programs.

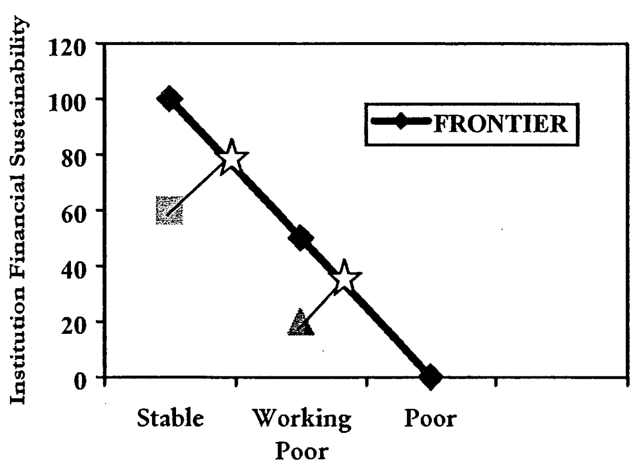
-Elizabeth Rhyne, 1998.

I. INTRODUCTION

The purpose of this report is to evaluate the ability of WOCCU- Nicaragua's Rural Credit Union Program (RCUP) to reconcile financial sustainability with an expanded outreach.

Access to a full range of financial services is essential for poverty alleviation. Access to reliable savings facilities can improve the poor's economic security and access to credit can foster asset accumulation. Savings instruments allow the poor to increase wealth, self- finance production activities and smooth consumption over periods of cyclical or unexpected crises. Credit products can improve the productivity of existing entrepreneurial activities and stimulate new sources of livelihood, as well as finance household needs such as education and housing.

Yet many microfinance experts argue that the financial institution faces a trade-off between financial sustainability and the ability to provide financial services to the poor. Institutions providing services to the higher income groups often display higher returns and greater financial sustainability. Institutions offering services exclusively to the poor typically display weaker financial returns and sustainability. This inverse relationship suggests a frontier as characterized below.



Clientele's Economic Condition

Given the inverse relationship between financial sustainability and outreach to the poor, the frontier line suggests that the highest attainable point of institutional financial sustainability will incorporate a less poor clientele. Similarly, the frontier line suggests a larger proportion of poor can be incorporated into the institution's clientele by operating at a lower level of financial sustainability.

In 1996 World Council of Credit Unions, Inc. (WOCCU) was contracted by USAID-Nicaragua to provide training and technical assistance to credit unions interested in upgrading their operations in lending and savings mobilization. By upgrading operations, WOCCU's Rural Credit Union program (RCUP) was to assist credit unions improve efficiency, profitability and growth in order to attain financial sustainability. Complimentary to the institutional strengthening focus, RCUP was designed to strengthen credit unions by expanding outreach to the poor. Prior to RCUP's inception in 1996, some Nicaraguan credit unions were serving the poorer elements of society but were financially weak and unsustainable (see triangle in the Frontier Graph). Some credit unions were financially strong but were not reaching as many poor as they could (see square in the Frontier Graph).

RCUP's goal has been to maximize both credit union financial sustainability and credit union outreach. RCUP aims to guide project credit unions (RCUP CUs) towards the frontier line (see stars in the Frontier Graph) where the credit union maximizes both its financial sustainability given its membership plus its outreach to the poor given its level of financial sustainability.

RCUP's success is defined along two dimensions: (1) financial sustainability of the credit unions; and (2) outreach to under-served groups, namely poor and/or rural communities. This report is structured accordingly in three parts. Part I discusses some developments in Nicaragua's banking sector during its transition from a state-dominated economy to a market-oriented economy, and points to some implications for the widespread poverty in Nicaragua. **Part II documents the methodologies and steps used to reform and strengthen RCUP CUs as financially sustainable institutions. The results of these efforts are presented through key operational and financial performance indicators.** Part III assesses the depth and breadth with which RCUP CUs reach communities excluded from formal financial services due to low income, geographic location and/or other socioeconomic characteristics. It profiles RCUP CU members and the changes observed in their economic behavior, income and wealth.

Part II of this paper assesses RCUP's ability to realize its principal strategy on an institutional level, namely guiding the Nicaraguan credit union movement away from a traditional reliance on share accounts, dependence on external financing, and associated problems with loan delinquencies by implementing mobilization of local savings; stricter enforcement of loan repayment schedules; capacity based loan application evaluations and financial management disciplines which include capital accumulation, loan loss provisioning, liquidity management and delinquency control.

WOCCU's Model Credit Union methodology is characterized by: the mobilization of local savings by offering competitive interest rates on standard withdrawable deposit accounts; implementing stricter enforcement of loan repayment schedules; reforming loan application evaluation policies to place greater emphasis on the borrower's repayment capacity; and financial management disciplines which include capital accumulation, loan loss provisioning liquidity management and delinquency control. The adoption of this package of innovative savings and credit services and financial management disciplines will permit participating credit unions to (i) become operationally efficient, (ii) achieve full financial self-sufficiency and (iii) grow through membership expansion.

RCUP's Credit Union Development Model adapts WOCCU's methodology to the Nicaraguan context, where savings mobilization had to be preceded by institutional strengthening and operational reform that established market-oriented practices. RCUP's Credit Union Development Model can be summarized by five interlinked prerequisites for developing market-oriented and savings-led financial intermediaries: (1) Institutional

Development; (2) Foundations for Savings Protection; (3) Savings Mobilization; (4) Risk–Based Credit Analysis; and (5) Diversified Credit Products.

1. *Institutional Development* can be broadly summarized as aiming to professionalize and to modernize credit union business practices, policies and procedures. Focus areas of RCUP's institutional development strategy are to upgrade the credit union legal framework (bylaws), to upgrade credit union management and staff capability and to improve credit union lending, collections, savings and internal controls policy. Furthermore, minimum financial standards are established; compliance is rewarded and failure to comply can lead to project expulsion.

2. *Foundations for Savings Protection* include establishing prudential financial management disciplines. Before accelerating public savings mobilization, prudential financial management standards need to be established in credit unions that will receive those savings in order to protect members' savings.

3. *Savings Mobilization* requires implementing market-oriented operations, which includes setting interest rates on savings products according to market trends as well as improving the overall quality and convenience of services. Successful savings mobilization programs increase the credit union's volume of funds available for lending, which spurs credit union outreach.

4. *Risk-Based Credit Analysis* establishes sound loan evaluation criteria and loan administration procedures, which allows for improved delinquency control and collections practices. Risk-based credit analysis is therefore another practice that protects members' savings, which comprise a significant portion of credit union earnings. Furthermore, risk-based credit analysis allows the credit union to include more poor members.

5. *Diversified Credit Products* expand the range of credit products offered by credit unions to meet the membership's diverse personal finance needs, which range from short-term microentrepreneurial loans and microsavings products to relatively longer-term and larger loans.

RCUP's strategy integrates technical assistance and training to guide credit unions through a process of reforms, to meet growth targets and to implement financial discipline standards. Furthermore, RCUP facilitates grants to upgrade physical infrastructure (office space) and to upgrade equipment (computers). RCUP's strategy can be summarized as follows:

- RCUP staff carries out diagnostics of local credit unions; RCUP staff and local credit unions discuss the terms and conditions of a formal project participation agreement and collaboratively create business plans based on the terms of the participation agreement contract.
- Surveys are conducted to collect individual level data of both credit union members and non-members in order to monitor project impact and to identify demand for financial services. Credit union financial services are modified according to these survey results.
- Based on the terms of the participation agreement between RCUP and a local credit union, RCUP staff provides technical assistance and training to assist RCUP CUs to establish uniform accounting systems; to update policies and procedures, such as interest rate pricing, savings mobilization and marketing; to upgrade reporting systems, such as delinquency reports; and to upgrade planning processes, such as business planning. Specific targets for membership and savings growth are set in each credit union's business plan.
- Capital needs are determined in each RCUP CU's individual marketing plans. RCUP provides "upgraded equipment" grants conditional on the RCUP CU's installation of new business information systems (as stipulated in the marketing plan's institutional development subcomponent) and achievement of growth targets (as stipulated in the marketing plan's savings mobilization subcomponent).

- RCUP staff provides technical assistance and training in financial management disciplines and credit administration practices. Individual business plans are collaboratively developed by RCUP and RCUP CUs, which set specific targets for financial condition indicators such as delinquency, provisions for loan losses and institutional capital (reserves +retained earnings).
- RCUP introduces a financial monitoring system, PEARLS, which measures RCUP CUs' implementation of project advocated policies and progress towards financial condition targets.
- Continued technical assistance and training is provided to RCUP CUs, based on their progress in implementing project-advocated financial disciplines and reaching financial indicator targets as well as adopting the credit administration policy framework.

As of June 2000, RCUP had eighteen participating credit unions and six participating credit union agencies[i], serving a total of 14,121 members. RCUP credit unions mobilized US$1,079,985 (C$13,499,812) in savings, US$451,961 (C$5,649,513) in share equity and have a total of US$806,133 (C$10,076,662) in institutional capital. These community sources of funds finance a loan portfolio of US$3,980,327 (C$49,754,087).

Table 1

RCUP Credit Unions Savings & Lending Activities (in US$)					
	June 1996	June 1997	June 1998	June 1999	June 2000
Number of Credit Unions + Agencies	10	13	13	13	18 (6 agencies)
Number of Members	1,588	2,784	3,844	4,216	14,121
DEPOSIT SAVINGS					
Volume of Savings	$8,527	$41,927	$117,671	$537,395	$1,079,985
SHARES					
Volume of Shares	$164,414	$270,456	$259,717	$142,373	$451,961
Number of Share Accounts	1,588	2,784	3,844	4,216	14,121
INSTITUTIONAL CAPITAL					
Total Institutional Capital	$738,939	$991,981	$1,227,218	$1,187,413	$806,133
LOANS					
Volume of Loans	$1,079,803	$1,524,148	$887,116	$888,224	$3,980,327
Number of Loans Outstanding	882	2,099	2,958	9,558	10,743
ASSETS					
Total Assets	$1,512,514	$2,331,979	$1,337,098	$1,126,928	$4,978,469

RCUP CUs include Armonia, Avances, Capitalizadora ,Central, Ciudad Antigua, COODEPARI, Dinámica, Económica, Iaguei, Integral, La Unica, La Unión, Moderna, Mujeres Agropecuarias, Nueva Alianza, Profesional, Pueblo Nuevo and Visión.

II. INSTITUTION BUILDING

CONCEPTUAL FRAMEWORK

Project implementation begins with communication. Initially, RCUP's Director visits local credit unions on an individual basis and introduces the broad parameters of RCUP's technical assistance and gauges the potential for the participation of that credit union in RCUP. At first, many credit unions expected and asked for subsidized credit and grants. RCUP explained that this project did not provide credit, but rather technical assistance designed to help credit unions achieve independence and financial sustainability, specifically through savings mobilization. RCUP carried out several regional forums with interested and potential participant credit unions to present its conceptual framework.

NICARAGUAN CREDIT UNIONS BEFORE RCUP

Pre-RCUP CUs were typically dependent on external credit to meet members' loan demand. Due to the high demand for credit union loans, which charged borrowers a low interest rate, credit unions often faced liquidity shortages. Due to the availability of low-cost external credit, liquidity crises did not spur credit unions to diversify their source of funds to include self-generated funds through savings mobilization. Instead, credit unions typically addressed liquidity shortages by accessing more subsidized loans from outside sources, exacerbating their dependence on external funds.

Reliance on external credit not only undermined financial sustainability, it also sustained weak policy and practices. Due to the perception that funds for loans came from outside of the community from rich sources, borrowers were more likely to become delinquent in their repayment and credit unions were less likely to ambitiously collect delinquent loans.

Perhaps the most damaging policy characteristic of the externally dependent pre-RCUP CUs was a savings policy skewed to support low-interest loan policies. Savings were made in the form of non-withdrawable share purchases, redeemable only upon terminating membership. Interest (dividends) paid at the end of each the fiscal year was typically lower than the market interest rate. In fact, many pre-RCUP CUs did not pay a return on shares because they operated at a loss. Members saved in this costly product since pre-RCUP CUs required a minimum share balance in order to qualify for a loan. Members that wanted to save money in addition to meeting the share requirement for loan eligibility were penalized; savers effectively subsidized borrowers.

Non-market interest rate policies limited both credit union membership growth and savings mobilization. As a result, credit unions in Nicaragua did not grow fast enough or generate funds rapidly enough to meet member loan demand. Instead, a borrower dominated credit union membership, lack of public confidence in financial investments and lack of savings instruments at the credit unions produced chronic liquidity shortages and loan rationing.

Another characteristic of pre-RCUP CUs was a loan-to-share multiple lending practice. Loan size was determined by a fixed multiple of the member's share amount, typically two or three times the amount that s/he had in shares. Members could also take out "automatic" loans amounting up to 90% of their share balance. Part of the high historic loan delinquency rate is a reflection of this loan-to-share loan processing practice. Lending as a multiple of the member's shares does not evaluate the borrower's capacity to repay a loan on the basis of her/his income stream nor does it consider the member's repayment history. Loan-to-share lending also fails to evaluate the risk associated with the activity or the return of the member's investment.

In addition, the practice of loan-to-share lending imposes a high cost to members, who are forced to invest into a non-interest bearing asset (share account). Corollary to the high-cost-to-member effect, share requirements for loans effectively restricted the size of loans available in a credit union, referred to as "loan rationing". Regardless of a member's income and repayment capacity, the member was unable to acquire a large loan unless s/he froze a large amount in a share account. As a result, credit unions were unable to meet members' needs for loans such as those often needed for housing or commerce.

At the start of RCUP in 1996 all Nicaraguan credit unions had approved loan applications waitlisted for available financing. Some credit unions had stopped accepting credit applications. Several had a cap limit on credit, which most credit requests exceeded. Some credit unions only allowed members to borrow the same amount that they had in shares. Potential demand existed for larger loan sizes but the liquidity-constrained credit unions were forced to give smaller loans. In some cases, credit unions stopped accepting new members because loan expectations exceeded credit union capacity.

Nicaraguan credit unions tended to be borrower-dominated associations. A homogeneous membership with the incentive to gain access to credit perpetuated a constant lack of liquidity. This member profile produced an association composed entirely of net borrowers. Credit unions were unable to meet credit needs because their policies and practices were unattractive to the community's net savers.

RCUP: LAUNCHING A SAVINGS-BASED MODEL

In 1996 RCUP introduced a market-oriented savings based model to the first 6 credit unions (RCUP CUs) that agreed to participate in RCUP. This model reduces dependence on external capital by focusing on savings mobilization and accumulating institutional capital (reserves +net earnings). The advantages of a savings-based model do not come without challenges; it requires an institutional structure able to protect and manage these member-generated funds. RCUP CUs use aggressive savings mobilization campaigns to increase liquidity available for lending. Concurrently, RCUP CUs must adhere to prudential standards defined by RCUP and RCUP-advocated policies to maintain institutional strength.

Reforming credit unions into market-oriented institutions is a prerequisite for mobilizing savings. Market-oriented operations benefit members by inducing a re-pricing of financial products, namely savings products that will offer the member a market return on her/his investment. Market oriented operations have also spurred an increase in the variety of financial services offered.

Withdrawable savings deposits is one of the most significant products to come out of market-oriented credit union operations for both the member and the institution. For the members it is convenient access, reliability and market interest rates that have made these savings instruments very popular. For the credit union, withdrawable savings deposits have become the credit union's principal source of funds instead of external capital.

Updated credit analysis and credit screening practices improve asset quality by reducing the reliance upon automatic or loan-to-share multiple lending practices. Credit risk is measured more accurately when loans are processed on the basis of: (i) the capacity to repay (income and expenses of the borrower); (ii) the available collateral or guarantee (assets owned); and (iii) the expected return on the investment.

Community generated funds place greater pressure on credit union management to ensure prudential management. RCUP CUs addressed this by adopting stringent financial management disciplines that in part, classified loans as delinquent or non-delinquent. RCUP CUs also strengthened collections policy and delinquency controls.

Once delinquent loans are identified, maintenance of asset quality requires protection of the credit union savings by provisioning for potential losses as a function of the actual delinquency. Credit unions provision 100% of the outstanding balance of all loans delinquent more than 12 months and 35% of all loans delinquent less than 12 months. If loans are delinquent for more than 12 months, the loan is written off the balance sheet. The balance is expended against provisions and the legal collections agent then ambitiously pursues the loan collection.

Savings mobilization must be accompanied by the generation of adequate capital and loan loss reserves to protect those savings. Credit unions must increase earnings both to offset the increased costs of deposit funds and the need to accumulate reserves. This item requires the use of market rates in lending. Credit unions retain net income in capital reserves at the end of each fiscal year. This institutional capital serves as a cushion to absorb losses and avoid impairing savings. It also serves as a source of funds, which generate earnings for the credit union.

Credit unions will expand to a more diverse membership to attract net savers. Attracting agricultural producers, salaried employees, professionals, and transportation agents will expand membership to those who are more likely to deposit savings in the credit union.[ii] By expanding membership and the attractiveness of savings services, credit unions can convert from small-scale, externally dependent, borrower-dominated associations to full financial intermediaries of community funds from net savers to net borrowers.

DIAGNOSTICS

> WOCCU projects start by conducting diagnostics of local credit union services and management in order to identify which credit unions will be eligible to participate in the credit union development project, in this case RCUP. Diagnostic results identify and offer recommendations for areas in need of operational and financial policy changes.
>
> A diagnostic assesses three areas: (1) the financial condition via a PEARLS analysis; (2) the adequacy of management systems, policies and internal controls via an evaluation of the credit union's written financial policies and procedures; and (3) a loan portfolio assessment in order to identify its real value via evaluating the true or market value of outstanding loans, notes, and mortgages. This evaluation includes a preliminary identification of losses.

Approximately 50 institutional diagnostics were completed in order to identify the first group of credit unions to be offered entry into RCUP. RCUP shared the diagnostic results with credit union management. RCUP staff visited credit union managers and directors to discuss the results and their implications for operational and financial policy. RCUP staff explained the actions that each credit union needed to take in order to participate in RCUP.

Ten of the initial credit unions assessed were chosen to participate in RCUP. Three credit unions (*El Socorro, Maria Auxiliadora and Guapisa*) were dropped about six months to a year later for non-compliance with RCUP guidelines. The second group of six joined the program in January 1998, and the third group of four joined in March 1999.

RCUP PARTICIPATION CONTRACT

RCUP CU Managers & Directors and RCUP staff must commit to active participation in RCUP as expressed in a formal participation contract. The one-year participation agreement contract specifies the conditions for participation, the obligations of both RCUP CUs and RCUP, and penalties for non-compliance. RCUP CUs agree to meet a set of targets for financial operating indicators, administrative adjustments and financial goals. RCUP specifies the technical assistance and financial assistance that the RCUP CU will receive. In the case of non-compliance in either or both parties, this annual contract is not renewed.

GOVERNANCE

Credit unions are often founded by local community leaders and depend on volunteers to manage and carry out operations. The involvement of volunteers helps small credit unions by maintaining low operating expenses at a time when the credit union does not yet manage a sufficient volume of funds to hire a full complement of professional staff. In addition, the volunteers' familiarity of the community's individuals allows them to contribute to loan approvals. A Board of Directors (BOD) dominated by non-professional volunteers can be very insightful about local clients, but may fail to have the financial and business expertise required to direct a financial institution.

As credit unions become larger, they engage in more sophisticated operations. Monitoring these institutions requires financial and business expertise over the volunteers' informational advantages of the community. Larger and more sophisticated credit unions typically generate sufficient income to hire professional staff with specialized expertise to carry out decision-making functions. Credit unions then involve volunteers less in operational matters, though volunteer owner-representatives are still called upon for decision- monitoring and oversight.

Nicaraguan cooperative law and credit union bylaws do not clearly define nor allocate oversight responsibilities and managerial responsibilities between the board of directors and the manager. The cooperative law and many credit union bylaws broadly state managerial decisions, such as interest rate determination, budgeting and approval of financial expenditure, are to be made at annual membership assemblies Inadequate credit union legislation also fails to stipulate a clear allocation of specialized technical responsibilities to elected non-professional volunteers (such as loan approval by volunteer credit committees).

Undefined roles and responsibilities of credit union management produced operational sluggishness. The resulting inefficient decision-making process was in a constant paralysis. RCUP CU managers were unable to respond quickly to opportunities and problems as needed.

RCUP provided the BOD training in skills and tools to monitor their credit unions' financial performance including:

- Roles and responsibilities of members of the Board of Directors;
- Roles and responsibilities of the Credit Committee;
- Roles and responsibilities of the Supervisory Committee;
- Vision and goal setting seminars;
- Understanding a balance sheet and income statement;
- PEARLS and financial disciplines training;
- How to review policies and procedures annually;
- How to administer a financial institution based on a business plan; and
- How to administer growth based on a marketing plan.

RCUP addressed these problems by proposing the adoption of clear rules in the credit union bylaws and advocating for the adherence to prudential standards that place clear pressures upon management's responsibility for financial performance.

BYLAWS

New credit union bylaws were designed to provide greater flexibility for management, to establish prudential disciplines and to clarify roles and responsibilities of those parties in charge of credit union governance.

> Standard elements of credit union bylaws include: registration of credit unions, cooperative principles, membership (admission, responsibilities, rights, loss of membership), governance structure, annual general meeting (AGM), quorum, board of directors, officers, supervision committee, other committees (credit, education), general manager, dissolution and liquidation.
>
> Beyond these standard elements, RCUP advocated bylaw reform and introduced new elements that expanded the membership range, specified governance responsibilities, mandated prudential disciplines and directed real cost pricing.

Bylaws guidelines, written 20 years earlier, vested the powers of interest rate setting at the annual General Meeting. Instead of this annual process, the market-oriented RCUP CUs need greater flexibility for their management to rapidly set and adjust interest rates. The new credit union bylaws allows management to set interest rates on savings and on loan products.

The new bylaws also establish prudential disciplines including institutional capital reserves, provisions for loan losses and charge offs. Among the primary principles established was the payment of a market rate of return on savings, and the charging of interest rates on loans to cover the full cost of operations including provisions and reserves.

The new credit union bylaws clarify roles and responsibilities of those parties in charge of credit union governance. The role of decision oversight role is assigned to the board of directors (BOD) and calls for a staggered rotation of the BOD. BOD members can hold positions for up to two elected terms and then must step down for at least one term. Rules limit BOD members' involvement in day-to-day operations and define their focus to be on policy and direction. The manager's major responsibilities include implementing credit union policy, implementing the budget, administering daily operations, reporting to the board and hiring & overseeing staff. The new credit union bylaws also set out the appropriate functions of the supervisory committee.

The new credit union bylaws enhance institutional safety and soundness. They establish controls on insider loans and ethical codes of behavior to avoid conflicting interests. To be a member of the BOD, a person must be free of any relation with any of the credit union's employees, should not have a contractual working relationship with the credit union and must not have committed any illegal acts or be delinquent in the payment of contractual obligations with the credit union. The BOD member is not allowed to participate in any loan or service decisions related to her/his own account.

The new bylaw further indirectly enhances institutional soundness by assigning credit decisions in the purview of professional staff with the necessary expertise versus the conventionally volunteer committees typically lacking a financial background. Hence the Credit Committee becomes a technical committee made up of credit union loan officers and employees with specialized skills. The Manager approves small loans, and the Credit Committee approves larger loans within size parameters and policies approved by the BOD. The BOD then considers loans to credit union BOD members and staff (if allowed) as well as loans that exceed the sizes that approved by the Credit Committee or Manager.

The development and installation of new credit union bylaws in RCUP CUs required RCUP staff to undertake several steps of drafting, reviewing and revision, which can be summarized as:

1. Evaluate existing RCUP CUs' bylaws.
2. Develop first draft of RCUP CUs' bylaws.
3. Implement seminar with RCUP CUs' board of directors to introduce and review new bylaws.

4. Develop second draft of bylaws.
5. Each RCUP CU receives 2nd draft of bylaws.
6. Receive feedback from RCUP CUs on 2nd draft of bylaws.
7. Develop 3rd draft of bylaws.
8. Each RCUP CU board of directors approves 3rd draft of bylaws. RCUP CUs call an assembly for its membership to review new bylaws article by article; some modifications are made.
9. RCUP CU membership approves the new bylaws.
10. RCUP CUs and RCUP present the new bylaws to the government regulator, Dirección General de Cooperativas (DIGECOOP).
11. DIGECOOP returns the bylaws with modifications.
12. RCUP CUs and RCUP lawyers analyze the modifications, negotiate with DIGECOOP and finalize the new bylaws registrations.
13. RCUP CUs legalize all ancillary internal papers with DIGECOOP
14. Train RCUP CUs' boards of directors on the compliance of the final bylaws.

III. SAVINGS PROTECTION AND FINANCIAL DISCIPLINES

ACCOUNTING SYSTEM

> Before credit unions are encouraged and assisted to actively mobilize community savings, they implement an accounting system, financial management disciplines and an internal policy framework that will protect those savings.

Pre-RCUP credit unions operated with a wide variety of accounting systems, sometimes conforming to generally accepted accounting practices and sometimes not. Several newer versions of accounting systems have recently been developed for Nicaraguan credit unions, but these systems continue to use outdated practices and are limited in their ability to allow credit unions to expand services and operations.

RCUP initiated discussions with the Superintendency of Banks regarding the Superintendency's accounting nomenclature for banks. In consultation with the Superintendency of Banks, a revised version of the Superintendency's nomenclature was developed for credit union implementation. The credit union accounting nomenclature was closely tied to RCUP's monitoring system, PEARLS. The credit union accounting nomenclature included more contemporary reserving and provisioning accounts and more consistency with international financial intermediary accounting standards established by the Superintendency of Banks.

Credit union participation in RCUP required implementation of the new accounting system. RCUP staff assisted credit unions, of which the majority conducts accounting manually, in the process of conversion to the new standardized chart of accounts.

- Steps taken by RCUP to establish the accounting nomenclature in RCUP CUs include:
- Preparation of an accounting manual.
- Evaluation of the credit union accountants' skills and expertise.
- In-classroom teaching of basic accounting courses, which explain the basic accounting principles and introduce the application of WOCCU nomenclature.
- On-the-job technical assistance in the implementation of the accounting system in the credit unions.
- Integration of all auxiliary accounting records, general ledger, member record cards, bank reconciliations, income statements, and balance sheets were into the new accounting system.
- Standardization of all paperwork with formats compatible with the new nomenclature.

- Implementation of the discipline of establishing accounting closing dates by the 15th of each month.
- Project staff carried out follow-up to accounting procedures and ensured transparency by conducting spot checks of accounting records at credit unions. Where errors were found, technicians and advisors assisted credit union staff to resolve them.

The credit unions ran parallel accounting systems for three to five months before running completely on the new system. When credit unions complied with all of the above, they began to work with the PEARLS monitoring system.

POLICY FRAMEWORK

The policy framework of financial management disciplines is designed to improve the safety and soundness while enhancing financial management skills. Key financial management disciplines promoted by RCUP include:

Delinquency Control Disciplines

- Measure delinquency by classifying the total amount of a loan delinquent when one payment has been missed;
- Maintain delinquency on new loans between 5-10%;
- Mandatory write-off of loans delinquent for periods greater than 12 months;
- Enforce strict collection procedures; and
- Legal action for collection of loans with a high risk of recovery.

Capitalization Disciplines

- Establish capital reserves and retained earnings targets at 10% of total assets;
- Adequate provisioning for loan losses (100% for loans delinquent over 12 months and 35% for loans delinquent less than 12 months);
- Transfer net earnings to capital reserves and retained earnings; and
- Transfer delinquent loan recoveries to reserves.

Earnings Disciplines

- Maintain interest rates charged on loans and paid on savings at market levels;
- Control operating costs less than 8% of total assets;
- Eliminate operating deficits;
- Establish a planning and budgeting program to project and track the financial results;
- Limit non-earning assets to 7% or less of total assets.

Liquidity Disciplines

- Maintain liquidity reserves at 25% of with-drawable savings.

INTERNAL CONTROLS

The diagnostic analysis conducted at RCUP's inception included evaluation of internal controls. RCUP prepared internal controls policies and procedures and provided training sessions for RCUP CUs. RCUP's technical assistance team provided internal control guidelines, minimum standards and credit union policy guidelines including conflict of interest and ethical conduct rules, loan processing controls and cash management.

The internal controls policy established rules of ethics for the board of directors (BOD) and staff.

- A BOD member cannot assume the position of management or staff of a credit union.
- BOD members must immediately report any conflict of interest or involvement of credit union business with personal business.
- Any business between the credit union and a BOD member has to be reviewed by the BOD and approved without the participation of the interested party.
- BOD members cannot accept gifts in exchange for commitment of any service from the credit union.
- Collateral seized and in liquidation must be liquidated at market prices and cannot be sold to a BOD member.

The internal controls policy also specifies requirements of personnel policy, salary structure, job descriptions and rotation of personnel.

BOD members and employees are prohibited from influencing the loan granting to any member or serving as guarantor of a member's loan. Loans are to be made according to the established loan policy and procedures. Staff is to verify authenticity of documents and signatures. Those in analysis but by the internal administrator do not do the disbursement of loans. The BOD and the Supervision Committee can check to verify that staff is following policy. Loans to directors or staff must be under policy rules; the applicant cannot participate in process of analysis. A loan to a director or staff person is decided upon by the BOD, not by the credit committee. Loans that are written off must be approved by the entire BOD.

Written loan policies define the types of loans available and determine approved levels of authority for granting loans, collateral requirements and loan terms. Applications are standardized to provide simple standardized information for post disbursement follow-up and review. Loan processing duties are segregated such that one employee does not have complete control over the process of loans. Ideally, one person originates the loan and another disburses the loan. The internal controls policy also provides control procedures for cashiers.

CASH FLOW

Diagnostics conducted at RCUP's inception included evaluation of non-earning liquidity levels relative to international credit union standards. RCUP developed a cash flow analysis worksheet tool, prepared policies on cash flow management and provided field training in each of the credit unions in cash flow analysis.

Cash flow training focused on the sources of incoming funds and how these were spent in order to explain changes in cash accounts. This tool proved to be particularly essential when Hurricane Mitch hit in 1998. At this time many members stopped paying loans or withdrew savings, which affected the cash flow of credit unions. Consequently, the cash flow tool was used to determine if there would be sufficient liquidity to cover financial costs, administrative costs, disbursements of new loans and savings withdrawals. It was used to guide decisions for mobilizing savings and for using external financing.

CAPITALIZATION

By law, Nicaraguan cooperatives must set aside reserves from net earnings. Ten percent of net income goes to legal reserves and twenty percent goes to an education fund. Most credit unions also set aside reserves for social welfare.

In several pre-RCUP CUs, a large part of reported institutional capital consisted of the credit union's value of physical infrastructure, which fails to represent financial reserves. Therefore, institutional capital represented the credit union's collateral but not its financial resources.

Other pre-RCUP CUs showed high levels of institutional capital (reserves +net earnings), but also exhibited high levels of delinquency and no provisions for loan losses. Only a few credit unions regularly estimated and created provisions for loan losses. Therefore, after charge-offs, the net level of capital was inadequate and in many cases negative.

Capitalization is a crucial component of RCUP's savings-led strategy. In order to accumulate institutional reserves, credit unions must retain net income in capital reserves at the end of each fiscal year. This institutional capital serves as a cushion to absorb losses and avoid impairing savings. Savings mobilization must be accompanied by the generation of adequate capital and loss reserves to protect those savings. Credit unions must increase earnings both to offset the increased costs of offering deposit instruments and the need to accumulate reserves, which requires the use of market-driven interest rates.

PEARLS MONITORING TOOL

RCUP uses WOCCU's PEARLS credit union monitoring and evaluation system to track the progress of the credit unions in applying RCUP advocated financial management policies and disciplines to their operations. Progress towards established goals is evaluated quarterly and continued participation depends on this progress.

PEARLS was developed in 1990 by WOCCU as a means to evaluate the operations of local credit unions in Latin America. Over time, it has evolved to become a unique management tool and supervisory mechanism. The PEARLS system operates by using standardized financial ratios and formulas to assess credit union performance. Each letter of the name "PEARLS" looks at a different but critical aspect of credit union operations:

P = Protection
E = Effective Financial Structure
A = Asset Quality
R = Rates of Return and Cost
L = Liquidity
S = Signs of Growth

The PEARLS concepts are introduced RCUP CUs simultaneously with an in classroom business planning training. The PEARLS training included several sessions in both classrooms and field visits to credit unions over a period of 3-4 months.

QUICK KEY TO PEARLS

AREA	PEARL	DESCRIPTION	GOAL
P=PROTECTION	P1	Allowance for Loan Losses / Delinquency >12 months	100%
	P2	Net Allowance for Loan Losses / Total Delinquency	35%
	P3	Complete Loan Charge-Off of Delinquency > 12 months	100%
	P4	Bad Debt Charge-Offs / Total Loan Portfolio	Minimum
	P5	Accumulated Recovered Charge-Offs / Accumulated Charge-offs	100%
	P6	Solvency	100%
	P7	Net Institutional Capital	10%
E=EFFECTIVE FINANCIAL STRUCTURE	E1	Net Loans/Total Assets	70-80%
	E2	Liquid Assets / Total Assets	Max 20%
	E3	Financial Investments / Total Assets	Max 10%
	E4	Non-Financial Investments / Total Assets	0%
	E5	Member Savings Deposits / Total Assets	70-80%
	E6	Borrowed Funds (External Credit) / Total Assets	0%
	E7	Member Shares / Total Assets	10-20%
	E8	Institutional Capital / Total Assets	Min 10%

A= ASSET QUALITY	A1	Total Loan Delinquency / Total Loan Portfolio	<= 5%
	A2	Non-earning Assets / Total Assets	<= 5%
	A3	(Zero Cost Funds [1]) / Non-earning Assets	>100%
R= RATES OF RETURN & COSTS	R1	Net Loan Income / Average Net Loan Portfolio	Entrepreneurial Rate
	R2	Liquid Asset Income / Average Liquid Assets	Market Rates
	R3	Financial Investment Income / Average Financial Investments	Market Rates
	R4	Non-Financial Inv. Income / Average Non-Financial Inv.	Greater than R1
	R5	Financial Cost: Member Dep. / Average Member Dep.	Market Rates >Inflation
	R6	Financial Cost: Borrowed Funds (External Credit) / Average Borrowed Funds (External Credit)	Market rates
	R7	Financial Cost: Member Shares / Average Member Shares	Market Rates >= R5
	R8	Gross Margin / Average Total Assets	Variable-Linked to R9, R11, R12
	R9	Operating Expenses / Average Total Assets	<10%
	R10	Provisions for Risk Assets / Average Total Assets	Dependent on Delinquent Loans

[1]Zero Cost Funds is equal to **Non-Interest Bearing Liabilities + Non-Institutional Capital + Institutional Capital**

	R11	Non-Recurring Income or Expense / Average Total Assets	Minimum
	R12	NET INCOME / AVERAGE TOTAL ASSETS	Linked to E8
L= LIQUIDITY	L1	LIQUID ASSETS - SHORT-TERM PAYABLES/ TOTAL MEMBER DEP.	Min 15%
	L2	Liquidity Reserves / Total Member Deposits	10%
	L3	Liquid Assets (Non-Earning) / Total Assets	<1%
	L4	CU Deposits in CFF / Total CU Liquidity	10%
S= SIGNS OF GROWTH	S1	Growth in Total Assets	Real %
	S2	Growth in Loans	Dependent on E1
	S3	Growth in Member Deposits	Dependent on E5
	S4	Growth in Borrowed Funds	Dependent on E6
	S5	Growth in Member Shares	Dependent on E7
	S6	Growth in Institutional Capital	Dependent on E8
	S7	Growth in Membership	>5%

Note: Goals can vary depending on the credit union's phase of development and/or strategy.

The first session of the PEARLS training was offered at each individual RCUP CU. Each RCUP CU was provided with an explanation of PEARLS, discussing each of the monitoring areas denoted by the letters (P-E-A-R-L-S) all of the tool's rations an their inter-relatedness. RCUP also explained the international credit union standards. The second session at each credit union included a review of previous training and offered more in depth training of each ratio.

During the third session, the roles were reversed and credit union managers taught PEARLS to RCUP staff. The fourth session in each credit union focused on the relationships between the financial ratios within the context of the transition to the new credit union model. The fifth session was a general group classroom training, which reviewed the individual credit union PEARLS. At this session the PEARLS ratios of the different RCUP CUs were compared to each other.

BUSINESS PLANNING

> Credit unions establish the means of savings protection in a series of steps:
>
> - Conversion to and operation with RCUP's uniform accounting standards;
> - Training in and adoption of key financial management disciplines;
> - Establishment, training and implementation of new operating policies;
> - Creation of a self-monitoring capacity so that each credit union can employ the PEARLS system to monitor its financial condition.
>
> Once the credit unions have accomplished these steps and they have improved their credit risk analysis, technical assistance shifts to growth and proper financial management of that growth. The key instrument used by the credit unions to manage that growth process is the business planning tool.

On the basis of the problems and opportunities identified by the diagnostic, RCUP CU management and RCUP staff design a business plan. The business plan lays out a logical structure for how RCUP CUs can achieve their targets in membership growth, capitalization, savings growth, loan and investment activity and capitalization. New institutional policies and disciplines are supported by a new annual planning format that focuses on specific balance sheet improvements and goals. The plan includes developing *pro forma* balance sheet and income statement projections. With these projections, detailed work plans are established to map how the credit union will achieve its goals. The entrepreneurial business plan becomes a key tool for the credit unions in achieving their policy reforms and financial goals. For continued RCUP-sponsored technical and financial assistance, the financial and growth goals must be achieved.

RCUP developed business-planning tools and provided classroom training in business planning to RCUP CU managers and 3-4 BOD members. RCUP technicians develop business plans and associated action plans with each RCUP CUs. Each RCUP CU manager explains the business plan and goals to the BOD, who signs an agreement to implement the business plan. Afterwards, the RCUP CU sets out to implement the plan. This plan specifies required marketing activities, policy changes, service adjustments, financial goals and growth goals.

Each RCUP CU develops a new business plan annually with new growth targets, budgets, and financial indicators that are used in evaluating progress. The annual development plan serves as the basis for the continuing participation in RCUP.

RCUP CU managers and BOD supervise the business plan, PEARLS ratios and goals every month. This supervision becomes quarterly as credit unions become more comfortable and experienced in their plan implementation. Ultimately, RCUP CU managers come up with their own answers to their financial needs and formulate their own strategies for success.

IV. CREDIT ANALYSIS AND RISK SCREENING

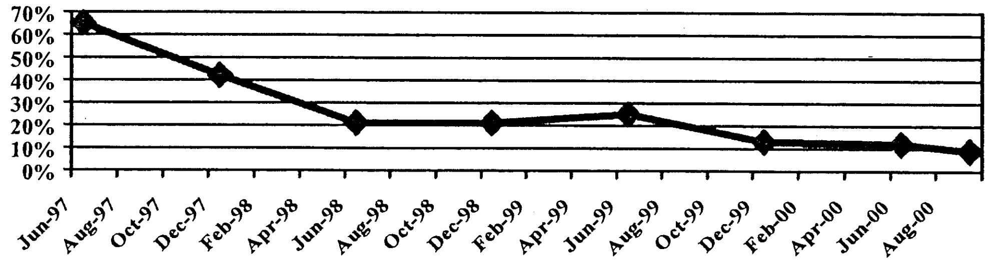
Diagnostics conducted at RCUP's inception included an examination and qualification of the loan portfolio. Most Nicaraguan credit unions failed to adequately monitor or measure loan delinquency. Delinquency was measured as late payments to date as opposed to the total outstanding balance of delinquent loans. As a result, actual delinquency levels were normally three times higher than the levels reported.

The first classroom training session for credit union managers, loan officers and collection officers was in portfolio analysis. RCUP uses loan delinquency control tools to measure and continue to monitor credit union loan delinquency. A loan delinquency monitoring tool was installed in each credit union to identify each loan and measure the quality of the portfolio. RCUP trained the credit union management to use the tool to monitor the performance of the loan portfolio and respond rapidly when a loan became delinquent. Henceforth, management provides a delinquency report each month to the board. Monthly follow up ensures that the loan cards balance with the general accounts and the general ledger.

CLEANING THE LOAN PORTFOLIO & IMPROVING COLLECTIONS

At initiation of RCUP, consolidated delinquency for RCUP CUs stood at 65%. Aggressive collections and improved loan screening reduced delinquency to 21% by June 1998. Yet with the entry of new high delinquency participant credit unions in 1998 and the destruction of Hurricane Mitch, consolidated delinquency rose to 25% by March of 1999. Hurricane Mitch destroyed many agricultural producers' crops and lands as well as many small and microentrepreneurs' shops and materials in October of 1998. Delinquency increased from 10% in September to 28% by the end of May of 1999. Continued focus on collections and improved risk analysis in credit decisions reduced consolidated delinquency to below 10% by September of 2000.

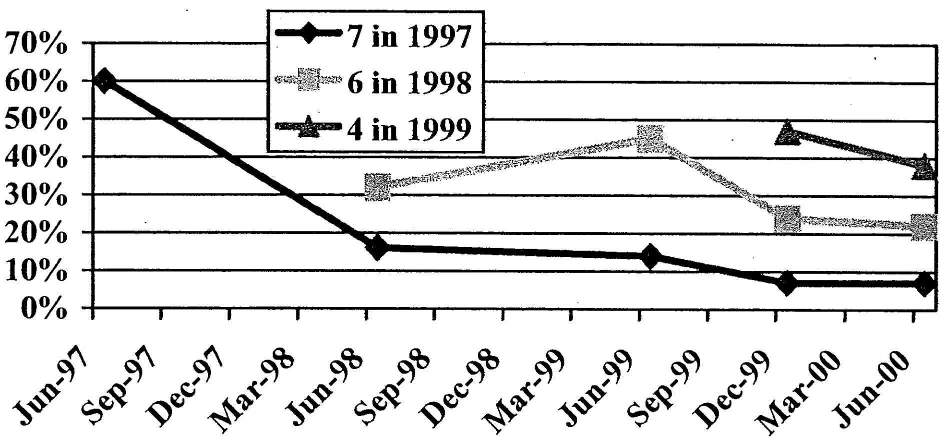
Consolidated Delinquency



Before undertaking the loan portfolio cleanup process, RCUP must identify the actual level of delinquency. For example, among the first group of credit unions, delinquency was reported at 42% but found to be 64.7%; among the second group of credit unions, the delinquency was reported at 6% but was actually found to be 47%.

Each credit union established and implemented a loan recovery strategy with monthly follow up to gauge progress and to prevent further delinquency on new loans. New collection policies were established along with new credit policies. Part of the process of establishing new collection and clean-up practices was the establishment of provisioning and allowances for loan losses. Implementation of the loan loss provisioning took between four to five months to train and administer.

Delinquency by Entry Groups



During the first stages of loan portfolio clean up, unrecoverable loans are written off to provide a more transparent report of loan and asset levels. As a result, reported loans decline significantly.

Loan write-offs against earnings and capital reserves also declined the volume of reported capital reserves.

In addition to accurate reporting of delinquency, loan portfolio clean up also involves accurate reporting of loan income. Many credit unions had traditionally recorded interest as accrued interest, calculating it as it should have been earned. This income was fictitious since a large portion of the loan portfolio was actually delinquent and non-earning

To monitor the loan portfolio clean up, RCUP CUs were divided into three entry groups, according to the time of entry into RCUP. The first entry group consisted of seven credit unions that entered RCUP in 1997. Delinquent loans for this group represented 60% of the total outstanding portfolio, which were either recovered or purged. In 1998, the delinquency rate dropped rapidly to 16%. After Hurricane Mitch, delinquency continued to fall, but much more slowly, finally reaching the current rate of 6.7% in December 1999. The first group of credit unions also wrote off fictitious assets, reducing the reported loan volume by approximately 50%.

The second entry group of six credit unions entered RCUP in 1998. This was the group of credit unions most affected by Hurricane Mitch and immediately saw its delinquency rise from the initial 32% to 45%. Collections and strengthening activities decreased that delinquency rate from 32% to 25%. Refinancing of delinquent loans was not allowed among any of the credit unions and was ruled out in the credit unions' new credit policies and bylaws. Of those credit unions most affected by Hurricane Mitch, loans, for which members demonstrated repayment capacity, were restructured and continued to be categorized as delinquent.

The third entry group of four credit unions, entering in 1999, showed high levels of post Mitch delinquency, which have fallen as a result of loan portfolio cleanup. This group recovered a large portion of their delinquent loans, but a large portion remained unrecoverable.

Delinquency by Entry Groups					
Entry Group	Jun 97	Jun 98	Jun 99	Dec 99	Jun 2000
1	64.7%	16%	14%	7%	7%
2		32%	45%	24%	22%
3				47%	38%

Loan write-offs against earnings and capital reserves also declined the volume of reported capital reserves. For example, among the first group of entrants, capital reserves declined from June 1997 to June 1998 as long time delinquent and unrecoverable loans were written off. Again from December 1999 to June 2000, capital reserves declined as Mitch related loan losses were written off. Similarly, among the second group of project entrants, capital declined 45% from June 1998 to June 1999 as they wrote-down historically delinquent loans and Mitch related lost loans, but then rebounded as profitability was improved.

Impact on Capital of Loan Portfolio Clean up by Entry Groups						
Entry Group	Gross US$	Jun 97	Jun 98	Jun 99	Dec 99	Jun 2000
	Loans	$1.24 Mill.	$681,039	$812,192	$1.22 Mill	$1.31 Mill
1	Capital	$247,270	$237,999	$279,275	$323,797	$281,252
	Loans		$260,581	$431,249	$715,327	$773,188
2	Capital		$98,999	$54,247	$164,894	$170,227
	Loans			$871,101	$890,258	$1.65 Mill
3	Capital			$372,827	$322,808	$339,161

Collections policies and procedures included requirements and processes for loan write-off and recoveries. Henceforth, all loans delinquent for more than 12 months were to be provisioned for 100% and written off, i.e. removed from the balance sheet. As they were written off, they were passed to contracted lawyers for legal action and collection. Any loans charged off and then collected were re-entered through the income statement as extraordinary income and dedicated solely to finance provisions.

In addition to a strengthened collections policy, RCUP-advocated credit policy and procedures also resulted in lower delinquency. Before entering RCUP, many credit unions were receiving high levels of external credit from foreign lenders with large associated amounts of lost loans. Credit unions negotiated with lenders to donate the external credit to the credit unions. This was done to clean up the loan portfolio that was highly delinquent. The credit unions entered these funds into the balance sheet as institutional capital and then wrote them off to absorb the loan losses.

RCUP CUs learned to implement a delinquency reporting system along with the PEARLS monitoring system. Training in the credit unions uses both the financial report and the delinquency report. Monthly evaluation includes provision requirements vis-à-vis goals.

In addition to accurate reporting of delinquency, loan portfolio clean up also involves accurate reporting of loan income. Many credit unions had traditionally recorded interest as accrued interest, calculating it as it should have been earned. This income was fictitious since a large portion of the loan portfolio was actually delinquent and non-earning. RCUP trained the credit unions to record and analyze their earnings solely on the basis of earned interest. Group classroom training focused on the difference between earned and accrued interest.

INTRODUCING RISK-BASED LENDING

Part of the historically high loan delinquency was a reflection of loan-to-share lending practices. Lending as a multiple of the member's shares does not evaluate the borrower's capability to repay the loan on the basis of his or her income stream. Nor does this method evaluate the risk associated with the activity or the return of the member's investment.

Share requirements for loans also effectively restrict the size of loans available. Regardless of a member's income and repayment capacity, the member is not able to acquire a large loan, unless the member freezes a large amount in non-withdrawable low return shares. This practice resulted in credit unions often being unable to meet members' needs for such loans as are often needed for housing or commerce.

New credit policies and procedures were designed and established to ensure that savings mobilized would be administered safely through improved lending practices. Technical assistance and training provided recommendations for credit repayment and risk analysis practices, income, expense and debt information collection from borrowers, use of security and collateral and verification methods for reported information.

RCUP implemented group forums with managers and boards on credit and collections policies and procedures. New loan policies provided guidelines for loan authorities, loan ceilings, concentration limits, credit information requirements, credit granting guidelines, security and collateral guidelines, interest rate policies and maintenance, and review of files.

RCUP staff also visited each credit union individually to train the credit union staff in credit and collections policies and procedures. Technical assistance assisted credit unions in the establishment of guidelines for repayment capacity loan analysis, training in credit analysis, approval, administration and collection and provision of updated lending forms, procedures, marketing materials and models.

Project staff supervised the implementation of credit policies and procedures via monthly desktop analysis of monthly credit reports and via 3-4 monthly site visits to credit unions. An ongoing dialogue was maintained with the credit unions regarding credit administration as they operated with the new policies and encountered new problems and situations. Managers met once a month for group experience sharing.

TRANSITION TO A TECHNICAL CREDIT COMMITTEE

At the beginning of RCUP, all credit approval decisions were made by untrained elected volunteers who made up the Credit Committee. Policy and by-law development led to several credit unions placing credit decisions in the purview of a technical staff Credit Committee. The new by-laws establish this for all credit unions.

The technical Credit Committee is composed of a manager or sub-manager, a credit manager or loan officer and one member of the volunteer credit committee. The technical Credit Committee places loan decisions in the hands of those trained in technical criteria, within the policy parameters of the credit union. It also brings together the credit manager and the collections manager who monitors those loans that become delinquent.

The system establishes several tiers of loan approval. Large, long-term and risky loans are approved by all members of the technical credit committee. The manager, sub-manager and credit officers each having authority to approve loans of decreasing size limits and risk as established by the credit policies of the credit union. All credit decisions are subject to random review by the member volunteer Credit Committee or Board of Directors to confirm that they comply with policy

PRICING

Loan rates vary substantially across credit unions. This variation holds true to a lesser degree for local banks across rural communities as well, suggesting a fairly high level of financial market risk disparity and difficult in capital mobility throughout rural Nicaragua.

RCUP provided RCUP CUs with training and technical assistance to price loans to cover all costs and to manage spreads. Interest rates on loans are set to provide adequate earnings to cover the cost of funds, operating costs, provisions for bad loans, and capital formation. Through RCUP's business planning tool, credit unions calculate this price as the "entrepreneurial rate" on loans.

Credit union loan rates reported in 1996 were reported at levels similar to those of 2000 (42%); however, actual return on the portfolio was 24%. This low return reflected high levels of non-performing loans. As loans were cleaned up, collection was enforced, loan risk analysis was improved and the return was measured against actual loan levels, earnings from lending rose from 24% in June 1996 to 37% in December 1999.

Credit union loan rates continue to lie slightly below the rates charged by local banks and significantly below those rates charged by local non-governmental organizations (NGOs).

LOAN INTEREST RATES						
Credit Union	Stated Loan Rate 6/30/96	Return on Loans 6/30/96	Stated Loan Rate 6/30/00	Return on Loans 6/30/00	Average Stated Local Bank Loan Rate	Average Stated Local NGO Loan Rate
Total	42%	24%	41%	37%	43%	48%
Avance	56%	28%	36%	42%	40%	55%
Visión	15%	16%	42%	66%	39%	58%
Central	33%	17%	38%	32%	48%	78%
Capitalizadora	45%	45%	33%	31%	40%	27%
Económica	36%	30%	36%	37%	55%	44%
Iaguei	40%	36%	42%	48%	36%	n/a
Integral	39%	20%	38%	30%	42%	53%
La Unica	28%	4%	37%	37%	42%	51%
La Unión	18%	9%	42%	36%	39%	64%
Profesional, Masatepe	89%	45%	46%	48%	36%	51%
Moderna	61%	31%	44%	44%	40%	55%
Mujeres Agropecuarios	37%	8%	36%	15%	45%	49%
Moderna			36%	n/a	40%	55%
Dinámica			42%	n/a	n/a	n/a
Armonia			36%	n/a	48%	53%
Nueva Alianza			30%	n/a	n/a	28%
Ciudad Antigua			30%	n/a	n/a	37%
Pueblo Nuevo			30%	n/a	n/a	36%

As credit unions accumulate excess liquidity with deposit mobilization, they will make longer-term loans and interest rate risk will become more important. Training will introduce variable rate lending to protect the credit unions from interest rate risk.

LOAN GROWTH

In 1997, before project operations began at the credit union level, the growth of outstanding loans was 41%. This reporting included non-performing loans. During 1998, as non-recoverable loans were written off, loan volume shrank to 35%. Loans outstanding then increased 4% by June 1999. The trend reversed after cleaning up the portfolio was completed and loans increased 300% by June 2000. In real terms, loan growth was -42% in 1998, -9% in 1999 and 257% in 2000.

Growth in RCUP CUs' Loans Outstanding:					
	1996	1997	1998	1999	2000
Assets (in C$)	13,491,625	23,319,791	14,962,125	13,094,909	52,606,010
Assets (in US$)	$1,512,514	$2,331,979	$1,337,098	$1,126,928	$4,148,608
Nominal Growth	N/a	73%	-36%	-12%	302%
Real Growth	N/a	54%	-43%	-23%	259%
Loans(inC$)	9,631,840	15,241,481	9,926,832	10,321,165	41,234,570
Loans (in US$)	$1,079,803	$1,524,148	$887,116	$888,224	$3,251,835
Nominal Growth	N/a	58%	-35%	4%	300%
Real Growth	N/a	41%	-42%	-9%	257%
Exchange rate	9	10	11	12	12.5
CPI	112	126	141	161	180
Inflation	10%	12%	12%	14%	13.5%

LOAN PRODUCTS

As credit unions grow and expand their outreach, they need to expand and diversify the loan portfolio to absorb the extra liquidity, diversify the default risk across occupational sectors and meet the varied loan demands of the membership. This will include developing new credit products.

Financial service demands vary with the occupation of the membership. For example, in agricultural areas, most members borrow for longer-term repayment. Citric producers borrow fixed, 6-month term loans, which they pay at end of harvest instead of monthly. Cattle producers often require a 2-year period for financing from when they buy the small animals until the animals are old enough to sell.

Credit unions offer small loans at low transaction costs to its members. This service responds to a section of the financial market not served by banks: small operations or members with low levels of assets. To continue serving this market, credit unions will need to offer a range of credit administration services, which begin with unsecured loans for very small loans and repayment analysis for larger size loans. Simplified loan processing techniques continue to keep administrative costs low through the simplest procedures for the smallest loans. After establishing a credit history by repaying small, low transaction cost character loans[iii], members gain access to larger loans in increasing amounts and subject to increasing risk controls such as repayment capacity measures and collateral requirements. As loan size increases, collateral requirements and repayment capacity analysis protect the soundness of lending.

Further work needs to be done to establish new lending products. Some credit unions, such as several in Bolivia and the Philippines, offer solidarity group loans for poor or "downscale" micro or small producers.

For many poor members and/or members who live in remote rural areas far from the credit union office, access to a local solidarity group provides them with a lower-cost method to access credit union services.

Credit unions in other countries, such as Ecuador, have developed new products that offer small producers products that are flexible, taking into consideration their typically irregular cash flow and offering increased access with performance. To satisfy the demand for working capital, some credit unions, such as those in Ecuador, offer "open-end" lines of credit or supplier credit through material suppliers for "upscale" micro or small producers.

V. SAVINGS MOBILIZATION

A distinguishing feature of a credit union is that the credit union's owners are also its customers: the savers and borrowers. Credit union stability depends on achieving a balance between the conflicting demands of these two sets of owner-clients. Net borrowers will demand low loan rates, low transactions costs, and laxness in prudential discipline, while net savers will demand high deposit rates and strong prudential disciplines to protect their savings. Therefore, although the net savers have strong incentives to see the viability of their institution strengthened with the achievement of solid profitability performances and high solvency ratios, net borrowers' short-term incentives favor conditions (easy access to loans, low loan rates, and lax repayment discipline) that adversely affect the financial viability of the credit union.

Screening interest rates and loans, as well as collection policies, help to determine the proportion of each type of member (net borrower or net saver) that is attracted to the credit union. These proportions may then be reflected in the nature of the directorship (*borrower dominated* or *balanced intermediary*). *Borrower dominated* credit unions tend to attract new members looking for cheap loans and lax prudential discipline, which tends to keep those credit unions borrower dominated. *Balanced intermediary* credit unions tend to attract net savers as well as net borrowers, which tends to keep them balanced. Hence, there is a tendency for each of these credit union types to perpetuate itself.

Ambitious savings mobilization and the subsequent limitation of external credit dependence helped to reduce governance distortions prevalent in borrower-dominated pre-RCUP CUs. RCUP CUs attracted net savers as well as net borrowers and evolved into balanced intermediaries.

Savings mobilization required stronger financial disciplines of adequate capital reserves, loan loss provisions, and liquidity reserves to protect those savings and maintain the confidence of the savers. Aggressive deposit mobilization and membership growth was targeted at net savers and led to greater representation of net savers on the board of directors and thus support for stronger prudential disciplines.

RCUP assisted credit unions to implement savings mobilization efforts to overcome liquidity shortages and external dependency. RCUP's technical assistance introduced new and more accessible products (withdrawable savings), tailored products to particular market niches and improved the return on savings products. These changes implied higher costs, demand for new skills and a more agile, aggressive and demanding style of management. Training provided RCUP staff with requisite skills in savings services, marketing, interest rates and liquidity management.

MARKETING ASSISTANCE

A marketing plan was the crux of RCUP's savings mobilization efforts. RCUP conducted market studies to identify local community members with savings potential, savings growth potential for communities and characteristics of competing savings service providers. Member and nonmember surveys identified consumer financial service demands and preferences as well as perceptions of credit unions. These surveys also examined local credit union member and nonmember demographic characteristics, economic characteristics and use of financial services. The studies profiled the members' use of credit union and non-credit union financial services, and identified the financial service needs which credit unions may satisfy for the population in the region.

RCUP provided classroom-training sessions for credit union managers and BOD members introducing customer demands for financial services, alternative services offered by the competition, pressures in the market place and credit union market strategies. The program provided training and technical assistance to participant credit unions in:

- Definition of the participant's market;
- Analysis and comparison of the competition;
- Analysis of service structure;
- Strategy definition for market penetration;
- Strategy definition for service improvement;
- Implementation of marketing programs to mobilize savings and increase membership;
- Development of new products and financial services; and
- Promotion and publicity programs.

RCUP training included identifying RCUP CUs' comparative advantages in comparison with other local financial institutions, such as prices offered, terms, minimum amounts, convenience, waiting periods, service variety and sophistication of products.

In order for credit unions to operate as full financial intermediaries between net savers and net borrowers, it was imperative that membership expanded. Credit unions expanded service to a more diverse membership in order to attract net savers. Attracting agricultural producers, salaried employees, professionals, and transportation agents expanded membership among those more likely to deposit savings in the credit union. Aggressive member recruitment campaigns were directed at those groups identified as having high savings potential. Those RCUP CUs that could afford it, maintained an assigned staff member with direct responsibilities in marketing.

To participate in the marketing program technical assistance, credit unions needed to:

- Keep their accounting books up to date,
- Report their financial conditions to RCUP office by the 15th of every month
- Provide a delinquency report by the 15th of every month,
- Approve a revised version of their bylaws, and
- Adopt all the new policies and procedures that RCUP had standardized.

In order to enter the marketing program, CUs had to meet financial standards:

- Delinquency rate lower than 15%
- No new external loans
- Meet the liquidity requirements
- Provision 100% of loans delinquent over 12 months.

Credit unions that met the standards were chosen to enter the marketing program. RCUP and credit unions signed contracts that specified growth targets and policy goals for the credit unions and outlined the assistance provided by RCUP's marketing program. Each marketing plan has specific goals and identified strategies for accomplishing each goal:

Goal – increase membership by x%; strategies include:

- produce and distribute brochures,
- offer lottery of appliances such as televisions for bringing in new members,
- offer fixed term deposit of 2000 Córdobas to the member who brings in the largest number of new members.
- have the manager meet with the mayor and local community organizations to promote the credit union,
- sponsor community events, celebrations,
- carry out festival for the community at the end of the year,
- arrange for the manager to be interviewed on radio and/or television.

Goal - mobilize growth in passbook savings by x%; strategies include:

- raffle refrigerator, double interest on new savings.

Goal - mobilize x% in new savings certificates of deposits: Strategies include:

- redesign or update certificate products to provide new types (name, differentiated prices, aim at specific markets),
- raffle prizes such as furniture for the 1 year largest deposit, stereo system for the largest 9 months deposit and a couch for the largest 6 months deposit,
- raffle certificates of savings at local sports games,

Goal - mobilize x% new children's savings: Strategies include:

- raffle bicycles, video games, scholarships, graduation rings,
- visit schools to teach children the importance of savings, the benefits of a credit union and how to become a member.

Goal - improve the physical image of facilities:
paint facility, repair all deteriorations,
restructure lobby, counters and offices to maximize service orderliness,
design facilities meeting branding presentation standards to identify the credit union easily as a member of the sound group.

The credit unions' marketing strategies use lotteries to provide incentives for savings growth. Credit unions offer lottery prizes such as household appliances, bicycles, motorcycles, nights at hotels and monetary awards to bring in new members and savings. The strategy has stimulated growth. However, savings also have a tendency to decrease after awarding the prize. The credit unions have to price out the costs of prizes and promotion.

Credit unions have also increased the rate of interest to stimulate savings growth. They announce in the media that for a period of time, the credit union will pay a premium on new savings above normal rates. This strategy tends to have a lower cost than lotteries for the same rapid increase in liquidity.

Assistance provided to the credit unions through the Better Equipment component is managed within the marketing plan, and is conditional on satisfactory progress in meeting marketing plan and growth targets.

Physical Image and Upgraded Equipment

A mediocre institutional image undermined public confidence in credit unions. Improving the credit union image was a priority within RCUP's marketing program. An initial step was to change the RCUP CU names to reflect that credit unions are financial institutions open to all member of the community. Thirteen out of the 18 RCUP credit unions have legally changed their names.

Old Name	New Name
Dipilto-CACD	Cooperativa de Ahorro y Crédito Financiera Capitalizadora
Comulnad	Cooperativa de Ahorro y Crédito Financiera Económica
La Unidad	Cooperativa de Ahorro y Crédito Financiera Dinámica
San Antonio	Cooperativa de Ahorro y Crédito Financiera Moderna
CACPIC	Cooperativa de Ahorro y Crédito Financiera Visión
La Hermanidad	Cooperativa de Ahorro y Crédito Financiera Integral
La Union	Cooperativa de Ahorro y Crédito Financiera La Union
Avances	Cooperativa de Ahorro y Crédito Financiera Avances
Iaguei	Cooperativa de Ahorro y Crédito Financiera Iaguei
UCOOM	Cooperativa de Ahorro y Crédito Financiera Unica
Coodepagro	Cooperativa de Ahorro y Crédito Financiera Central
Masatepe	Cooperativa de Ahorro y Crédito Financiera Profesional

To launch the new image of the marketing campaign, RCUP assisted the credit unions in the development of a new standardized image of CUs through common logos, paint and sign color schemes, internal and external appearances, and all papers and customer forms. RCUP contracted a graphic artist to design the new logos and paperwork forms and bought printers for producing the paper forms.

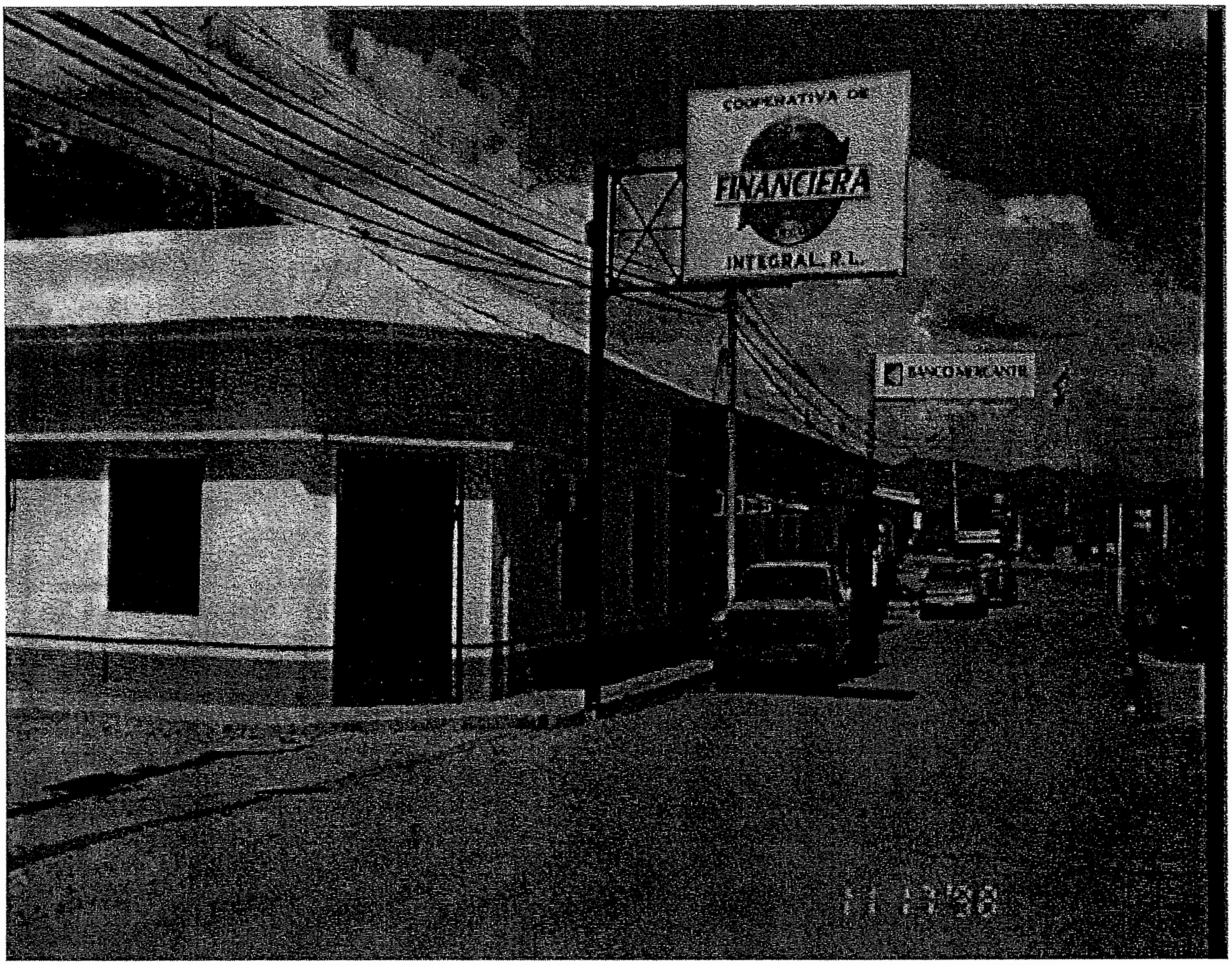
Surveys reinforced the notion that the safety of savings in the credit union was highly correlated with the physical appearance and attractiveness of the credit union facilities. RCUP provided assistance to credit unions in upgrading their facilities is they met performance criteria. Priorities were established for first steps in achieving better physical image and carrying out the marketing campaign.

Assistance in improving the credit unions' physical image accelerates the progress of RCUP's savings mobilization initiatives. An improvement in physical appearance helps to improve public confidence in the savings institution and therefore attracts new members. The marketing program provided assistance in the credit union's infrastructure design, improvement of security, professional image, public access and convenience of services. In addition, all credit union staff that provide direct service to members were trained in quality member service. Credit unions hired guards to provide an image of security.

Infrastructure improvements included painting and minor repairs, constructing billboards, creating promotional devices, upgrading offices and reception areas via interior remodeling. RCUP made small investments to remodel and purchase materials (furniture, windows) to improve RCUP CUs' physical infrastructure and to enhance their image, security and operational capabilities.

Assistance to RCUP CUs was contingent on their compliance with:

- Keeping up-to-date accounting books;
- Reporting the financial conditions to the RCUP office by the 15th of every month;
- Providing a delinquency report by the 15th of every month;
- Approving a revised version of their bylaws; and



An RCUP CU after successful completion of the RCUP marketing program

- Adopting all the standardized RCUP-advocated policies and procedures, which include maintaining a delinquency rate lower than 15%, not accepting any new external loans, meeting liquidity requirements, and provisioning for 100% of loans delinquent over 12 months.

After the credit unions met these standards, a request for physical improvement was presented to a peer board of credit union managers and directors as well as RCUP staff. If the board accepted the proposal, RCUP worked with a local constructor to remodel the credit union facilities. In some cases, RCUP aided the credit union in finding an adequate building for the credit union to move into because their present locale was inadequate or placed in a little-trafficked section of town. The only areas remodeled were the cashier, member services, credit department and the manager's office. RCUP also helped in painting the exterior of the building and placing illuminated signs outside. All credit unions were painted the same color pattern, all have an identical floor layout, all have identical doors and windows. When the remodeling process was completed, RCUP provided the basic equipment for these credit unions to operate.

RCUP's marketing plan also included an upgraded equipment component, which aimed to help credit unions improve their service delivery and attract new membership. By facilitating upgraded equipment in credit unions, computerized accounting and management systems were expanded, which significantly reduces transaction costs associated with financial services. This reduction allows financial institutions to more efficiently service small savings accounts or small loans for which transaction costs are a large proportion of the balance. The use of computerized accounting systems also enhances the accuracy and transparency of financial information and therefore, of prudential monitoring.

Despite the reasoning above, few credit unions in Nicaragua today meet the size, infrastructure or staff capability requirements for computerization of operations. Therefore, project implementation has included technical assistance to a limited number of credit unions in preparation of accounting systems, policies and physical infrastructure for installation of basic computerized accounting, loan and savings information systems. RCUP also assisted with the installation of stand-alone PCs with a printer in order to begin basic computer training and back office accounting. This assistance allowed credit unions to install the PEARLS monitoring system so that credit unions can self-monitor vis-à-vis business plans and financial targets.

Credit unions placed banners announcing the remodeling to their membership and local community. Credit unions promoted their new image through local media. RCUP hired audio radio marketers to develop radio spots. Two separate audio advertisements were developed: one for local markets to advertise individual local CUs and another for the national market to advertise for the larger CU movement. RCUP also placed newspaper ads for the national campaign.

SAVINGS PRODUCTS

The credit unions continue to service a large number of very small share accounts, often from lower income individuals simply seeking membership for access to loans. Note that shares were previously invested largely for the purpose of acquiring access to credit. Therefore, share accumulation patterns largely reflected those members who sought credit, rather than savings services in their own right. Today, members are required to hold US$10 (C$125) in shares. Any excess shares above this level are transferred to passbook savings.

Before RCUP began, credit unions lacked savings instruments that would attract those who sought to save for the sake of savings itself. RCUP CUs began to offer withdrawable deposit savings that paid a market rate of return. The savings mobilization strategy shifted away from making low-return share accounts a condition to access credit. Today, member savings are captured with competitive market rates, convenience and a sound institutional image.

All RCUP CUs now offer passbook savings that are with-drawable on demand. This has become the principle savings base in the credit unions. Members can deposit and withdraw funds at any moment. To open a passbook account, there is no minimum balance that a member must hold. However, the account must hold a minimum balance of US$10 (C$125) before the credit union will pay interest.

Other accounts include:

- Children savings accounts: Credit unions offer these accounts in order to develop future loyalty of young members, reach deeper into the younger age potential market and bring parents into the credit union where they may also be recruited.
- Program savings accounts such as the Christmas Club: Members who want to save for Christmas, deposit a fixed amount each month during the year until withdrawn in November. The account does not permit withdrawals until November. This rule assists both members and the credit union to manage their liquidity flow. This account offers a higher return than passbook savings.
- Program savings accounts for Education: Payment of school fees makes up a large part of the demand for loans. Monthly contributions are not withdrawable until the period in which payment for school fees is due. If one withdraws funds before this time, one pays a fine of 1% of the amount of each withdrawal.

For any of these accounts, no member with a delinquent loan can withdraw savings or interest until the loan is up to date. The advantages are that the credit union can plan on when the member will withdraw the funds. The account reduces the credit demand at Christmas time, converting loan demand at peak times to member savings for that period. The disadvantage is that the credit union is not always certain that savers will meet the monthly savings obligations.

Credit unions now offer a variety of fixed term deposits in which funds are deposited on contract for a fixed period of time; terms are 30, 60, 90, 120, 180 days and 1-3 years. The product does not permit return of the funds until the end of the contracted period. A minimum balance of US$100 (C$1250) is required for fixed term deposits. The member can use the fixed term deposit accounts as collateral for loans but not to leverage loans. The account has a low administrative cost because there is one only withdrawal; it offers a higher return than other savings products. The interest payment is made at end of period.

SAVINGS POLICY

The new savings policy provides service guidelines, guidance on operating by market principles and operational parameters. The service guidelines and market principles mandate that the credit union:

- Set interest rates to be competitive with those offered in the financial markets;
- Expand hours of service;
- Identify and develop new products which the members demand;
- Have a written marketing plan which includes projections of passbook and term deposits;
- Maintain confidentiality: personnel of the credit union will not reveal to third parties any information about savings of members unless granted written authorization by the member; and
- Meet the preconditions for mobilizing savings:
  - market knowledge and goals
  - attractive physical image
  - security
  - professional appearance of personnel

- competitive hours of service
- technology and communication means
- disciplines to protect savings
- marketing program

Operational parameters indicate that the credit union:

- Review interest rates once a month. If it needs to raise interest rates, it must revise the business plan;
- Capitalize interest earned the last day each month;
- Maintain at least 15% of deposits as liquidity reserves to respond to demands for savings withdrawals. The initial 15% will be composed of finance investments of high safety and low risk and high liquidity;
- Not have more than 5% of savings in hands of one member or family;
- Maintain a match between savings account maturities and loan terms, finance short term loans with short term money and medium or long term loans with medium or long term savings; and
- In RCUP's pipeline is to add an institutional fidelity bond insurance to cover losses to the credit union against losses such as robbery as fraud.

To open a deposit account, the process is kept simple. The member fills in the form with personal identification and designates beneficiaries. The member receives a receipt with her/his deposit balance and the cashier fills in a receipt of withdrawal with a copy to the member. All forms for RCUP CUs were redesigned to offer simple formats that were consistent across all RCUP CUs.

INTEREST RATES

Many credit unions previously did not pay a return on shares. As RCUP has assisted credit unions in the shift from dependence on traditional shares and external credit to market based deposit savings, RCUP has provided interest rate policy training for pricing which is competitive with market levels and encourages positive real interest rates on savings. The rates on deposits now offered tend to be much closer to the market rate charged by other institutions.

The procedure for setting interest rates is as follows: The manager establishes the interest rate in the business plan, which the board of directors approves. Interest rates are calculated on the average daily balance for the month period and then credited monthly to the savings account. On term deposits between 30 and 120 days, the credit union pays interest upon maturity. On term deposits 180 days and longer, the credit union credits interest to accounts quarterly and pays out principle plus interest accumulated upon maturity. Credit unions also include a base adjustment for inflation. Each credit union presents the interest rates visibly in the lobby.

Savings Interest Rates								
	Credit Union				Local Bank			
Credit Union	Pass-book	3 Month Deposit	6 Month Deposit	12Month Deposit	Pass-book	3 Month Deposit	6 Month Deposit	12Month Deposit
Avance	18%	19%	19%	20%	15%	15.5%	17%	18%
Moderna	16%	17.5%	19%	22%	12%	13%	15%	18%
Unión	18%	19%	19%	22%	12%	13.5%	15%	17%
Integral	18%	19%	19%	20%	13%	14.5%	15.5%	17.5%
Visión	18%	19%	20%	22%	13%	14%	15%	17%
Económica	16%	18%	18%	20%	12.5	14%	14%	16.5%
Capitalizador	16%	18.5%	19.5%	22%	13.5	14%	16%	19%
Dinámica	16%	18%	19%	22%	N/A	n/a	n/a	n/a
Iaguei	18%	19.5%	20.5%	22%	N/A	n/a	n/a	n/a
Central	18%	20%	20%	22%	13%	15%	15.5%	17%
Profesional	18%	20%	20%	22%	12%	14%	15.55	18%

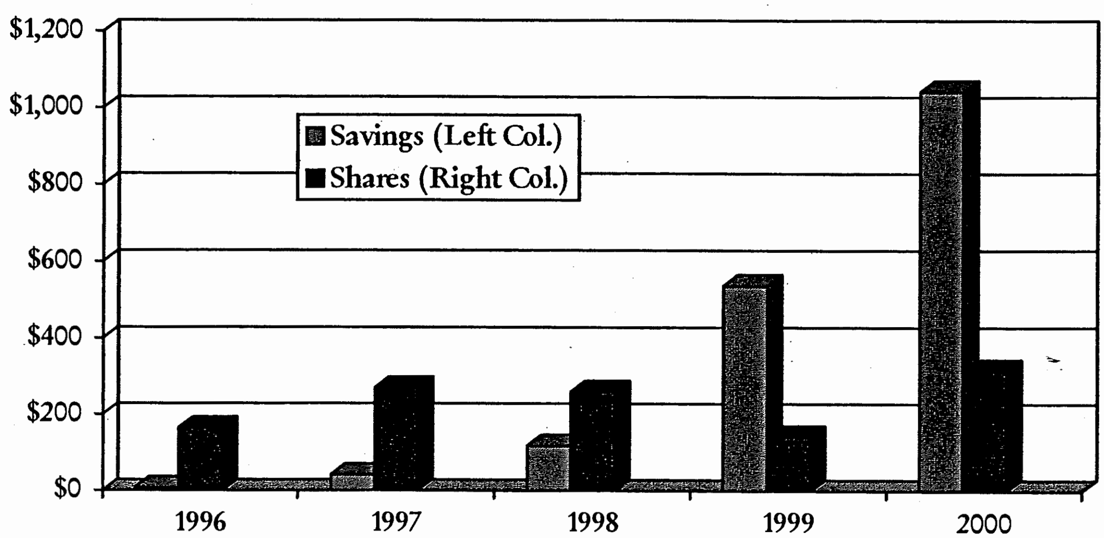
Note: There are no private banks in where Dinámica and Iaguei are located.

SAVINGS GROWTH

Project participant credit unions show a nominal growth in savings of 451% in 1997, 214% in 1998, 374% in 1999 and 112% in 2000. Real growth in savings was 390% in 1997, 181% in 1998, 315% in 1999 and 90% in 2000

In contrast, real growth in shares reversed from 64% in 1997 to -4% in 1998 and -50% in 1999 as members migrated their shares to deposits and dedicated new savings to deposits instead of to shares. In 2000 shares grew in real terms 117% reflecting growth of new members who paid in new shares.

Savings (in Thousands US$)



The graph above shows the savings growth from pre-RCUP 1996 to mid 2000. Savings deposits grew in a rapid manner outstripping shares in 1999 and taking off in 2000.

Savings Growth

	1996	1997	1998	1999	2000
Members	1,588	2,784	3,844	4,216	14,121
Savings (in C$)	76,065	419,273	1,316,740	6,244,530	13,238,822
Savings (in US$)	$8,527	$41,927	$117,671	$537,395	$1,044,038
Nominal Growth		451%	214%	374%	112%
Real Growth		390%	181%	315%	90%
Shares (in C$)	1,466,573	2,704,560	2,906,229	1,654,371	4,005,823
Shares (in US$)	$164,414	$270,456	$259,717	$142,373	$315,907
Nominal Growth		84%	7%	-43%	142%
Real Growth		64%	-4%	-50%	117%
Exchange rate	9	10	11	12	12.5
Consumer Price Index	112	126	141	161	180
Inflation	10%	12%	12%	14%	13.5%

During 1996, before RCUP began, the credit unions that later became affiliated to RCUP held US$8,527 in savings deposits. By June 2000, these RCUP credit unions had increased savings to US$1,055,038.

VI. PERFORMANCE

PEARLS

A major component of WOCCU's technical assistance to RCUP has focused on implementing the PEARLS monitoring tool, as briefly described in the 'PEARLS training' section. PEARLS allows both RCUP and the credit union to monitor its financial condition while it is undergoing the changes related to saving mobilization, capitalization, and loan risk analysis reorientation. PEARLS refers to a set of basic indicators in six key areas: Protection, Effective Financial Structure, Asset Quality,, Rates of Return and Costs, Liquidity, and Signs of Growth. It provides the credit union section with standards to measure their performance as financial intermediaries.

As mentioned earlier in this report, the first group of ten credit unions entered RCUP in May 1997. Three credit unions (*El Socorro, Maria Auxiliadora and Guapisa*) were dropped about six months later for non-compliance with program guidelines. The second group of six joined the program in January 1998, and the third group of five joined in March 1999. The impact of RCUP is visibly greatest among the first group of credit unions to enter the program. The performance of the second group generally lags behind the first group but those credit unions in the second group also show faster adoption of standards, policies and services, achieving standards in a shorter period of time. The third group, having joined more recently, display initial improvements but are still some distance from meeting standards.

As of June 2000, project participant credit unions are designated as Category A, the strongest participants which meet a set of prudential standards, Category B, the participants which meet some criteria, if not all, and Category C, the participants which are far from meeting criteria.

Criteria for Category A:

- Delinquency is less than 10%;
- Provisions for Delinquency greater than 12 Months are 100% or greater;
- Provisions for loans that are delinquent less than 12 months are 35% of the loan balance;
- Loans delinquent more than 12 months are charged-off; and
- Liquidity is 25% of deposits.

Criteria for Category B:

- Delinquency is less than 25%;
- Provisions for Delinquency greater than 12 Months are 100% or greater;
- All Policies and Procedures are in Place; and
- Possibility to Enter Category A within 12 Months.

RCUP CUs in Category A include: Avances, Visión, Unión, Integral, Moderna, Económica, Iaguei, Unica, Profesional and COODEPARI. Category B includes: Central, Capitalizadora, Dinámica, Mujeres Agropecuarias and Nueva Alianza. Category C includes: Pueblo Nuevo, Ciudad Antigua and Armonia.

PROTECTION					
	6/97	6/98	6/99	6/00	Goal
P1: PROVISIONS / DELINQUENCY >12 MONTHS					100%
Category A	3%	100%	100%	100%	
Category B	23%	74%	100%	35%	
Category C	n/a	n/a	n/a	18%	
Consolidated	8%	100%	100%	30%	
P2: NET PROVISIONS / DELINQUENCY <12 MONTHS					100%
Category A	0%	63%	7%	49%	
Category B	0%	0%	15%	0%	
Category C	n/a	n/a	n/a	0%	
Consolidated	0%	99%	37%	0%	
P6: SOLVENCY					Min 100%
Category A	-18%	212%	163%	140%	
Category B	237%	42%	50%	80%	
Category C	337%	336%	236%	101%	
Consolidated	95%	230%	175%	125%	
P7: NET CAPITAL					Min 10%
Category A	-17%	30%	23%	18%	
Category B	2%	-8%	-5%	-3%	
Category C	36%	36%	25%	0%	
Consolidated	-3%	27%	18%	7%	

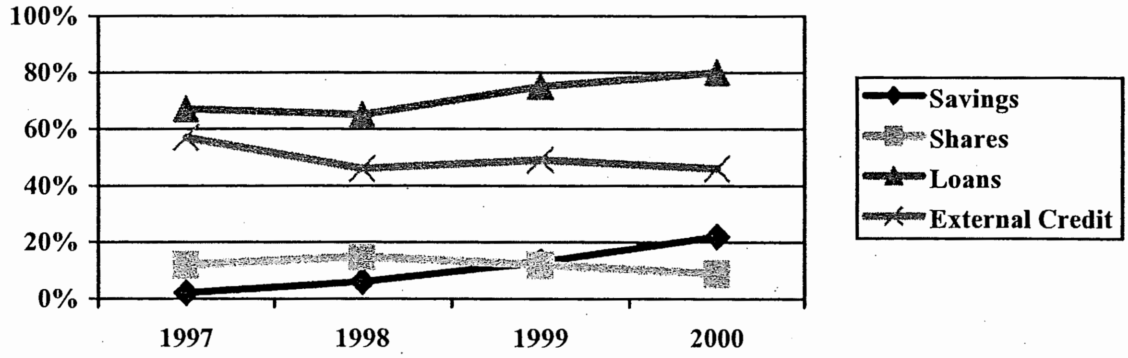
Loan loss provisions are the first line of defense for protection of savings against losses from delinquency. The 12 credit unions of Category A have increased provisions for loan loss to 100% of loans delinquent more than 12 months.

At 49%, the credit unions have not yet reached the standard of loan loss provisions for those loans delinquent less than 12 months. The 5 credit unions of Category B and 3 credit unions of Category C have not yet generated sufficient income to dedicate to meeting provisions standards for loans delinquent more than 12 months and consequently neither have been able to begin provisions for loans delinquent less than 12 months. Consequently, Category A shows strong net capital at 18% while Category B and C still show negative or zero net capital.

FINANCIAL STRUCTURE					
	6/97	6/98	6/99	6/00	Goal
E1: NET LOANS / TOTAL ASSETS					70-80%
Category A	67%	66%	69%	76%	
Category B	60%	56%	64%	79%	
Category C	73%	67%	86%	86%	
Consolidated	67%	65%	75%	80%	
E2: LIQUID INVESTMENTS / TOTAL ASSETS					Max 20%
Category A	3%	7%	11%	11%	
Category B	7%	21%	26%	14%	
Category C	10%	22%	5%	4%	
Consolidated	5%	15%	12%	10%	
E5: SAVINGS DEPOSITS / TOTAL ASSETS					70-80%
Category A	2%	9%	25%	38%	
Category B	2%	3%	3%	11%	
Category C	2%	3%	6%	7%	
Consolidated	2%	6%	13%	22%	
E6: EXTERNAL CREDIT / TOTAL ASSETS					0%
Category A	58%	35%	30%	30%	
Category B	70%	72%	77%	70%	
Category C	43%	49%	52%	53%	
Consolidated	57%	46%	49%	46%	
E7: SHARES / TOTAL ASSETS					Max 20%
Category A	13%	19%	14%	9%	
Category B	6%	11%	6%	4%	
Category C	13%	12%	13%	12%	
Consolidated	12%	15%	12%	9%	
E8: INSTITUTIONAL CAPITAL / TOTAL ASSETS					Min 10%
Category A	11%	32%	27%	19%	
Category B	10%	10%	2%	6%	
Category C	34%	32%	23%	20%	
Consolidated	16%	29%	20%	16%	

As credit unions mobilize increasing savings, there is a possibility that lending activities do not grow as rapidly causing the ratio of loans to assets falls. In RCUP CUs, loans have increased their participation in assets from 67% to 80% of total assets. As credit unions remove non-earning assets from their balance sheet, more funds are available for loans to members. This practice generates higher returns on assets. RCUP CUs' loan to assets ratio has also increased due to RCUP CUs' strong focus on upgrading and increasing lending activities in order to strengthen profitability. The ratio of liquid investments to assets has risen from 5% to 10% as credit unions meet RCUP liquidity standards.

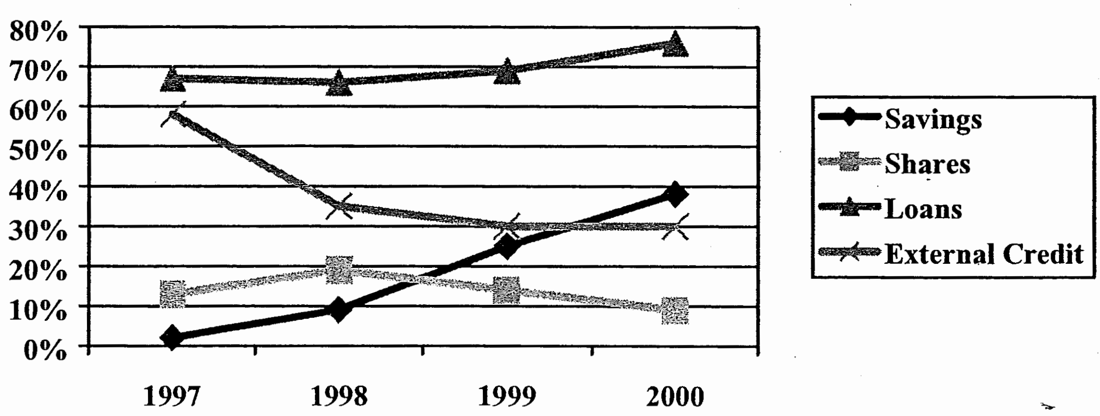
Consolidated Structure - Percent of Total Assets



The credit union source of funds is maturing as credit unions have increasingly mobilized the more robust market-rate with-drawable deposits rather than depend on traditional forced-savings shares or external credit. Deposits are substituting shares rising from 2% of assets in 1997 to 22% of assets as a source of funds for the consolidated groups and 38% for Category A. Shares show the reverse pattern falling from 12% of assets to 9% of assets. Consolidated trends show savings overtaking shares as a source of funds. External credit shows a decreasing trend. External credit shows a more accelerated decrease as a source of funds in Category A from 58% of assets to 30% of assets while hovering around 70% for Category B and still increasing for Category C. Seven credit unions including Avance, Central, COODEPARI, Económica, Integral, La Unión and Moderna show marked decreases in external credit financing of assets. Three credit unions (Iaguei, Profesional and Vision) did not have positive levels of external credit.

When we segregate the credit union groups by performance, we see that savings as a source of funds overtakes not only shares but external credit as well. Category A credit unions display the financial structure evolution which all credit unions in RCUP will demonstrate.

Category A - Percent of Total Assets

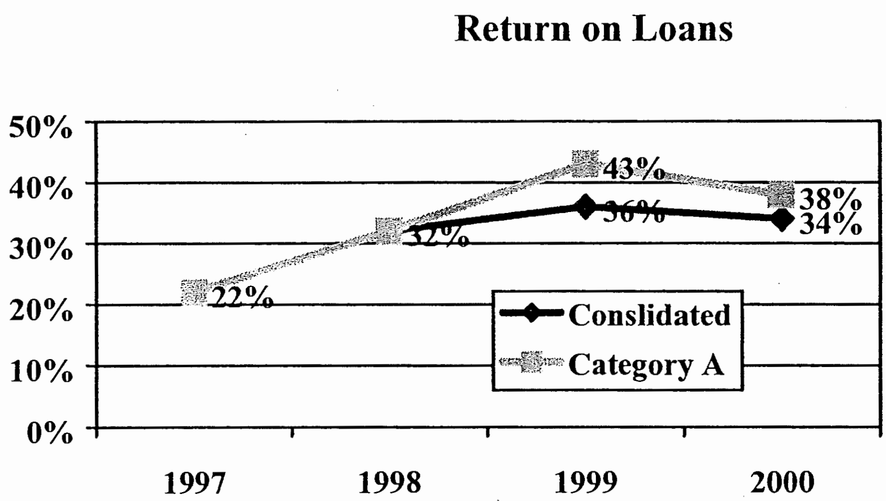


Institutional capital (reserves and retained earnings) has risen and then returned to 16% of assets despite huge write-offs and provisions of credit union loans. Category A institutional capital has risen from 11% in 1997 to 19% in 2000 while Categories B and c show declines as they have written off non-recoverable loans. Lower levels of Net Capital reflect the still inadequate levels of provisions.

Of project participants, eight credit unions (Avance, Económica, Integral, La Armonia, Nueva Alianza, Profesional La Unión and Visión) meet international standards of 10% of assets in net capital. Two credit unions (Central and Unica) meet the international minimum standards of 8% while eight credit unions (Capitalizadora, COODEPARI, Dinámica, Iaguei, Moderna, Mujeres Agropecuarias, Ciudad Antigua and Pueblo Nuevo) do not meet minimum standards of 8%. Capital growth has had to absorb the need to provision for large amounts of historical delinquency.

RATES OF RETURN AND COSTS					
	6/97	6/98	6/99	6/00	Goal
R1: LOAN INCOME / NET LOANS					
Category A	22%	32%	43%	38%	
Category B	8%	29%	33%	30%	
Category C	33%	32%	31%	32%	
Consolidated	22%	32%	36%	34%	
R2: LIQUID INVESTMENT INCOME / AVERAGE LIQUID INVESTMENTS					
Category A	53%	19%	16%	12%	
Category B	3%	18%	10%	14%	
Category C	11%	4%	10%	12%	
Consolidated	24%	11%	12%	13%	
R5: COST OF DEPOSITS / AVERAGE DEPOSITS					
Category A	14%	24%	20%	17%	
Category B	0%	9%	25%	17%	
Category C	11%	20%	22%	14%	
Consolidated	11%	21%	21%	17%	
R6: COST OF EXTERNAL CREDIT / AVERAGE EXTERNAL CREDIT					
Category A	4%	6%	13%	9%	
Category B	2%	14%	21%	14%	
Category C	7%	5%	21%	19%	
Consolidated	4%	7%	19%	14%	
R7: COST OF SHARES / AVERAGE SHARES					
Category A	13%	16%	18%	20%	
Category B	0%	15%	15%	17%	
Category C	2%	6%	18%	10%	
Consolidated	9%	13%	18%	15%	
R9: OPERATING EXPENSES / AVERAGE ASSETS					
Category A	11%	11%	17%	17%	
Category B	13%	12%	14%	12%	
Category C	19%	13%	13%	14%	
Consolidated	13%	12%	15%	15%	
R12: NET INCOME / AVERAGE ASSETS					
Category A	3%	3%	0%	0%	
Category B	5%	1%	-10%	-1%	
Category C	6%	5%	-3%	1%	
Consolidated	4%	3%	-3%	0%	

Credit union return on loans has increased from a low of 22% in 1997, which reflected both low rates on loans and a large portion of the loan portfolio not producing income to 34% for the consolidated credit unions as of June 2000. The rise is due to the fact that credit unions have priced their loans at rates that cover their full costs, and they have improved the performance quality of their portfolio.



Credit union net income has fallen from 4% of assets in 1997 to 0% in June 2000. This reflects several changes in both rates of return and financial structure. Credit union profitability has been affected:

- Positively as the average return on loans has increased from 22% in 1997 to 34% in 2000 and positively as the portion of assets earning as loans increased from 67% to 80%,
- Negatively as the cost of deposits has increased from 11% to 17% and negatively as the share of deposits funding assets increased from 2% to 22%,
- Negatively as credit unions have undertaken the clean up process of provisioning for and writing off long time historical losses in the loan portfolio,
- Negatively by the increasing cost of external borrowings from 4% to 14% and negatively (in the short run) as the portion of assets funded by external credit fell from 57% to 64%,
- Negatively by the decreasing returns on liquid investments from 24% to 13% and negatively as the portion of assets in the form of liquid investments increased from 5% to 10%,
- Negatively by the increasing operating costs from 13% to 15% of assets,
- Negatively as the return which credit unions pay on shares has increased from 9% to 15%,

Note that the negative impact of increasing volume of deposit savings and decreasing dependence on external credit is a positive indication of maturity, competitiveness and financial sustainability. The negative impact of increased cost of shares is also an indication of maturity and competitiveness. Credit unions are approaching market rates, paying members a return on their shares where they received no return before. Credit unions are moving to a more competitive equilibrium of financial intermediation, which has higher costs. Credit union net income in the future will depend on the credit union willingness to raise loan interest rates to cover these higher costs.

The return on deposits has increased from 11% in 1997 to 17% in 2000. Credit union passbook savings rates compare favorably to those of local banks. Credit unions have increased term deposit interest rates to levels, which provide a positive real return to savers. Credit unions have begun to compete for savings not only on the basis of higher rates but also on the basis of institutional image, range of services and convenience of services.

The fall in net income ratios reflects temporary costs to make credit unions safer places for members to place their savings. The largest negative impact upon profitability has been the improved discipline of provisioning for long time un-collectible loans, rising from 1% in 1997 to 3% in 1999 and 2% of assets in 2000. This cost will fall again as historical losses are charged off and loan screening and risk analysis improves. Profitability will improve as historical losses are cleaned up and provisions fall.

In most cases credit union loan rates have increased since 1997; a few have decreased their rates with market trends. Credit unions traditionally charged lower-than-market rates on loans. Currently, credit union management has committed to market rates. The loan rates now offered tend to be much closer to the market rate. Participating credit unions use the WOCCU business planning methodology to calculate the entrepreneurial rate which covers the finance costs, operating costs, provisions and contributions to capital.

LIQUIDITY					
	6/97	6/98	6/99	6/00	Goal
L1: LIQUIDITY / DEPOSITS					25%
Category A	121%	89%	47%	34%	
Category B	644%	639%	496%	116%	
Category C	663%	764%	45%	72%	
Consolidated	361%	266%	71%	48%	
L3: NONPRODUCTIVE LIQUIDITY / TOTAL ASSETS					1%
Category A	1%	2%	2%	2%	
Category B	8%	1%	1%	1%	
Category C	5%	2%	2%	3%	
Consolidated	3%	2%	2%	2%	

Liquidity ratios in 1997 reflect tiny bases. With savings growth of that base, credit unions have maintained liquidity levels above standards. Credit unions show an increasing propensity to deposit their liquidity in the banking sector. The high level of failure and intervention in the banking sector puts the credit union liquidity at risk and RCUP will need to address the task of advising credit unions on which banks are safe and which are not safe. RCUP also needs to begin to establish a liquidity management facility to manage the pooled credit union system liquidity.

ASSET QUALITY					
	6/97	6/98	6/99	6/00	Goal
AI: DELINQUENCY / GROSS					5%
Category A	52%	13%	18%	6%	
Category B	18%	34%	36%	23%	
Category C	0%	0%	0%	44%	
Consolidated	35%	11%	13%	23%	
A2: NONEARNING ASSETS / TOTAL ASSETS					5%
Category A	18%	27%	20%	12%	
Category B	27%	235	9%	7%	

Category C	17%	10%	9%	10%	
Consolidated	19%	20%	13%	10%	

Part of RCUP's technical assistance and training has focused on improved credit screening, loan risk analysis and collections. Delinquency, appropriately measured as outstanding loan balance of loans delinquent more that 30 days, decreased from 52% in 1997 to 6% in 2000 for Category A, from 34% in 1998 23% in 2000 for Category B and was identified at 44% in 2000 for category C.

Most credit unions show significantly decreasing delinquency trends, most decreasing from levels between 40-55% to 18-13 %. Exceptions are Capitalizadora, Dinámica, La Armonia, Ciudad Antigua, and Pueblo Nuevo (most of which recently entered the program). Económica, Integral and La Unión meet minimum standards of 10% while Avance, Iaguei, Unica and Profesional meet standards of 5%. A comparison above of credit union peer groups A,B,C (classified by the length of involvement in RCUP) demonstrates the significant decrease in delinquency among those credit unions that have had the longest participation in RCUP.

Non-earning assets have fallen from 19% to 10% of assets, with the most marked reduction in Category B, which shrunk from 27% to 7%.

SIGNS OF GROWTH					
	6/97	6/98	6/99	6/00	
S1: TOTAL ASSET GROWTH					
Category A	69%	-28%	24%	65%	
Category B	96%	-29%	121%	53%	
Category C	95%	73%	52%	19%	
Consolidated	78%	-8%	49%	44%	
S2: LOAN GROWTH					
Category A	45%	-29%	30%	82%	
Category B	119%	-33%	153%	87%	
Category C	91%	60%	94%	19%	
Consolidated	63%	-10%	70%	54%	
S3: DEPOSIT GROWTH					
Category A	477%	303%	245%	147%	
Category B	389%	11%	151%	427%	
Category C	-14%	143%	170%	49%	
Consolidated	131%	206%	223%	145%	
S7: MEMBERSHIP GROWTH					
Category A	25%	54%	119%	46%	
Category B	167%	15%	17%	50%	
Category C	100%	61%	56%	1%	
Consolidated	138%	42%	70%	34%	

In 1997, the growth of outstanding loans was 63%. During 1998, as credit unions wrote off non-recoverable loans, book value loan volume decreased 29% for Category A and 33% for Category B. Loans outstanding then grew 20% in 1998 for category A and 153% for Category B. Loan volume grew 82% and 87% for Categories A and B in 2000.

Project participant credit unions show nominal savings deposit growth 131% in 1997, growth of 206% and then 223% in 1998 and 1999. Through the first six months of 2000, savings had grown by 145%.

Before RCUP's inception, the credit unions held US$8,527 in savings deposits. During RCUP the credit unions increased savings to US$ 1.1 million by June 2000, a net gain of US$1,071,458.

Before RCUP's inception, the credit unions that later joined RCUP reportedly had US$1,079,803 in outstanding loans (of which approximately 45% were uncollectable). During RCUP the credit unions increased verified loans to US$ 3,980,327 as of June 2000.

PROGRESS ACHIEVING FINANCIAL SUSTAINABILITY

ADJUSTED NET INCOME

A mark of financial sustainability is the ability of the credit union to pay market rates for all sources of funds and operate at a positive net profit. Each credit union's financial statements adjustments are made to reflect the real costs of funds. Deposit costs are calculated at market deposit rates for 18% in 1997 and 18% in 2000. Returns on shares are estimated at the same return provided to deposits. The cost of external credit is calculated at current market rates of 18% charged for inter-bank loans.

RCUP CU reported (unadjusted) net income is compared with the market cost of funds (adjusted) net income for the years 1997 and 2000. With the adjustments made, 6 RCUP CUs continue to show negative adjusted net income for both 1997 and 2000, 2 RCUP CUs change from a positive adjusted net income in 1997 to a negative adjusted net income in 2000, 4 RCUP CUs show positive adjusted net income in both years and 6 RCUP CUs show change of negative adjusted net income in 1997 to positive adjusted net income in 2000.

ADJUSTED NET INCOME				
	Reported 1997	**Adjusted 1997**	**Reported 2000**	**Adjusted 2000**
Avances	$11,128	-$49,177	$86,929	-$24,724
Central	$221,254	-$77,887	$192	-$238,695
Iaguei	$13,073	$378	$92,755	$204,591
Integral	$107,132	-$3,109	-$35,717	-$74,786
Moderna	-$35,758	-$14,397	-$10,572	$78,082
Unica	$118,483	-$538,286	$90,159	-$390,504
Unión	$119,229	-$94,438	-$71,909	-$302,351
	Reported 1998	**Adjusted 1998**	**Reported 2000**	**Adjusted 2000**
Visión	$158,467	$164,591	$281,000	$285,983
Capitalizadora	$13,386	$135,671	$59,183	$364,991
Dinámica	$46,160	-$27,700	-$34,131	$81,210
Económica	-$21,663	-$28,721	-$2,835	$22,636
Mujeres Agropecuarias	-$124,482	-$23,187	-$216,830	-$247,501
Profesional	$24,571	$22,295	-$27,553	-$61,559
	Reported 1999	**Adjusted 1999**	**Reported 2000**	**Adjusted 2000**
Armonia	$895,713	$734,950	$256,694	$348,326
Ciudad Antigua	-$840,401	-$620,791	$460	$13,16

COODEPARI	-$16,911	$24,732	-$380,256	-$283,835
Nueva Alianza	-$241,168	-$233,901	$22,794	$12,620
Pueblo Nuevo	-$529,809	-$346,442	$0	$7645

SUBSIDY DEPENDENCE INDEX

In this section we do a comparative measure of subsidy dependence index (SDI) of RCUP CUs upon their entrance to RCUP and as of June 2000. If RCUP is successful in moving RCUP CUs away from dependence on externally subsidized funds and non-remunerated shares for operations and towards full cost mobilization of savings, then we would expect to see a decrease in the subsidy dependence of these credit unions in their operations. The SDI calculation is measured with full cost of shares at market interest returns. Subsidy is measured as:

$$\text{Subsidy} = S = A^*(m-c) \ + \{(E^*m)-P\} \ + \ K^*(m-c) \ + \{[A + E + D \,/\, (1 - r)] - (A + E + D)\} \ (m - t)$$

$$\text{Loan Return} = LP * n$$

$$SDI = S \,/\, (LP * n)$$

A = obligatory shares
m = interest rate would have to pay if paid market rate on long term deposits = 18%
c = lower than market rate paid on member shares
E = institutional equity (does not include shares)
P = reported annual profit
K = external credit
l = external borrowing rate
LP = loan portfolio
n = onlending rate
D = deposits
r = reserve requirements for credit unions in short term investments = 15%
t = investment returns paid on credit union short term reserve investments

We use the simplified formula, Subsidy = S = $A^*(m-c) \ + \{(E^*m)-P\} \ + \ K^*(m-c)$. The subsidy measures the internal or external subsidies where the credit union does not pay the full market rate for return on deposits, where profits are less than the market rate of return on equity and where the rate paid on external credit is less than the market-borrowing rate. The credit unions which pay low returns on shares or which have below-market, concessional returns on external credit have higher calculated subsidy. To calculate the subsidy dependence index, we take the ratio of the subsidy over the full return on the loan portfolio. From the period of 1997 to 2000, the subsidy dependence index has decreased for 12 of the 18 credit unions.

SUBSIDY DEPENDENCE INDEX		
	Entered 1997	2000
Avances	27%	18%
Central	48%	21%
Iaguei	16%	-4%
Integral	22%	23%
Moderna	41%	7%
Unica	44%	13%
Union	28%	59%
	Entered 1998	2000
Visión	-26%	-29%
Capitalizadora	67%	-3%

Dinámica	26%	29%
Económica	80%	36%
Mujeres Agropecuarias	178%	42%
Profesional	27%	29%
	Entered 1999	2000
Armonia	16%	19%
Ciudad Antigua	90%	8%
COODEPARI	56%	64%
Nueva Alianza	111%	7%
Pueblo Nuevo	72%	1%

CONCLUSION

In conclusion, RCUP CUs have improved their market competitiveness, institutional safety and soundness and financial sustainability. RCUP has helped to move RCUP CUs closer to the financial sustainability frontier in demonstrating greater financial sustainability for the clientele served. How have the improvements in financial sustainability impacted RCUP CUs' outreach? Part III of this report will discuss RCUP CUs' progress on expanding financial service outreach to their communities.

NOTES

[i] A credit union agency, also referred to as a branch, is an additional office location of the same credit union.
[ii] Based on WOCCU surveys conducted in 1997 and 2000 members with these occupations are more likely to be net savers.
[iii] Character loans classify the borrower according to her/his repayment history and overall history with the credit union.

Part II

BIBLIOGRAPHY

Beatriz Orlando, Maria and Molly Pollack. 2000. *MicroEnterprises and Poverty.* InterAmerican Development Bank, Sustainable Development Department. February.

Hulme, David and Paul Mosley. 1996. *Finance Against Poverty.* London: Routledge Press.

IMF (International Monetary Fund). 1999. *Nicaragua: Recent Economic Developments and Statistical Annex.* Washington DC.

Lennon, Barry. 2000. *Rural Credit Union Program (RCUP)/ Nicaragua External Review.* MicroEnterprise Development Office (G/EGAD/MD) USAID/Washington. February.

Mesbah, Dina. 1997. *The Role of Credit Unions in Niacaraguan Financial Markets: Improving the Financial Access of Small Savers and Borrowers.* Madison: World Council of Credit Unions.

Rhyne, Elisabeth. 1998. "The Yin and Yang of MicroFinance: Reaching the Poor and Sustainability." In *The MicroBanking Bulletin.*

Von Stauffenberg, Damian, Todd Farrington, and Luca Tortorelli. 1998. *Microfinance in Nicaragua : an Assessment prepared for the United Nations Development Program.* Washington DC : Private Sector Initiatives Corporation.

3

THE ROAD TO JINOTEGA

PART THREE: TOWARDS MAXIMIZING CREDIT UNION OUTREACH

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EXECUTIVE SUMMARY

The purpose of this report is to evaluate the ability of WOCCU- Nicaragua's Rural Credit Union Program (RCUP) to reconcile financial sustainability with an expanded outreach.

In 1996 World Council of Credit Unions, Inc. (WOCCU) was contracted by USAID-Nicaragua to provide training and technical assistance to credit unions interested in upgrading their operations in lending and savings mobilization. By upgrading operations, WOCCU's Rural Credit Union program (RCUP) was to assist credit unions improve efficiency, profitability and growth in order to attain financial sustainability. Complimentary to the institutional strengthening focus, RCUP was designed to strengthen credit unions by expanding outreach to the poor. RCUP's goal has been to maximize both credit union financial sustainability and to maximize credit union outreach. Part III of *The Road to Jinotega* will discuss the latter.

RCUP CU OUTREACH

The *institutional strengthening process* implemented by WOCCU-Nicaragua's Rural Credit Union Program (RCUP) 1997-2000, which is elaborated in Part II of this report, has had positive impacts on the outreach of credit unions participating in RCUP (RCUP CUs). It has allowed loan access to a larger number and larger proportion of RCUP CU members for a wide variety of the membership's needs; both the number of small loans and large loans increased:

- The percentage of small loans (US$300/C$3,750) relative to the total loans outstanding in June 2000 is 45%, compared to 19% in 1997.
- The ratio of the median loan size to GDP per capita [US$452 (C$5,650)] was 76% while the ratio of the average loan size to GDP per capita is 120%.
- Of those RCUP CU members accessing loans, 57% are male and 43% are female which nearly mirrors the national population distribution: 50% male and 50% female.
- Women currently access more loans, which are smaller than loans accessed by men.
- Of loans disbursed as of June 2000, over one-third went towards agricultural purposes (36%), approximately one-third towards self-employed commerce, manufactures, service (29%) and one-fifth towards consumption (19%).

RCUP CUs mobilize community savings and raise equity risk capital at the grassroots community level.

- As of June 2000, RCUP CUs have two savers for every one borrower.
- Half of all deposits are for amounts less than US$32 (C$400).
- The ratio of the median deposit size to the 1999 GDP per capita [US$452 (C$5,650)] is 7% while the ratio of the average deposit size to 1999 GDP per capita is 26%.

The savings portfolio illustrates a process of evolution. The first accounts are typically the smallest accounts. Many lower-income and poor members display a preference to deposit savings in small amounts where they find safety, convenience and return. The opening of new savings opportunities in small communities also attracts a handful of local large savers.

CURRENT MEMBER PROFILE

An RCUP CU member survey conducted in March 2000 suggests that characteristics of current RCUP CU membership may be summarized as follows:

Demographic

- Household characteristics: an average of 5 members in their household. Of these household members, the majority (64%) has 1-3 dependents, where *dependent* is defined as members that are unlikely to be earning an income, such as children and grandparents. The average age is 44; the majority of members are 25-44.
- Education levels are fairly high; 54% have more than primary schooling; 7% have no formal schooling. Nationally, more than half of the rural and more than one-third of urban poor adults are illiterate.
- The most common occupation is self-employed enterprise, seconded by agricultural production.
- Women are concentrated in the former whereas men are more concentrated in agriculture; a larger percentage of women are owners of an enterprise, at 66% compared to 52% of men. National figures show the self-employed business sector is composed of 47% men and 53% women.
- Commercial activities are the most prevalent form of enterprise, rising from 48% in 1997 to 60% in 2000.
- The absolute number of respondent households owning a micro or small enterprise has increased from 435 in 1997 to 551 in 2000. However, the percentage of membership households owning a business has decreased from 80% in 1997 to 72% in 2000. This reflects two things: (i) a significant expansion of the membership, and (ii) increased numbers of members from other occupations.

Income

When interpreting income data, it should be noted that only include those respondents for which complete information was acquired (603 respondents out of 764 of which 33 do not belong to the economically active population and are thus not expected to have an income). Elimination of those with missing numbers may introduce a downwards bias by leaving out those who do not wish to report income for fear of tax enforcement. It may introduce an upwards bias by leaving out those at the bottom income range who do not track their income.[i]

- Survey 2000 gathered data from new credit union members (new respondents) and from members that had been surveyed in 1997 (second-time respondents). Second-time respondents have a significantly higher per capita income compared to new respondents.
- The highest annual per capita household income levels are found among members engaged in self-employed business while the lowest levels are found among members engaged in agriculture.
- Most member households are concentrated in the lowest and highest income ranges; 40% have annual household incomes of less than US$2,400, while 27% have annual incomes of US$6,000 or more. The middle level categories have smaller concentrations of members.
- Analysis of annual per capita household income, defined as total income earned by all household members divided by the total number of household members shows over half of respondents' belong in the lowest 2 income brackets, followed by over 15% in the highest income bracket.
- Thirty one percent of Survey 2000 respondents' per capita annual household income falls below the extreme poverty line (below US$1 per day), and 55% of Survey 2000 respondents' per capita annual household income falls below the general poverty line (below the US$2 per day).

Wealth

We refer to both "total household assets" and "non-financial household assets", which are defined as:

> ***Total household assets**=Σsavings accounts +business assets (% of business owned by the household) +agricultural assets + residential assets.*
>
> ***Non-financial household assets**=Σ business assets (% of business owned by the household) +agricultural assets + residential assets.*

The "non-financial household asset" function omits savings and will be used when assets are being used to explain savings behavior. This function will also be used when Survey 2000 is being compared to Survey 1997; the latter analyzed only non-financial household assets.

- The average household wealth level for all Survey 2000 respondents is US$20,640 (compared with the 1997 survey average of US$17,000).
- Respondents in the lowest income category have the highest value of average agricultural assets (US$8,000), possibly reflecting the large landholding of a small number of owners.
- Women have, on average, approximately 60% the value of business assets, approximately 70% the amount of agricultural assets, and about the same value of residential assets as men have.

MEMBER BEHAVIOR

According to Survey 2000 results, member consumption of financial services has the following characteristics:

Savings

- The most frequent motive for savings remains a safeguard for emergencies
- Of the Survey 2000 respondents, 86% deposit the majority of their savings at RCUP CUs. This figure falls as low as 70% for Moderna and Iaguei and rises as high as 96% at Avance.
- Lower income groups tend to more frequently place their savings in RCUP CUs than in other financial institutions.
- The total household savings is approximately three times larger than the mean and median values of RCUP CU individual savings accounts.
- Lower income households display a higher average propensity to save than higher income households. The average savings amount for the lowest earning respondents represents 19% of their average income, whereas the average savings amount for the highest earning respondents represents 7% of their average income.[ii]
- The distribution total household savings accounts across financial institutions reveals much lower average balances in credit union accounts.
- Survey respondents' most common reason for choosing a credit union as their primary savings institution is still to acquire access to loans. *Notably, requirements for loans fall as a motive for choosing a savings institution from 51% for the lowest income group to 43% for the highest income group. It stands at 60% for those engaged in agriculture to 44% for those self-employed in business.*

Loans

Survey 2000 respondents were asked to report on all loans, including both cash and in kind (trader credit), received or outstanding in 1999. The information is used to profile members' use of lending services provided by RCUP CUs and to evaluate members' use of the credit services provided by other formal and informal sources of credit, such as banks, non-governmental organizations (NGOs) and moneylenders.

- Most households had accessed one or two loans in the year 1999.
- The average size of household loans from credit unions tends to be much smaller than the average size of loans from banks.
- As household wealth increases, loan size for all institutions increases.
- Among age groups, loan size first increases with one's productive years, rising from an average of US$259 among respondent younger than 25 years old, to US$937 among respondents between 25-34 years old.
- The largest average loan size was for business use (US$902), while the smallest average loan size was for personal use at US$601.
- RCUP CUs are predominant source of credit to their member households, accounting for 83 % of the number of loans (up from 70% in 1997) and accounting for approximately 70% of the total amount of loans granted. The second most important source of loans is private banks, which provide only 4% of the loans but 12% of the total amount. This suggests that members access larger loans from private banks. This is followed by village banks, which account for 7% of the number of loans and 7% of the volume of loans.
- Both public banks and moneylenders figure much less predominantly than in previous surveys suggesting credit union substitution for reduced public bank lending and replacement of moneylender operations.
- A very small portion (43 households or 6%) of Survey 2000 respondents indicated that their household had asked for a loan from a private or public bank with 88% of that group successful in their application. The majority of those applications were from higher income and wealth groups.
- In 1999, 507 sample households (66%) requested a loan from a credit union. Of those households that asked for a loan from their credit union in 1999, 93% were granted that loan while 7% were denied. The rate of refusal ranges from 15% for the lowest income groups to 0% for the highest income groups.

HURRICANE MITCH

Few natural disasters have exacerbated the incidence of poverty more than the hurricane that struck in late 1998 — Hurricane Mitch. The estimated total direct and indirect damage is $1.2 billion, which is 57% of 1998 GDP. The human toll included death or injury of 323,000 and displacement of one-fifth of the population (870,000 people) of which 45% were children. Over 250,000 homes, 500 schools and 300 health centers were affected.

It is important that the effects of Hurricane Mitch are included in analyzing this impact assessment of the Nicaraguan Rural Credit Union Project. In many cases, where growth was expected among the 1997 respondents, devastation from the hurricane may explain slow or backward growth. It was crucial that RCUP CUs were able to better assist their member's needs by restructuring existing loans, issuing loans to repair damages, or helping members create savings accounts to prepare for natural disasters and other emergencies such as Hurricane Mitch.

- Sixty five percent of survey respondents were affected by Hurricane Mitch.

- The most common types of destruction or loss caused by Hurricane Mitch was "destruction to home", "land loss" and "animal loss". The latter two types of losses suggest that agricultural RCUP CU members were most affected by Hurricane Mitch.
- Agriculturalists reported the highest frequency of damages over $800 (47%) compared to other occupational groups.
- Of the 407 affected households, the average amount of damage was US$1,541 per household. Damage was calculated by adding losses in assets and subtracting costs occurred by paying for hospital and doctor bills, funeral services, lost income, etc.

The majority of surveyed credit union members affected by Hurricane Mitch funded repairs through credit unions services through either household savings or a credit union loan. At the time of the hurricane, 280 households were holding loans administered by the credit union (twelve households held two loans). Out of a total of 292 credit union administered loans, 226 or 77% have been repaid, 56 or 19% are still being repaid and 10 or 3% are in default. Of these 280 households, 34% restructured their loan after Hurricane Mitch. In a comparison between restructured loans and non-restructured loans, for restructured loans, 64% of households paid, 30% are still paying and 6% defaulted. For the non-restructured loans 85% paid, 14% are still paying and 1% defaulted.

IMPACT OF RCUP CUs ON MEMBERS

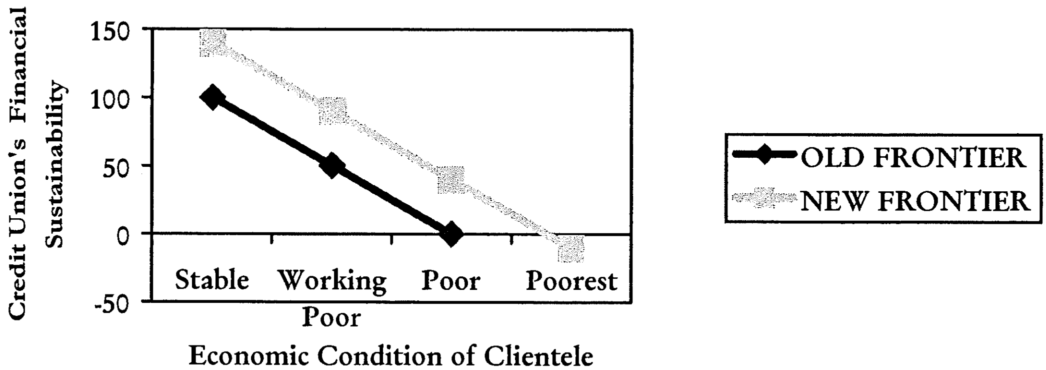
RCUP CUs help members climb a ladder of modest, but increasing, asset accumulation. This trend is supported by:

- Member deposits show small but increasing increments to deposit accounts each year: US$31 in 1997, US$35 in 1998 and US$47 in 1999.

- Of the 55 RCUP CU members for which we have complete wealth measurements in both 1997 and 2000, there are signs of considerable upward mobility. Of these, 47% show and increase in the value of their non-financial assets.
- Of the 79 members for which we complete savings data in both 1997 and 2000, 38% show higher levels.
- Of the 111 members for which we have complete occupation data in both 1997 and 2000, the majority remained in the same occupational category, which is not surprising considering the brevity of the period under consideration. However, there is some movement of self employed agriculturists to self employed business and of self employed business to private sector employee.

CONCLUSION

The current challenge is to expand "the frontier". RCUP has significantly improved the financial sustainability of the credit unions while expanding its outreach of service to the poor. One of the new challenges facing the Nicaragua credit unions is the further expansion of service to the poor. Drawing on experiences from credit union movements in Bolivia, Ecuador and the Philippines, RCUP CUs are now exploring the introduction of new information technologies and credit technologies that enable them to reach even deeper into the lower income groups in rural Nicaragua.[iii] Recognizing that there exists some trade off between the two goals of financial sustainability and outreach to the poor, RCUP's long-term goal is to shift the frontier out in order to improve both objectives for all credit unions.



NOTES

[i] Out of the 764 respondents, 128 of the respondents did not report their annual income because they did not know or did not want to respond. Out of these 128 respondents, 95 had primary occupations as self-employed agriculture, self-employed business, private or public sector employees and were therefore excluded from household per capita income and poverty lines since these occupations are expected to have an income. The remaining 33 respondents' households were not included in calculations because the respondent was not expected to have an income (ie: homemaker).

[ii]The median of the lowest earning income range (US$0-1,200) is $600. The average savings amount corresponding to this income bracket is $112. Therefore, this group's average savings amount represents 19% of their median income. Similarly, for the highest income range (US$6,000-+), the estimated median value is 7,000. The average savings amount for this group (US$466) represents 9% of their estimated median income.

[iii] Some credit unions, such as several in Bolivia and the Philippines, offer solidarity group loans for poor or "downscale" micro or small producers. For many poor members and/or members who live in remote rural areas far from the credit union office, access to a local solidarity group provides them with a lower-cost method to access credit union services.

Credit unions in other countries, such as Ecuador, have developed new products that offer small producers products that are flexible, taking into consideration their typically irregular cash flow and offering increased access with performance. To satisfy the demand for working capital, some credit unions, such as those in Ecuador, offer "open-end" lines of credit or supplier credit through material suppliers for "upscale" micro or small producers.

Poverty lenders feel that it is important to reach the poorest possible people. Many in the sustainability camp are more interested in opening access to the full spectrum of the poor who lack access to financial services; although most do include the poorest in that spectrum.

In fact the focus of many people in the sustainability camp is on scale of outreach as opposed to depth of outreach ... They argue that mixed programs which can become large and sustainable are preferable to small exclusively focused programs.

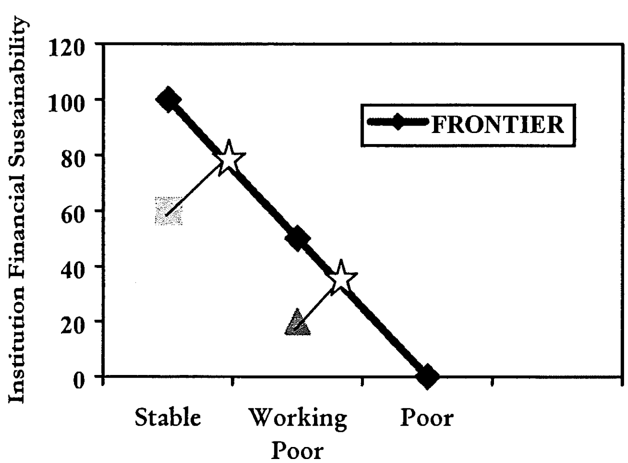
-Elizabeth Rhyne, 1998.

I. INTRODUCTION

The purpose of this report is to evaluate the ability of WOCCU- Nicaragua's Rural Credit Union Program (RCUP) to reconcile financial sustainability with an expanded outreach.

Access to a full range of financial services is essential for poverty alleviation. Access to reliable savings facilities can improve the poor's economic security and access to credit can foster asset accumulation. Savings instruments allow the poor to increase wealth, self- finance production activities and smooth consumption over periods of cyclical or unexpected crises. Credit products can improve the productivity of existing entrepreneurial activities and stimulate new sources of livelihood, as well as finance household needs such as education and housing.

Yet many microfinance experts argue that the financial institution faces a trade-off between financial sustainability and the ability to provide financial services to the poor. Institutions providing services to the higher income groups often display higher returns and greater financial sustainability. Institutions offering services exclusively to the poor typically display weaker financial returns and sustainability. This inverse relationship suggests a frontier as characterized below.



Clientele's Economic Condition

Given the inverse relationship between financial sustainability and outreach to the poor, the frontier line suggests that the highest attainable point of institutional financial sustainability will incorporate a less poor clientele. Similarly, the frontier line suggests a larger proportion of poor can be incorporated into the institution's clientele by operating at a lower level of financial sustainability.

In 1996 World Council of Credit Unions, Inc. (WOCCU) was contracted by USAID-Nicaragua to provide training and technical assistance to credit unions interested in upgrading their operations in lending and savings mobilization. By upgrading operations, WOCCU's Rural Credit Union program (RCUP) was to assist credit unions improve efficiency, profitability and growth in order to attain financial sustainability. Complimentary to the institutional strengthening focus, RCUP was designed to strengthen credit unions by expanding outreach to the poor. Prior to RCUP's inception in 1996, some Nicaraguan credit unions were serving the poorer elements of society but were financially weak and unsustainable (see triangle in the Frontier Graph). Some credit unions were financially strong but were not reaching as many poor as they could (see square in the Frontier Graph).

RCUP's goal has been to maximize both credit union financial sustainability and credit union outreach. RCUP aims to guide project credit unions (RCUP CUs) towards the frontier line (see stars in the Frontier Graph) where the credit union maximizes both its financial sustainability given its membership plus its outreach to the poor given its level of financial sustainability.

RCUP's success is defined along two dimensions: (1) financial sustainability of the credit unions; and (2) outreach to under-served groups, namely poor and/or rural communities. This report is structured accordingly in three parts. Part I discusses some developments in Nicaragua's banking sector during its transition from a state-dominated economy to a market-oriented economy, and points to some implications for the widespread poverty in Nicaragua. Part II documents the methodologies and steps used to reform and strengthen RCUP CUs as financially sustainable institutions. The results of these efforts are presented through key operational and financial performance indicators. **Part III assesses the depth and breadth with which RCUP CUs reach communities excluded from formal financial services due to low income, geographic location and/or other socioeconomic characteristics. It profiles RCUP CU members and the changes observed in their consumption of financial services, income and wealth.**

Part III of this report is organized into five sections. ***Section I* provides an introduction to the entire report, *The Road to Jinotega*. *Section II* examines credit union records to characterize the scale, scope and depth of credit union outreach, both for loans and for savings products. *Section III* analyzes a credit union member survey conducted in March 2000 (Survey 2000) to provide a current membership profile.** Survey 2000 included an average of 50 members from thirteen RCUP CUs, yielding a total of 764 surveys. ***Section III* infers which demographic characteristics and which financial behavior characteristics are associated with RCUP CUs' membership by comparing data over 3 years.** Survey 2000 data is compared with 1997 data derived from a credit union survey of both RCUP members and non-members conducted in RCUP's first year (Survey 1997). In addition, this section compares Survey 2000 data for new respondents in 2000 with the replies of second-time respondents (those who had been previously surveyed in 1997). Of the Survey 2000 respondents, 653 interviews were new respondents and 111 were second-time respondents, having been interviewed in Survey 1997. ***Section IV* examines 657 member records over 1996-1999 from RCUP's marketing database to provide a history of these members' access to financial services.** In addition, Section IV examines data of 55 RCUP CU members that were surveyed both in 1997 and in 2000. **This longitudinal data allows us to look at changes over this three-year period in members' wealth, savings accumulation and occupation. *Section V* provides a conclusion.**

Part III assesses the extent to which RCUP credit unions, having implemented RCUP's institutional strengthening policies, service the poor and other underserved people[1]. Part III seeks to address a number of questions:

- What is the profile of the RCUP CU members and has it changed during the process of institutional strengthening? What economic groups do the RCUP CUs serve?
- What is the scale, scope and depth of RCUP CU outreach?
- Do RCUP CUs make the shift from borrower-dominated institutions to balanced intermediaries; do they attract net savers?
- Do RCUP CUs serve the poor? Do RCUP CUs expand their outreach to the poor?
- What is the composition of the poor served by RCUP CUs?
- Is there evidence that RCUP CU member access to increasing levels of financial services assists them in increasing their income and wealth (asset) levels?

During the past three years, RCUP CUs have purged over 300 member accounts that were inactive. Despite this purging, the membership base has increased from a base of 1,588 in 10 credit unions in 1996 to 14,216 members in 18 credit unions in 2000.

Table 1: RCUP CU and Membership Growth					
	6/1996	6/1997	6/1998	6/1999	3/2000
Number Credit Unions	10	13	13	13	18
Total Membership	1,588	2,784	3,844	4,216	14,121

II. FINANCIAL OUTREACH

LOAN OUTREACH

Scale

As of June 1997, the first seven credit unions that entered RCUP had 2,099 loans outstanding with a total volume of US$1,149,479 (C$14,368,488). The number of loans ranged from 46 loans at Iaguei to 538 loans at Central. The volume of loans rose from US$15,255 (C$190,688) at Iaguei to US$578,269 (C$72,283,623) at Unica. The number of loans exceeded the number of members of RCUP CUs, suggesting more than one loan per member. The average loan size was US$548 (C$6,850), ranging from US$219 (C$2,738) at Central to US$1,069 (C$13,363) at Unica.

As RCUP CUs cleaned unrecoverable loans off their balance sheet, three credit unions (Avances, Iaguei, Moderna) continued to show growth in both number and volume of loans, Integral showed a decrease in the number of loans, Central showed a decrease in the volume of loans and two credit unions (Unica and Unión) showed a decrease in both the volume and number of loans. Unica demonstrated the largest losses, dropping from a reported 528 loans to 53 loans and a volume of US$578,269 (C$7,228,363) to US$6,266 (C$78,325).

Table 2: Loans Outstanding – Number and Volume of Loans (in US$)					
Credit Union		6/1997	6/1998	6/1999	6/2000
FIRST GROUP OF CREDIT UNIONS TO ENTER RCUP: 1997					
Avances	#	362	437	648	903
	$	$ 158,690	$ 202,627	$284,895	$642,496
Central		538	566	293	411
		$ 117,701	$ 60,988	$ 94,284	$ 174,966
Iaguei		46	136	211	431
		$ 15,255	$ 33,502	$ 79,632	$212,098
Integral		191	155	231	246
		$ 96,824	$110,276	$120,722	$166,686
Moderna		250	359	345	324
		$ 92,372	$151,187	$189,607	$193,035
Unica		528	53	87	86
		$ 578,269	$ 6,266	$ 12,163	$160,326
Unión		184	180	123	86
		$ 90,368	$ 60,988	$63,621	$ 58,076
SECOND GROUP OF CREDIT UNIONS TO ENTER RCUP: 1998					
Visión		N/a	90	77	115
		N/a	$ 55,836	$ 59,773	$ 75,487
Capitalizadora		N/a	467	281	375
		N/a	$ 56,466	$ 187,347	$346,073
Dinámica		N/a	259	178	212
		N/a	$ 91,399	$ 137,662	$108,469
Económica		N/a	49	70	85
		N/a	$ 14,543	$ 28,700	$ 62,443
Mujeres		N/a	135	205	201
Agropecuarias		N/a	$ 21,951	$ 48,895	$146,808
Profesional		N/a	72	86	137
		N/a	$ 14,231	$ 22,165	$ 45,457
THIRD GROUP OF CREDIT UNIONS TO ENTER RCUP: 1999					
Armonia		N/a	N/a	N/a	1,394
		N/a	N/a	N/a	$732,789
Ciudad Antigua		N/a	N/a	894	1,468
		N/a	N/a	$ 301,816	$325,614
COODEPARI		N/a	N/a	399	596
		N/a	N/a	$ 170,006	$140,293
Nueva Alianza		N/a	N/a	336	266
		N/a	N/a	$ 92,030	$132,495
Pueblo Nuevo		N/a	N/a	983	1,069
		N/a	N/a	$ 342,210	$359,787
TOTAL	**#**	**2,099**	**2,958**	**5,447**	**8,405**
	$	**$1,149,479**	**$ 880,260**	**$2,235,528**	**$4,083,396**

As of June 2000, the 18 RCUP CUs had 7,539 loans outstanding with a volume of US$4,083,396 (C$51,042,450). Despite large write-offs of non-recoverable loans and historic losses, the number and volume of loans increased after the loan portfolio clean up. The average loan amount in 2000, US$542 (C$6,775), was $6 less than the average size in 1997, which was $548 (C$6,850).

Depth

Small loans are used as an indicator of the depth of credit union services to the poor. The United States Agency of International Development (USAID) uses a reference point of loans with an average balance of less than US$300 (C$3,750) per borrower as a working definition of poverty lending.[2] Loans under this threshold are assumed to be reaching the poorest borrowers. The underlying assumption is that the smaller the loan, the poorer the individuals willing to go through the loan application process; fewer poor people are presumed to have access to larger loans.

Credit unions are mixed-outreach financial institutions; their loan service is not exclusively focused on the poor. Service to the poor is blended with service to a broader spectrum of the local population. Credit union services are not focused exclusively on the poor. Smaller loan sizes, typical of loans to the poor, tend to involve higher costs per client. Credit unions serving the poor can better maintain financial sustainability by spreading their costs across loans of larger and medium sizes as well. In this manner, the credit union reaches a large absolute number of the poor on a sustainable basis.

As mentioned, a breakdown of the credit union loan portfolio in June of 2000 reveals an average loan balance of US$542 (C$6,775). Yet the average tells little about the distribution of loans within the total number of loans disbursed. In June 2000, the median loan size granted was US$343 (C$4,288). In other words, 3,718 loans (50% of all loans made) were for amounts less than US$343 (C$4,288). The ratio of the median loan size to GDP per capita [US$452 (C$5,650)] was 76% while the ratio of the average loan size to GDP per capita is 120%.

In June 2000, 3,397 outstanding loans (or 45% of the loan portfolio) were for amounts less than US$300. These loans accounted for 9% of the funds loaned. Twenty percent of the number of loans (1,482 loans) were for amounts between US$300 and US$500 and accounted for 10% of funds loaned. At the other end of the size range, 7% of the number of loans were for amounts over US$2,000 and accounted for 41 % of funds loaned.

RCUP CUs operate as financial intermediaries, which are not limited to poverty lending of loans less than US$300. They maintain almost half of their portfolio in loans less than US$300 and the number of such loans reaches a significant scale of over 3,000 loans. RCUP CUs thus are able to reach a larger number of low income or small borrowers while at the same time spreading their fixed costs across a larger portfolio of an expanded range of loan sizes and diverse loan purposes.

Table 3: Size Distribution of Loans Outstanding, June 2000 (in US$)

	$1-300	$301-500	$501-1,000	$1,001-2,000	$2,001-3,000	>3,001	Total
Number of Loans	3,397	1,482	1,291	862	239	265	8,405
%	45%	20%	17%	11%	3%	4%	100%
Volume of Loans	$373,588	$419,406	$691,549	$924,225	$486,759	$1,187,869	$4,083,396
%	9%	10%	17%	23%	12%	29%	100%

Credit Unions include Armonia, Avances, Capitalizadora, Central, Ciudad Antigua, COODEPARI, Dinámica, Económica, Iaguei, Integral, Moderna, Mujeres Agropecuarias, Nueva Alianza, Profesional, Pueblo Nuevo, Unica, Union, Visión.

Throughout the process of strengthening institutional financial sustainability, RCUP CUs are making more small loans in both absolute and relative terms.

Table 4: Evolution of Size Distribution of Loans Outstanding, for Matched Sample* June 1997-2000 (in US$)

	$1-300	$301-500	$501-1,000	$1,001-2,000	$2,001-3,000	>3,001	Total
Number of Loans							
1997	397	510	661	323	118	90	2,099
%	19%	24%	32%	15%	6%	4%	100%
1998	443	479	264	350	208	142	1,886
%	24%	25%	14%	19%	11%	7%	100%
1999	718	378	499	263	55	25	1,938
%	37%	19%	26%	14%	3%	1%	100%
2000	873	528	473	401	120	92	2,487
%	35%	21%	19%	16%	5%	4%	100%
Volume of Outstanding Loans							
1997	$75,836	$117,530	$358,426	$269,949	$158,477	$169,261	$1,149,4779
%	7%	10%	31%	23%	14%	15%	100%
1998	$103,259	$208,848	$92,651	$105,974	$60,391	$54,711	$625,834
%	16%	33%	15%	17%	10%	9%	100%
1999	$80,124	$98,175	$247,948	$238,004	$91,870	$88,804	$844,924
%	10%	12%	29%	28%	11%	10%	100%
2000	$100,686	$144,806	$242,319	$396,781	$242,586	%480,503	$1,607,681
%	6%	9%	15%	25%	15%	30%	100%

Credit unions include: Avances, Central, Iaguei, Integral, Moderna, Unica, Unión.

*If we examine the impact of the institutional strengthening process on credit unions that have been engaged in this process for a longer period, we examine a matched set of credit unions that entered in 1997 and observe their evolution through June 2000.

Note that during the institutional strengthening of RCUP CUs, the number of both small loans and large loans increased. Also the percentage of small loans relative to the total increased from 19% in 1997 to 35% in 2000. In many countries, as credit unions undergo a strengthening process, the percentage of larger loans increases while that of smaller loans falls. That trend usually occurs because, although the credit unions are providing more smaller loans, their liquidity outgrows their loan portfolio and they invest that liquidity in larger loans for commerce and housing. The credit unions also tend to gravitate toward larger loans for which transaction costs are a relatively smaller portion of the total loan. Many credit unions and other formal financial institutions have exhibited this trend of moving up towards greater financial sustainability on the frontier but decreasing outreach. In contrast, RCUP CUs reveal instead the expansion of small scale lending.

The rising percentage of small loans reflects two other changes. RCUP CUs are experiencing high levels of membership growth. As new members take out loans, they start with small loans and have to demonstrate good repayment history before accessing larger loans. The change also reflects changes in governance practices and transparency. In 1997 many of the RCUP CU loans were in a few hands. With the enforcement of director transparency in bylaw reforms and loan concentration limits in new credit policies, the loan portfolio has become more widely diversified across a larger number and proportion of the membership, resulting in smaller loan balances.

Scope

As of June 2000 RCUP CUs demonstrate a high degree of credit diversification, attending a wide range of loan purposes. Loan purposes include housing construction, housing improvement, home purchase, agriculture, cattle raising, chicken raising, fish harvesting, small manufacturing, commerce, transportation business, personal service business, debt refinancing, emergency needs, education, personal expenses and electric appliance purchase.

Members' financing needs determine their credit union loan product offerings. The diversification of loan purpose allows the credit unions to respond to the full household needs of members. Review of member records indicate that a single household may have more than one member whose financial needs may vary; for example, a consumption loan for one member while a business loan for another member. Records also indicate that the credit demand of members change over time. While younger, a member's credit demand may be for consumption loans and then business loans. Once more established, a member's loan demand may be for housing needs.

In June 2000, the number of loans is approximately one third (36%) agriculture, one third (30%) commerce, service and manufacturing micro-enterprise and one fifth consumption. Housing remains a small portion of the portfolio.

The credit union's diversified loan portfolio diversifies risk across various economic sectors. Not all of the RCUP CU loan portfolio would be affected by an economic crisis in any one or two specific sectors. However, the portfolio still shows a high level of concentration in agricultural lending at 45% of funds, followed by 29% in commerce loans. As RCUP CUs generate greater liquidity, we expect to see greater growth of housing and small manufacturing lending, diversifying the portfolio further

Table 5: Distribution of Loans Outstanding by Purpose, June 2000 (in US$)

	Agriculture	Commerce	Manufactures	Housing	Consumption	Service	Other	Total
Number of Loans	2,751	2,138	266	384	1,432	265	255	7,536
%	36%	29%	4%	5%	19%	4%	3%	100%
Volume of Loans	$1,816,589	$1,171,237	$129,456	$263,445	$305,849	$315,393	$81,432	$4,083,401
	45%	29%	3%	6%	7%	8%	2%	100%

Credit Unions include: Armonia, Avances, Visión, Capitalizadora, Central, Ciudad Antigua, COODEPARI, Dinámica, Económica, Iaguei, Integral, Moderna, Mujeres Agropecuarias, Nueva Alianza, Profesional, Pueblo Nuevo, Unica, Unión.

Table 6: Evolution of Size Distribution of Loans Outstanding by Purpose, for Matched Sample*
1997 – 2000 (in US$)

	Agriculture	Commerce	Manufactures	Housing	Consumption	Service	Other	Total
Number of Loans								
1997	1,011	354	163	147	183	73	168	**2,098**
%	48%	17%	8%	7%	9%	3%	8%	100%
1998	822	538	176	184	70	86	10	**1,886**
%	44%	28%	9%	10%	4%	5%	0%	100%
1999	320	723	86	286	253	121	149	**1,938**
%	17%	37%	4%	15%	13%	6%	8%	100%
2000	396	766	83	342	639	129	132	**2,487**
%	16%	31%	3%	14%	26%	5%	5%	100%
Volume of Outstanding Loans								
1997	$545,955	$212,386	$50,158	$57,039	$54,151	$21,821	$207,969	**$1,149,479**
%	47%	19%	4%	5%	5%	2%	18%	100%
1998	$145,592	$293,468	$46,341	$69,634	$32,856	$16,622	$21,321	**$625,834**
%	23%	47%	7%	11%	5%	3%	3%	100%
1999	$142,102	$330,399	$ 29,075	$161,814	$ 48,515	$114,888	18,132	**$844,925**
%	17%	39%	3%	19%	6%	14%	2%	100%
2000	$494,411	$456,919	$ 44,851	$245,197	$151,014	$171,459	43,831	**$1,607,682**
%	31%	28%	3%	15%	9%	11%	3%	100%

Credit unions include: Avances, Central, Iaguei, Integral, Moderna, Unica and Unión.
*If we examine the impact of the institutional strengthening process on credit unions that have been engaged in this process for a longer period, we examine a matched set of credit unions that entered in 1997 and observe their evolution through June 2000.

The trend toward greater diversification of the portfolio is demonstrated in reviewing the evolution of credit unions during the strengthening process. For a matched sample of seven credit unions, during the course of RCUP, the loan portfolio development has increased the share of the number of commerce loans from 17% to 31% and of housing loans from 7% to 14%. The number of consumption loans has increased from 9% to 26%. The number of agricultural loans has fallen from 48% to 16%. This decrease also reflects the large number of agricultural loans that were delinquent and unrecoverable for many years, which have since been removed from the books.

Correspondingly, the volume of agricultural loans has decreased in absolute volume from US$546,000 (C$ 6,825,000) in 1997 to a low of US$142,000 (C$1,775,000)in 1999 and then rose back up to US$494,000 in 2000. The volume share of the agricultural loans fell from 47% in 1997 to 17% in 1999 and began to rise again reaching 31% in 2000. Commerce loans volume share increased from 19% in 1997 to 28% in 2000. The volume of housing loans rose from 5% to 15%. The volume of consumption loans was relatively smaller than that of the number of consumption loans, rising from 5% to 9%.

Gender

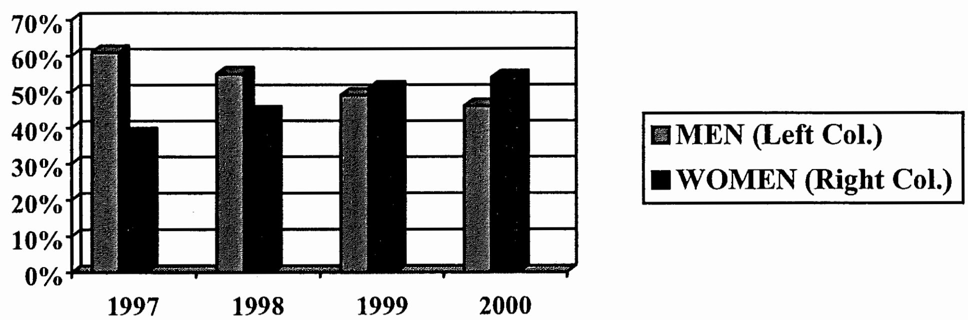
The size distribution of loan sizes for women tends to concentrate more heavily in small sizes. As of June 2000, female members compose 45% of total RCUP CU membership and hold 34 % of the volume and 43 % of the number of loans (refer to Table 14 for membership totals disaggregated by gender). The average woman's loan size is US$427 (C$5,338), compared to the average man's loan size of US$593 (C$7,413).

Table 7: Size Distribution of Loans Outstanding by Gender

	Men	Women	Not Reported	Total
Number of Loans	4,275	3,211	50	7,536
%	57%	43%	1%	100%
Volume of Loans	$2,537,602	$1,370,435	$175,360	$4,083,397
%	62%	34%	4%	100%

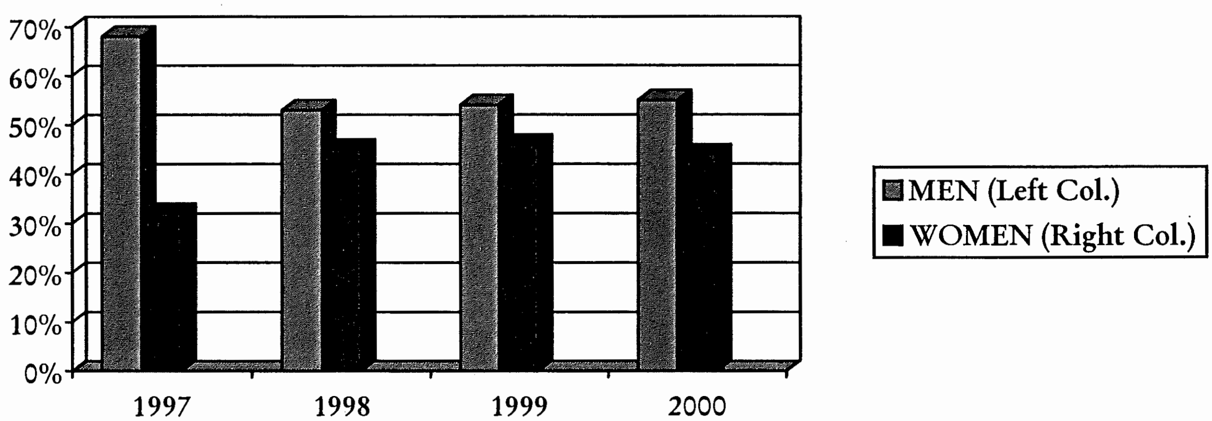
Credit Unions include: Armonia, Avances, Visión, Capitalizadora, Central, Ciudad Antigua, COODEPARI, Dinámica, Económica, Iaguei, Integral, Moderna, Mujeres Agropecuarias, Nueva Alianza, Profesional, Pueblo Nuevo, Unica, Unión.

NUMBER OF LOANS BY GENDER



If we examine the portfolio of seven credit unions that entered RCUP in 1997, men held over 60% of the number of loans and women held less than 40%. By 2000 this same group of credit unions had 46% of the number of loans held by men and 54% of the number of loans held by women.

VOLUME OF LOANS BY GENDER



Similarly, in 1997, men held 68% of the volume of loans while women held only 32%. By 2000, the gap was reduced as women held 45% compared to men's 55%. The fact that women hold a larger percentage of the number of loans and yet a smaller percentage of the volume of loans reflects again that women tend to hold smaller loans than men.

Table 8: Evolution of Size Distribution of Loans Outstanding by Gender

1997 – 2000 for Matched Sample* (in US$)

Number of Loans				
	Men	**Women**	**Not Reported**	**Total**
1997	1,283	805	11	2,099
%	**61%**	**38%**	1%	100%
1998	1,032	837	14	1,886
%	**55%**	**44%**	1%	100%
1999	945	990	3	1,938
%	**49%**	**51%**	0%	100%
2000	1,133	1,333	21	2,487
%	**46%**	**54%**	1%	100%
Volume of Loans (in US$)				
1997	$779,189	$366,884	$3,409	$1,149,482
%	**68%**	32%	0%	100%
1998	$332,165	$283,669	$10,000	$625,834
%	**53%**	**45%**	2%	100%
1999	$454,428	$387,082	$3,413	$844,924
%	**54%**	**46%**	1%	100%
2000	$886,827	$ 712,409	$8,444	$1,607,680
%	**55%**	**45%**	0%	100%

Credit unions include: Avances, Central, Iaguei, Integral, Moderna, Unica, Union

*If we examine the impact of the institutional strengthening process on credit unions that have been engaged in this process for a longer period, we examine a matched set of credit unions that entered in 1997 and observe their evolution through June 2000.

Credit unions undergoing greater transparency of operations and expansion of credit processes and products can reach out to a greater number of women in both absolute and relative terms. For the matched sample of seven credit unions during the life of RCUP, trends of reversal in the portfolio share of men and women from 1997 to 2000 suggest that as credit unions undergo institutional strengthening, they are able to provide greater access to loans for women.

SAVINGS OUTREACH

Scale

What most distinguishes credit unions from other non-bank financial entities offering microfinance services is the ability of the credit unions to mobilize mass numbers of small, voluntary, savings accounts. As of June 2000, 18 Nicaraguan credit unions serviced 14,121 share accounts and 7,473 savings deposits. This amounted to US$451,961 (C$5,649,513) in share accounts and US$1.1 million (C$ 13.75 mill) in savings deposits. All credit union members have savings deposits. The credit unions have two savers for every one borrower. All members also have share accounts. The shares represent the equity ownership and risk capital invested by the 14,121 members. The credit unions play a significant role not only in mobilizing savings but also in raising equity risk capital at the grass roots community level.

A sample of 12 RCUP CUs and their branches are reviewed below. The ten credit unions service 7,473 savings deposit accounts for a total of US$864,816 (C$10.8 million). The average deposit is US$116 (C$1,450), ranging from a low of US$58 (C$725) at the El Viejo branch of Iaguei to the high of US$196 (C$2,450) at Avances. The median deposit is US$32 (C$400); half of all the deposit accounts are for amounts less than US$32 (C$400).

Table 9: General Statistics of RCUP CU Deposit Accounts (in US$)

Credit Union	Number of Deposit Accounts	Total Volume of Deposits	Average Deposit	Median Deposit
Avances	1,557	$ 304,654	$ 196	$ 37
Avances, Juigalpa	317	$ 21,859	$ 69	$ 27
La Union	199	$ 22,556	$ 113	$ 32
Integral	470	$ 59,452	$ 126	$ 32
Moderna	1,276	$109,291	$ 86	$ 29
Economica	145	$ 8,857	$ 61	$ 30
Dinamica	211	$ 13,873	$ 66	$ 31
Capitalizadora	503	$ 36,659	$ 73	$ 33
Iaguei	1,140	$159,515	$ 140	$ 36
Iaguei, El Viejo	475	$ 27,544	$ 58	$ 28
Central	857	$ 59,420	$ 69	$ 30
Profesional	323	$ 41,135	$ 127	$ 32
Total	7,473	**$864,816**	**$ 116**	**$ 32**

The ratio of the median deposit size to the 1999 GDP per capita [US$452 (C$5,650)] is 7% while the ratio of the average deposit size to 1999 GDP per capita is 26%.

Depth

RCUP CUs have been attracting savings deposits since the beginning of the project in 1997. The savings portfolio illustrates a process of evolution. The first accounts are typically the smallest accounts. Many lower-income and poor members display a preference to deposit savings in small amounts where they find safety, convenience and return. The opening of new savings opportunities in small communities also attracts a handful of local large savers.

Deposit savings accounts are concentrated in the lower size ranges. Seventy percent of savings deposits are less than US$45 (C$563) and 13% are between US$46-100 (C$575-1,250). In other words, 83% of total savings deposits are for amounts less than US$100 (C$1,250). These small deposits comprise 17% of savings funds. In contrast, the largest block of funds comes from savings accounts of amounts ranging larger than US$500 (C$6,250), which represent 4% of total savings deposits and comprise 60% of savings funds.

Table 10: Distribution of Deposit Accounts by Size (in US$)							
RCUP CU		$ 0 - 45	$ 46 – 100	$ 101-300	$301-500	$500-1000	$ 1000 +
Avances	No.	61%	20%	12%	3%	2%	3%
	Vol.	6%	7%	10%	6%	8%	63%
Avances, Juigalpa	No.	84%	6%	5%	2%	2%	1%
	Vol.	17%	6%	13%	9%	17%	38%
La Unión	No.	69%	11%	8%	5%	2%	5%
	Vol.	8%	7%	13%	16%	15%	41%
Integral	No.	70%	12%	10%	4%	2%	2%
	Vol.	8%	6%	13%	10%	12%	51%
Moderna	No.	77%	9%	8%	3%	2%	2%
	Vol.	9%	7%	15%	11%	19%	40%
Económica	No.	74%	14%	8%	1%	1%	1%
	Vol.	16%	18%	20%	9%	21%	15%
Dinámica	No.	72%	12%	12%	2%	2%	0%
	Vol.	16%	12%	36%	10%	17%	8%
Capitalizadora	No.	68%	26%	2%	2%	1%	1%
	Vol.	32%	6%	14%	14%	6%	28%
Iaguei	No.	63%	13%	15%	3%	4%	2%
	Vol.	7%	8%	18%	9%	18%	40%
Iaguei, El Viejo	No.	79%	10%	6%	2%	3%	0%
	Vol.	25%	13%	16%	8%	31%	7%
Central	No.	76%	5%	12%	4%	2%	2%
	Vol.	15%	9%	20%	9%	16%	31%
Profesional	No.	70%	11%	10%	3%	3%	2%
	Vol.	7%	6%	12%	9%	18%	48%
Total	**No.**	70%	13%	10%	3%	2%	2%
	Vol.	10%	7%	14%	9%	14%	46%

In summary, the account distribution of deposit savings reflects the pattern of many small accounts with low balances, a small middle tier of moderate size accounts which provide approximately a quarter of deposit funds, and a third level of a small number of large accounts, providing approximately two thirds of the deposit funds. These large accounts represent several retired members as well as "hot money", accounts that are very sensitive to interest rates. As such they represent a high level of liquidity risk to the credit unions. The flight of a small number of these large accounts would cause serious liquidity problems for the credit unions. The RCUP CUs need to expand the narrow middle tier of moderate size accounts that will eventually provide them with the largest block of relatively stable funds.

III.CLIENT PROFILE

In March 2000, RCUP carried out a survey (Survey 2000) of 764 credit union members in order to profile RCUP CU members and their households. Between 50-70 members were interviewed from 13 RCUP CUs. This section provides a profile of RCUP CU members' demographic, socio-economic and financial behavior characteristics. In addition, Survey 2000 provides a profile of financial services behavior of members' households; household size averaged 5 persons per respondent.

Table 11: Survey 2000 Sampling Distribution[3]				
Credit Union	**Municipality**	**Department**	**Membership (4/2000)**	**Sample**
Armonia	Nandaime	Granada	1,570	Not sampled
Avance	Santo Tomas	Chontales	1,588	70
Capitalizadora	Ocotal	Nueva Segovia	894	50
Central	Jinotepe	Carazo	857	62
Ciudad Antigua	Cuidad Antigua	Nueva Segovia	663	Not sampled
COODEPARI	Rivas	Rivas	373	Not sampled
Dinámica	Yalaguina	Madriz	448	50
Económica	Somoto	Madriz	131	51
Iaguei	Corinto	Chinandega	1,344	72
Integral	Sebaco	Matagalpa	601	78
La Unión	Matagalpa	Matagalpa	227	63
Moderna	Esteli	Esteli	1,346	67
Mujeres Agropecuarias	León	León	284	51
Nueva Alianza	San Juan de Limay	Esteli	216	Not sampled
Profesional	Masatepe	Masaya	360	50
Pueblo Nuevo	Pueblo Nuevo	Esteli	749	Not sampled
Unica	León	León	628	50
Visión	Jinotega	Jinotega	146	50
TOTAL			**12,425**	764

The 18 project participant credit unions (RCUP CUs) are located in 14 communities in various parts of Nicaragua outside of Managua. Communities range from provincial capitals to small rural towns. The 13 surveyed credit unions represent 10/14 departments (see map, p.i, Part II).

DEMOGRAPHIC CHARACTERISTICS

Age Distribution

Fifty two percent of the members surveyed are in the age range of 25-44 and 24% are in the range of 45-54 years of age. Individuals 25-44 years old are in their prime working and borrowing years. This percentage has fallen from 64% in the Survey 1997 as more savers have been drawn into the credit union from older groups.

The age distribution of sample respondents is concentrated in the prime working age years. The 45-54 age group is at the peak of their earning and savings potential and have maintained their participation at approximately 24%. The group over 55 years is a primary source of larger savings accounts and has increased its participation in the credit union from 9% in 1997 to 27% in 2000. The youngest group, 18-24, is in the early stage of economic life and is beginning to borrow. Membership remains weak in the youngest groups: 4% for those between 18-24 years of age. Sixty two percent of the Nicaraguan adult population is younger than 25, compared to only 4% of the credit unions' membership.

Table 12: Age Distribution of Survey 2000 Respondents			
Age Group	1997 Survey Credit Unions	2000 Survey Credit Unions	(1)Nicaragua
0-15	0%	0%	40%
15-24	3%	4%	22%
25-44	64%	52%	26%
45-54	23%	24%	6%
55 & older	9%	20%	6%
Total	100%	100%	100%
Sources:	(1) US Bureau of Census, International Data Base 2000		

Survey 2000 data suggests that the average adult RCUP CU member is 44 years old, which is 4 years higher than the Survey 1997 average of 40 years old. The average age of members varies very little by credit union (between 41-45 years).[4]

Credit unions' weakest membership penetration levels are among adults aged 18-24. Twenty two percent of the Nicaraguan adult population is younger than 25, compared to only 4% of the credit union membership according to Survey 2000.

Education Level

In general, education levels of sample credit union members are fairly high. Fifty four percent of members have more than primary school education; and 16% have some university education. Only 7% of the members surveyed have no formal schooling. Education levels are slightly higher for women than for men; 17% of women completed primary compared to 14% of men, 15% women completed secondary compared to 10% men; 8% women completed trade school compared to 4% men. In contrast, 19% men have had some university education compared to 13% women.

Table 13: Education Level of Survey Respondents				
Education	Survey 2000 All	2000 Male	2000 Female	Survey 1997 All
No Formal Education	7%	8%	6%	3%
Some Primary	24%	30%	19%	21%
Complete Primary	15%	14%	17%	15%
Some Secondary	19%	16%	22%	25%
Complete Secondary	13%	10%	15%	11%
Trade-Technical School	6%	4%	8%	9%
Some University	7%	9%	6%	6%
University Graduate	9%	10%	7%	9%

Gender Distribution

Survey 2000 respondents represented 362 male and 402 female RCUP CU members. Of these, the sampled membership of women reaches 85% in Iaguei, 69% in Moderna and 66% in Profesional.

Male sample participation reaches the highest in three credit unions, Central and Unica at 76% and Capitalizadora at 66%. In Mujeres Agropecuarias, previously consisting of an all-female membership, sample participation was 45% male and 55% female.

In 8 of the 13 credit unions studied, men are outnumbered by women.

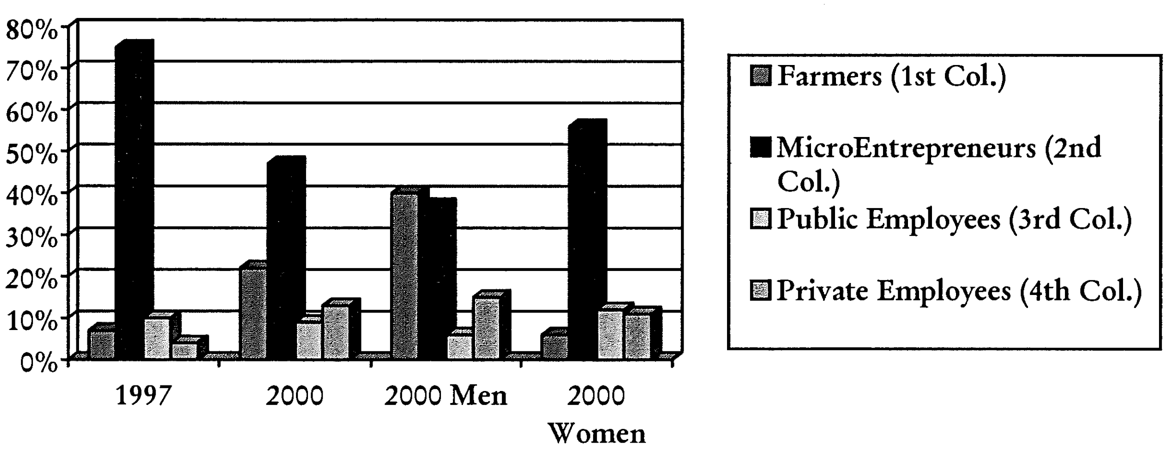
Table 14: Gender Distribution of RCUP CU Membership and Survey Respondents				
	Membership 6/2000	Survey 2000 Respondents	Survey 1997 Respondents	National Population (1)
Male	6,420 (55%)	362 (47%)	36%	50%
Female	5,136 (45%)	402 (53%)	64%	50%
(1) US Bureau of the Census, International Data Base, 2000				

Gender is correlated with occupation, and therefore credit union membership. The majority of members, in Iaguei, Moderna and Profesional, are involved in business (between 50 and 60% of sampled members are engaged in self-employed commerce, manufacturing or services); women account for 56% of those reporting self-employed business as their main economic activity. Agricultural production accounts for 50-60% of member economic activity in Central, Capitalizadora and Unica, whose membership is composed primarily of men.

ECONOMIC OCCUPATION

The largest group of credit union members is engaged in a self-employed enterprise, seconded by agricultural production. Forty seven percent of the sample membership is engaged in self-employed entrepreneurial activity, followed by 22% in agriculture production. Less predominant occupations include 13% private sector employees, 9% public sector employees and 7% homemakers. Others include students, retired and unemployed.

RCUP CU Members by Occupation and Gender



Credit unions are a mixed-outreach financial institution, which is reflected in the membership's occupational diversity. RCUP CU membership represents a broad cross-section of rural communities in Nicaragua where individuals are employed in a wide variety of occupations. RCUP seeks to expand the economic diversification of its credit unions' membership base. Members from provincial capitals may be vendors, merchants, self-employed, small manufacturers, teachers and/or construction workers. Membership increasingly includes housewives, private and public employees, bakers, leather workers and shoe makers. Members from the rural areas include grain farmers, citrus fruit growers, agricultural laborers, traders and cattle producers.

Throughout RCUP, credit unions show a de-concentration of their membership occupation. In initial credit union diagnostics, it was found that many credit union members were small and closed entrepreneur clubs. Membership entry was restricted to those with a similar business of their own. According to Survey 1997, self-employed business owners dominated membership at 75%. As new groups have entered membership, the participation of self-employed entrepreneurs (although increasing in nominal terms) has fallen to 47%. This trend does not suggest a decrease in the number of microentrepreneurs served. **Rather the number of microentrepreneurs served by RCUP CUs has increased while additional large numbers of other occupations have joined RCUP CUs as well.** The total number of enterprises held by survey respondents and their spouses increased to 551 from 435 in 1997, which represents a 27% increase (see Table 18).

This trend towards membership diversification also shows an increase in agricultural producers from 7% in 1997 to 22% in 2000 and in private sector employees from 4% in 1997 to 13% in 2000. These changes result from RCUP's strategy to expand credit union membership into a more diversified community base that can provide more financial services to all occupational groups.

Table 15: Survey 2000 Respondents' Occupation by Gender

Occupation	1997 Survey	2000 Survey Total	2000 Survey Males	2000 Survey Females
Self-employed Agriculture	7%	22%	40%	6%
Self-employed Business	75%	47%	37%	56%
Public Sector Employee	10%	9%	6%	12%
Private Sector Employee	4%	13%	15%	11%
Homemaker		7%	0%	13%
Unemployed		1%	1%	0
Other	4%	1%	1%	2%

Women represent the majority of credit union members primarily engaged in self-employed businesses while men represent the majority of credit union members engaged in self-employed agriculture. The majority of female respondents, 56%, have an occupation as a business entrepreneur while only 37% of men are found in the same occupation.[5] Conversely, the majority of men (40%) work in agriculture while only 6% of women claim their primary occupation as self-employed agriculture.

Micro and Small Enterprise Characteristics

Micro and small enterprises engaged in commerce, production or services constitute an important source of personal and household income for a significant portion of RCUP CU membership. Fifty nine percent of Survey 2000 respondents own a micro or small enterprise. In most of the surveyed RCUP CUs, 40-70 of respondents own an enterprise. Exceptions include Central Jinotepe, Mujeres

Agropecuarias and Capitalizadora where members tend to be concentrated in agricultural occupations.

The 18 RCUP CUs provide financial services to approximately 8,331 micro and small enterprises. To reiterate, of surveyed members, 59% own a micro or small enterprise. Extrapolated to the June 2000 membership of all RCUP CUs (14,121 members), this figure would suggest that the 18 RCUP CUs provide financial services to approximately 8,331 enterprises.

A larger percentage of women are owners of an enterprise, at 66% compared to 52% of men. This statistic is consistent with the findings above, which state that the majority of female respondents (56%) have a primary occupation as a self-employed entrepreneur, compared to 37% of men. A significant percentage of spouses of members also own enterprises. In 63% of credit union member households either the respondents or their spouses own and operate a micro or small enterprise.

Table 16: Respondent Households with an Enterprise

	Survey 2000 Households	Survey 1997 Households
Total	72%	80%

The absolute number of respondent households owning a micro or small enterprise has increased from 435 in 1997 to 551 in 2000. However, the percentage of membership households owning a business has decreased from 80% in 1997 to 72% in 2000. This reflects two things: (i) a significant expansion of the membership, and (ii) increased numbers of members from other occupations.

Commercial activities are the most prevalent form of enterprise, rising from 48% in 1997 to 60% in 2000. Clothes sales are the most common commercial activity, and are mostly owned by women. This activity is seconded by service enterprises, rising from 18% in 1997 to 23% in 2000. In the service sector, men are generally engaged in transportation and repair services, while women are principally engaged in dressmaking and hairdressing.

Food processing and snack shops make up 10% of enterprises (falling from 26% in 1997), which are mostly owned by women. Production activities are generally the least prevalent, at 5% in 2000, given that these activities require higher levels of initial capital investment. The production of clothes and leather goods comprise the majority of these enterprises.

Table 17: Type of Enterprise Owned by Survey Respondent Households

	Survey 2000	Survey 1997
Commerce	60%	48%
Food Service	10%	26%
Services	23%	18%
Production	5%	7%
Arts	1%	1%

Commerce includes: small neighborhood stores, general merchandise stores, sale of clothing and shoes, pharmacies, construction material dealers and hardware stores, bookstores, street vendors, kiosks, home furniture, furnishings and equipment sellers, car supply stores, and miscellaneous retail.

Food services include: food processing, retail of groceries and food products, snack shops including market vendors.
Services include: transportation (taxi, bus), professional services (legal, health), entertainment and recreation services, hairdressing services, car repair and services, photographic services, dressmaking and tailoring, clothes repair, shoe repair, building construction and contractors.
Production activities include: clothes production, carpentry/sawmill and furniture making, leather products, manufacturing of construction materials and metal goods manufacturing.
Arts include: jewelry making, pottery, ceramics and other handicrafts.

Table 18: Number of Workers Per Enterprise

	Survey 2000 551 Enterprises*	Survey 1997 435 Enterprises*
1	37%	41%
2 to 5	56%	55%
6 to 9	5%	2%
10 +	2%	2%
Average # of Workers	2.6	2.2

**Enterprises* refers to the enterprises of respondent and spouse.

Microenterprises served by RCUP CUs provide employment to an average of 2.6 non-family employees. Microenterprises owned by RCUP CU member households are small. The average amount of labor employed has increased from 2.2 employees in 1997 to 2.6 in 2000. Approximately 37% of these microenterprises provide regular employment for one person (decreasing from 41% in 1997) and 93% employ 5 people or less. However, we do see an increase in the number of microenterprises that employ 2-9 persons, which increased to 61% from 57% in 2000. This size increase reflects two trends: (i) larger microenterprises now approach the credit union for their financing needs; (ii) microenterprises that were surveyed in 1997 have grown and expanded to employ more workers.

Women-owned microenterprises tend to be smaller than male-owned microenterprises. The average size of businesses owned by men is 2.7 permanent employees, compared to female-owned businesses averaging 1.7 permanent employees.

Table 19: Use of Non-Family Labor

	Survey 2000	Survey 1997
Only Family Labor	64%	73%
Use of Non-Family Labor	36%	27%
Number of Non-Family Hired Persons		
1 Hired Person	51%	n/a
2 to 5 Hired People	42%	n/a
5 to 9 Hired People	4%	n/a
10 + Hired People	4%	n/a

Thirty-six percent of member enterprises employ non-family labor only, with the majority of those businesses (51%) hiring one employee. In contrast, the majority of businesses (64%) use family labor only. The percentage of enterprises hiring non-family workers (64%) has risen dramatically from 1997 when the percentage was only 27%.

INCOME

One of the purposes of RCUP is to open access to the full spectrum of people who lack access to financial services, expanding both the scale and the depth of outreach to the poor. This section measures the participation of RCUP CU membership across the breadth of income groups and the depth to which the credit unions reach the poor.

Per Capita Household Income

Income data tables only include those respondents for which complete information was acquired. Elimination of those with missing numbers may introduce a downwards bias by leaving out those who do not wish to report income for fear of tax enforcement. It may introduce an upwards bias by leaving out those at the bottom income range who do not track their income.[6]

Household income was measured differently in Survey 1997 and Survey 2000. Survey 1997 measured only the income of the respondent, whereas Survey 2000 includes the incomes of the respondent, spouse, and all other members of the household. "Household per capita income" is calculated as the total household income (of the respondent, spouse, and other household members) divided by number of people in the household. Due to the differences in income measurement, household per capita income will be larger in 2000 than in 1997.

Survey 2000 Respondents have an average of 5 members in their household. Of these household members, the majority (64%) has 1-3 dependents, where *dependent* is defined as members that are unlikely to be earning an income, such as children and grandparents. Approximately 24% of respondents' households have more than 4 dependents and 11% have no dependents.

Number of Dependents* in Survey 2000 Respondents' Households		
Number of Dependents	**N**	**Percent**
0	83	11%
1	145	19%
2	207	27%
3	140	18%
4	95	12%
5	48	6%
6	26	3%
7	7	1%
8	9	1%
9	1	0.1%
10	3	0.4%
Total	764	100

*Dependents are defined as respondent's children and grandparents who live in the respondent's household.

The 1999 Gross Domestic Product (GDP) of Nicaragua was US$2,232 million (C$26,782 million) for a population of 4.94 million (IMF 2000). Therefore, we estimate the per capita GDP is US$ 452 (C$5,650). According to Survey 2000 both the mean and median per capita household incomes exceed the 1999 GDP per capita of US$452. As the credit unions have expanded their membership base, they have received not only those members with higher incomes, but lower income members as well.

Survey 2000 gathered data from new credit union members (new respondents) and from members that had been surveyed in 1997 (second-time respondents). Second-time respondents have a significantly higher per capita income compared to new respondents. New respondents display a mean of US$ 1,172 and median of US$ 653 while second-time respondents display a mean of US$ 1,505 and median of US$ 960.

Table 20: Annual Per Capita Household Income

	Mean (US$)	N	Median (US$)
Survey 2000: All Respondents	$1,219	503	$674
Survey 2000: New Respondents	$1,172	431	$653
Survey 2000: Also Served as 1997 Respondents	$1,505	72	$960

The average annual per capita household income of total surveyed credit union members in 2000 was US$ 1,219. The median annual per capita household income of credit union members is US$674. In other words, 50% of sample members have household incomes of less than US$664.

In order to compare household per capita income between the 1997 and Survey 2000s, we used the 1997 measure of household income as respondent's income divided by the number of people in the household (Table 21). The median household per capita income by this measure was slightly lower in 2000 ($370) than in 1997 ($400).

Table 21: Annual Per Capita Household Income Based on Survey 2000 Respondents's Income

	Mean (US$)	N	Median (US$)
Survey 2000: All Respondents	$817	625	$370
Survey 1997: All Respondents	N/A	314	$400 est.

The highest annual per capita household income levels are found among members engaged in self-employed business while the lowest levels are found among members engaged in agriculture. The highest mean income is found among members engaged in self-employed business at US$1,583 while the lowest mean income is found among members engaged in agriculture at US$ 535. The highest median incomes are found among members primarily occupied as private sector employees at US$955 and in "other" occupations at US$997, while the lowest median is found among those engaged in agriculture at US$226.

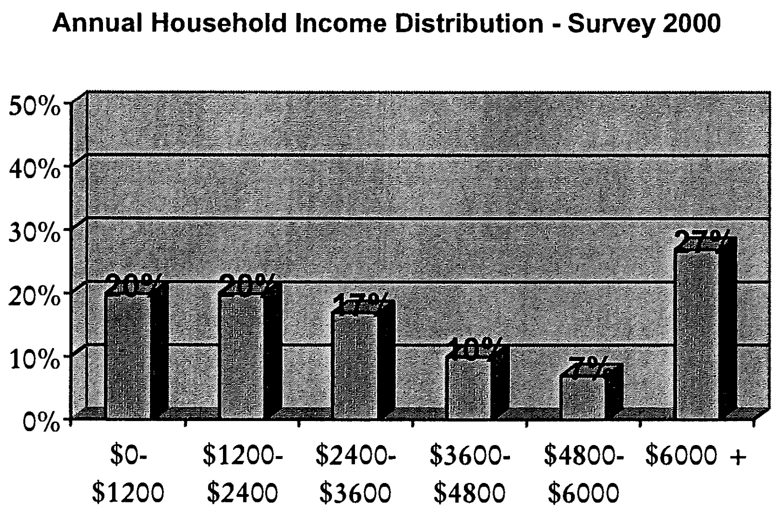
Table 22. Annual Per Capita Survey 2000 Household Income* by Occupation (in US$)

Occupation of Respondent	Mean	N	Median
Self-employed Agriculture	$535	106	$226
Self-employed Business	$1,583	237	$840
Public Sector Employee	$1,050	54	$744
Private Sector Employee	$1,442	66	$955
Homemaker	$639	29	$411
Unemployed	$547	4	$523
Other	$1,284	7	$997

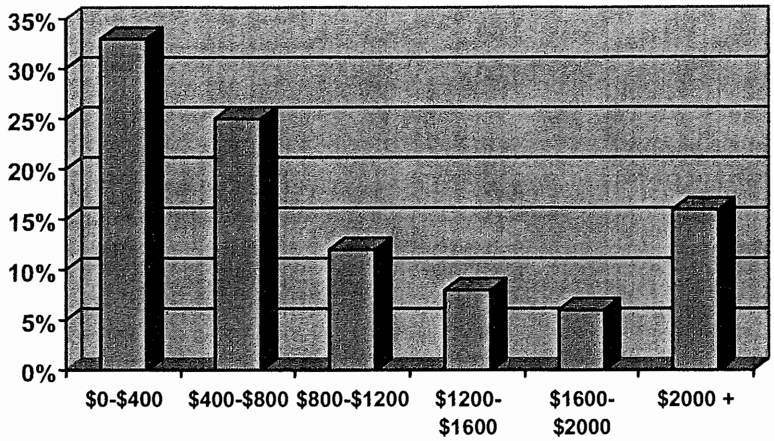
Note: Survey 2000 defines "household per capita income" as the total household income (of the respondent, spouse, and other household members) divided by number of people in the household.

Breadth: Income Distribution of Survey Respondents' Household Income

The highest concentrations of Survey 2000 respondents' households are in the lowest and highest income ranges. Forty percent of respondents have annual household incomes of less than US$2,400, while 27% fall in the highest income category of US$6,000 or more. The middle level categories have smaller concentrations of credit union members.



Annual Per Capita Household Income Distribution - Survey 2000



Analysis of annual per capita household income, defined as total income earned by all household members divided by the total number of household members shows over half of respondents' belong in the lowest 2 income brackets, followed by over 15% in the highest income bracket.

Table 24: Annual Per Capita Survey 2000 Respondent Household Income by Wealth Quintile

Wealth Quintile*	Mean	N	Median
1st Quintile	$763	53	$530
2nd Quintile	$805	65	$411
3rd Quintile	$992	58	$653
4th Quintile	$1,245	61	$900
5th Quintile	$1,992	54	$1,704

Note: Survey 2000 defines "household per capita income" as the total household income (of the respondent, spouse, and other household members) divided by number of people in the household.
*For discussion of wealth quintiles, see page 25.

Only the cases with complete wealth information (291 out of 764) are included in this report's discussion about wealth. This accounts for sample size differences among wealth quintiles. As would be expected, household per capita income rises with increasing wealth levels.

Depth: Households Below the Poverty Line

We measure two levels of the poverty line:

(1) Extreme Poverty Line: That Population with Income Below $1/day
(2) General Poverty Line: That Population with Income Below $2/day

Table 25: Survey 2000 Annual Per Capita Household Income by Poverty Line

	Extreme Poverty Line of $1/Day				General Poverty Line of $2/Day			
	Below $1/Day		Above $1/Day		Below $2/Day		Above $2/Day	
	N	%	N	%	N	%	N	%
Total Sample	157	31%	346	69%	274	55%	229	46%
Wealth Quintile*								
1st Quintile	18	34%	35	66%	35	66%	18	34%
2nd Quintile	30	46%	35	54%	50	77%	15	23%
3rd Quintile	19	33%	39	67%	36	62%	22	38%
4th Quintile	13	21%	48	79%	25	41%	36	59%
5th Quintile	4	7%	50	93%	10	19%	44	81%
Occupation of Respondent								
Self-employed Agriculture	72	68%	34	32%	88	83%	18	17%
Self-employed Business	51	22%	186	78%	108	46%	129	54%
Public Sector Employee	11	20%	43	80%	26	48%	28	52%
Private Sector Employee	5	8%	61	92%	25	38%	41	62%
Homemaker	14	48%	15	52%	22	76%	7	24%
Unemployed	2	50%	2	50%	2	50%	2	50%
Other (Retired, Student, Invalid)	2	29%	5	71%	3	43%	4	57%

Note: Survey 2000 defines "household per capita income" as the total household income (of the respondent, spouse, and other household members) divided by number of people in the household.
* For discussion of wealth quintiles, see page 30.

Thirty one percent of Survey 2000 respondents' per capita annual household income falls below the extreme poverty line (below US$1 per day), and 55% of Survey 2000 respondents' per capita annual household income falls below the general poverty line (below the US$2 per day). As would be expected, the highest incidence of income levels below the poverty line fall into the lower wealth quintiles. Agricultural producers report the highest incidence of annual per capita household income below the poverty lines: 68% below the extreme poverty line and 83% below the general poverty line. On the other hand, 22% of self-employed business entrepreneurs have incomes below the extreme poverty line and 46% below the general poverty line.

WEALTH

Assets are a crucial determinant of credit access and production behavior in general. For example, the ownership of land is an important determinant of access to credit since it serves as collateral. Thus, farmers with little or no land are less likely to access credit and will be less likely to engage in the production of crops, especially those that require costly inputs, such as lucrative export crops.

In our discussion:

- **Business assets** include: land and buildings, machinery and equipment used in the business, vehicles owned and used by the business, and inventories;
- **Agricultural assets** include: land, livestock and agricultural machinery; and
- **Residential assets** include: all residential properties owned by the respondents and their spouses, and any vehicles owned which are not used for business or agriculture. Out of the 764 respondents, 174 do not own their own home and 84 did not give a value for their homes. For these 84 households, the average value of a home was substituted as their home value.

We refer to both "total household assets" and "non-financial household assets", which are defined as:

Total household assets =Σsavings accounts +business assets(% of business owned by the household) +agricultural assets + residential assets

Non-financial household assets=Σ business assets (% of business owned by the household) +agricultural assets + residential assets.

The "non-financial household asset" function omits savings and will be used when assets are being used to explain savings behavior. This function will also be used when Survey 2000 is being compared to Survey 1997; the latter analyzed only non-financial household assets.

Survey 2000 respondents were divided evenly into five groups of ascending wealth levels, or quintiles, and comparisons were made across the quintiles. The quintiles are defined as:

- Wealth Quintile 1= US$ 0 – 2,629
- Wealth Quintile 2= US$ 2,629 – 6,992
- Wealth Quintile 3= US$ 6,992 – 14,624
- Wealth Quintile 4= US$ 14,624 – 28,964
- Wealth Quintile 5= US$ 28,964 +

Results presented in Table 26 suggest that there is a statistically significant relationship between *wealth and RCUP CUs*, *wealth and respondent occupation* and *wealth and respondent household income*.[7] This suggests that that the differences across these variables are due to differences that exist among the survey respondents, as opposed to differences that exist because of chance. In other words, if we were to analyze the same variables for a different set of respondents from the same credit unions at the same point in time, then there is some probability that the same patterns among wealth and credit union, wealth and occupation, and wealth and income would appear. However, these results should be interpreted with caution since the respondents with complete information about wealth make up a relatively small sample (291).

Wealth and RCUP CU

There is a strong statistically significant relationship between wealth and credit union (p=.00). Members of Moderna, Visión and La Unión are among the wealthiest in the sample: at least 30% of their members are in the highest wealth quintile. Members of credit unions Iaguei and Dinámica are among the poorest with respectively 47% and 42% of their members in the lowest wealth quintile (less than US$ 2,629).

Table 26: Household Wealth Quintiles for Survey 2000 Respondents						
	1st Quintile	2nd Quintile	3rd Quintile	4th Quintile	5th Quintile	Chi-square
Credit Union						
Avance	15%	21%	18%	23%	23%	
Moderna	10%	8%	10%	42%	30%	
Central, Jinotepe	20%	23%	33%	10%	13%	
Iaguei	47%	14%	19%	14%	6%	
Integral	9%	21%	24%	21%	24%	
La Unión	14%	14%	21%	21%	30%	
Visión	13%	13%	29%	10%	35%	
Económica	15%	23%	29%	15%	18%	
Capitalizadora	29%	29%	12%	24%	6%	
Dinámica	42%	27%	19%	8%	4%	
Mujeres Agropecuarias	22%	22%	22%	15%	19%	
Profesional	24%	36%	8%	16%	16%	
Unica	11%	25%	11%	36%	18%	χ^2=89.71 (p=.00)
Gender of Respondent						
Male	16%	19%	23%	23%	19%	
Female	24%	21%	18%	17%	20%	χ^2=7.19 (p=.126)
Occupation of Respondent						
Self-employed Agriculture	19%	21%	23%	20%	17%	
Self-employed Business	13%	19%	25%	21%	22%	
Public Sector Employee	28%	22%	20%	11%	19%	
Private Sector Employee	29%	14%	8%	25%	24%	
Homemaker	33%	33%	15%	8%	11%	
Other (Retired, Student, Invalid)	67%			33%		χ^2=42.75 (=.01)
Household Income						
$0 to $1,200	27%	40%	14%	13%	6%	
$1,200 to $2,400	29%	25%	24%	16%	6%	
$2,400 to $3,600	15%	30%	20%	24%	11%	
$3,600 to $4,800	24%	9%	24%	33%	9%	
$4,800 to $6,000	21%	5%	42%	21%	11%	
$6,000 +	4%	12%	14%	23%	47%	χ^2=93.89 (p=.00)
Years of Membership						
Under 2 Years	28%	22%	16%	18%	16%	
2 to 5 Years	23%	21%	20%	18%	18%	
5 to 10 Years	14%	20%	22%	20%	24%	
More than 15 Years	12%	16%	21%	28%	23%	χ^2=13.87 (p=.31)

Wealth and Occupation

There is a statistically significant relationship between wealth and occupation (p=.01). Of Survey 2000 respondents pertaining to the economically active population (EAP), private and public sector employees belong to households with the lowest wealth quintiles, with a respective 29% and 28% of households in the lowest wealth quintile. Fifty percent of public employee households are grouped in the lowest two wealth categories reflecting low compensation and suggests an inability among public workers to accumulate wealth. Private sector workers are bunched both at the bottom with 43% in the lower wealth levels and 49% at the top wealth levels.

Households that are self-employed in either agriculture or business are least represented in the lowest wealth category. Self-employed agricultural households are fairly evenly distributed across all five categories of wealth, ranging from 17% to 23%. Sixty eight percent of self-employed business households are in the top three wealth ranges, suggesting that self-employed business owners might be slightly more successful at accumulating assets.

Wealth and Income
There is a clear and unsurprising statistically significant relationship between household wealth and household income (p=.00). A greater share of lower income households is found in lower household wealth groups and vice versa. The highest income group stands with only 4% of households in the first quintile and 47% in the fifth quintile.

Wealth and Gender
Female credit union members tend to belong to households of lower wealth levels. Forty five percent of female respondents belong to households in the two lowest wealth categories, compared to 35% of the male members. On the other hand, 42% of male members belong to households in the top two wealth categories, compared to 37% of the female members. However these differences are not statistically significant (p=.126). In other words, the difference observed between males & females and wealth could be due to chance.

Wealth and Years of Membership
There is also a similar pattern of positive correlation between wealth and the number of years of credit union membership of the respondents. Those with memberships in the under 2 year and 2-5 year categories have the highest number of households in the lowest wealth quintile while members of more than 10 years have the largest number of households in the 4th and 5th quintiles. However these differences are not statistically significant (p=.31). In other words, the difference observed between respondents and wealth could be due to chance.

Table 27: Average Business, Agricultural and Residential Assets—Survey 2000 Respondents

	Business Assets	Agricultural Assets	Residential Assets
Median - Total Sample	$320	$0	$4,160
Mean - Total Sample	$3,322	$5,887	$10,150
CU	**Mean**	**Mean**	**Mean**
Avance	$4,738	$3,880	$10,095
Moderna	$3,670	$1,126	$19,887
Central, Jinotepe	$869	$7,048	$4,753
Iagueil	$2,533	$334	$5,455
Integral	$4,821	$5,274	$11,663
La Unión	$9,257	$1,717	$22,056
Visión	$4,397	$3,299	$15,271
Económica	$3,144	$5,805	$9,255
Capitalizadora	$946	$10,086	$6,185
Dinámica	$1,606	$1,078	$2,706

	Business Assets	Agricultural Assets	Residential Assets
Mujeres Agropecuarias	$719	$21,460	$4,791
Profesional	$4,139	$1,190	$9,669
Unica	$868	$22,207	$4,944
Gender of Respondent			
Male	$4,097	$6,984	$10,105
Female	$2,586	$4,871	$10,193
Primary Occupation			
Self-Employed Agriculture	$1,107	$17,037	$5,068
Self-Employed Business	$5,928	$2,590	$13,322
Public Sector Employee	$585	$1,943	$9,341
Private Sector Employee	$1,371	$4,183	$10,425
Homemaker	$2,285	$5,606	$6,769
Unemployed	$69	$245	$5,157
Other (Retired, Student, Invalid)	$403	$485	$5,816
Household Income			
$0 to $1,200	$716	$8,000	$2,981
$1,200 to $2,400	$1,271	$3,896	$5,736
$2,400 to $3,600	$2,871	$3,056	$8,790
$3,600 to $4,800	$3,411	$3,647	$8,531
$4,800 to $6,000	$3,249	$3,221	$9,574
$6,000 +	$8,739	$6,249	$18,854
Age Group of Respondent			
Younger than 25	$1,092	$736	$844
25-34	$3,125	$6,659	$7,955
35-44	$3,884	$4,857	$10,444
45-54	$3,802	$7,582	$12,108
55-64	$2,846	$5,652	$12,208
65+	$1,986	$5,419	$11,661

The average household wealth level for all Survey 2000 respondents is US$20,640 (compared with the 1997 survey average of US$17,000). The median household wealth level is US$10,480. As in 1997, residential assets accounted for the largest share of this wealth (59% in 1997 and 50% in 2000). In the Survey 2000, agricultural assets and business assets comprise 31% and 18% of total wealth, respectively. Savings only account for 1% of total household wealth. The mean residential asset level is US$10,150 with a median of US$4,160. In comparison, the mean and median for business assets are US$3,322 and US$320 respectively while the mean and median for agricultural assets are US$5,887 and US$0 respectively.

Average total wealth levels are highest among members of Mujeres Agropecuarias at US$ 33,274, Unica at US$ 33,199, and La Unión at US$ 31,478, compared to highest average wealth levels of US$25,400 of Moderna found in Survey 1997. Respondents with the lowest average wealth levels are found among the members of Dinámica and Iaguei with wealth levels of US$6,525 and US$ 7,751 respectively. Average residential (urban housing) assets are the highest for La Unión and Moderna. Average agricultural assets are much higher among members of Mujeres Agropecuarias and Unica than among the other credit unions.

Women have, on average, approximately 60% the value of business assets, approximately 70% the amount of agricultural assets, and about the same value of residential assets as men have. The average level of business and residential assets increases with increasing income levels. Respondents in the lowest income group have average business assets of US$716 and average residential assets of US$2,981, while those in the highest income category have average business assets of US$8,739 and residential assets of US$18,854. Respondents in the lowest income category have the highest value of average agricultural assets (US$8,000), possibly reflecting the large landholding of a small number of owners. Average agricultural assets stay relatively constant through the middle four income groups, only rising again among respondents with the highest incomes, of at least US$6,000.

Table 28: Characteristics of the Home	
Houses made of carton or plastic	0.3%
Houses with a roof and dirt floor.	21%
Houses with roof, floor, and outside toilet or latrine	36%
Houses with a roof, floor, and inside bathroom	43%

In addition to the asset value of a member's residence, we also examine the quality of a member's living conditions. Over 21% of members live in houses with dirt floors. Those in carton or plastic dwellings are few. Only 43% of members have indoor plumbing facilities. Other household characteristics indicated that 3% of respondents did not have access to a public water network or well, receiving water by river, springs, or other methods. Seven percent of respondents did not receive any type of electrical service or lighting.

SAVINGS BEHAVIOR

One of the principal objectives of RCUP's strategy is to promote the growth of savings. RCUP CUs attract new members who are net savers and encourage savings among existing credit union members. This section provides a profile of RCUP CU's members' demand for and use of savings services over time and explores whether savings demand is associated with occupation, gender, income and asset level.

Motive for Savings

Over half of Survey 1997 respondents (56%) were saving as a safeguard against emergencies and 40% were saving to start, expand or operate a business. For Survey 2000 respondents, the most frequent motive for savings was again as a safeguard for emergencies. However, there was a greater distribution of motives. Emergencies stood at 34%, followed by future investment at 23%; business was third at 14% and agriculture was fourth at 12%.

The most frequent motive for savings remains a safeguard for emergencies. Among those self-employed in agriculture, the primary reason for saving was for 'agriculture' (45%). A large number of self-employed business entrepreneurs chose 'business' (27%) as their primary reason for saving, while 32% indicate that the primary reason for savings was emergencies. Among private and public employees, the primary reason remained 'emergencies' at 40% and 46% respectively, followed by 'saving for the future'.

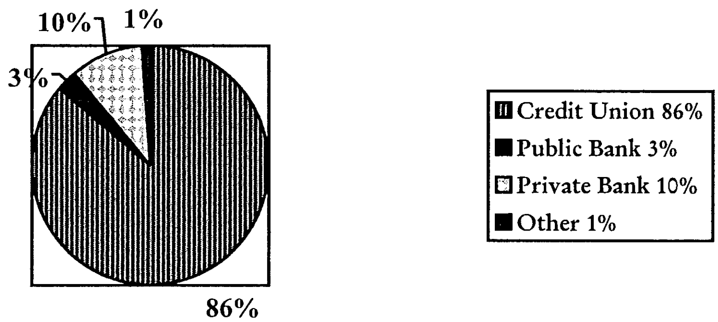
Table 29: Survey 2000 Respondents' Motives for Saving

	Home Improvement	Business	Agriculture	Vehicle for Personal Use	Personal Expenses	Emergencies	Retirement	Education	Future/ Investment	Other	No Info.
All Respondents	3%	14%	12%	1%	8%	34%	0%	1%	23%	3%	1%
Occupation of Respondent											
Self-employed Agriculture	2%	2%	45%	1%	3%	27%			13%	5%	2%
Self-employed Business	3%	27%	1%	1%	8%	32%		1%	24%	1%	1%
Public Sector Employee	5%	3%	2%	2%	13%	46%	2%	3%	22%	3%	
Private Sector Employee	3%	2%	5%	2%	12%	40%		2%	32%		1%
Family Worker			50%		50%						
Homemaker	2%	2%	10%	2%	12%	40%		2%	19%	6%	6%
Unemployed			20%			20%			40%	20%	
Retired						100%					
RCUP CU											
Avance	7%	4%			3%	61%		1%	23%		
Moderna	8%	12%			5%	39%		3%	33%		2%
Central, Jinotepe	2%	7%	32%	3%	15%	23%			13%	5%	2%
Iaguei	1%	25%			6%	44%			24%		
Integral	1%	17%	13%	1%	9%	35%			21%	1%	3%
La Unión		13%	3%		13%	35%		2%	33%		2%
Visión		28%		2%	6%	32%			30%	2%	
Económica	4%	12%	2%		6%	45%		2%	29%		
Capitalizadora		16%	26%		6%	20%			20%	8%	4%
Dinámica	10%	14%	8%		4%	30%		4%	14%	16%	
Mujeres Agropecuarias	4%	6%	39%		12%	22%			10%	2%	6%
Profesional	2%	28%	6%	8%	16%	16%	2%		20%	2%	
Unica	2%	2%	42%	2%	8%	22%		2%	20%		

Where RCUP CU Members Place the Majority of their Savings

Of the Survey 2000 respondents, 86% deposit the majority of their savings at RCUP CUs. This figure falls as low as 70% for Moderna and Iaguei and rises as high as 96% at Avance. The percentage has fallen from 92% in 1997 as the credit unions have attracted new members who save at both RCUP CUs and private banks.

Institution with Majority of Household Savings



RCUP CUs' main savings service competitors are private banks. Ten percent of members identified private banks as their primary savings institutions in 2000, compared to 1% in 1997. There has also been a decrease in the reliance on public banks as the primary savings institution of credit unions households. In 1997, 6% of credit union households chose public banks as their primary savings institution while only 3% of credit union households chose public banks in 2000. The change reflects both a withdrawal of confidence in the public banks and an attraction of new members who typically used private banks previously.

Table 30: Survey 2000Respondent Savings by Institution				
	Credit Union	Public Bank	Private Bank	Other
TOTAL	86%	3%	10%	1%
CU				
Avance	96%	1%	3%	
Moderna	79%	8%	12%	1%
Central, Jinotepe	90%	3%	7%	
Iaguei	79%	10%	10%	1%
Integral	85%	3%	10%	2%
La Unión	84%		16%	
Visión	82%	2%	16%	
Económica	80%		18%	2%
Capitalizadora	84%		10%	6%
Dinámica	96%		4%	
Mujeres Agropecuarias	94%	2%	4%	
Profesional	88%		12%	
Unica	80%	2%	16%	2%
Household Wealth Quintile *				
1st	92%		8%	
2nd	92%	1%	6%	1%
3rd	92%	4%	4%	
4th	80%	4%	14%	2%
5th	68%	4%	23%	5%
Household Income				
$0 to $1,200	97%		3%	
$1,200 to $2,400	94%	2%	4%	
$2,400 to $3,600	92%	1%	7%	
$3,600 to $4,800	81%	2%	15%	2%
$4,800 to $6,000	86%	3%	8%	3%
$6,000 +	69%	7%	21%	3%

* Wealth quintiles refer to non-financial household wealth, which does not including savings (see p30).

Lower income groups tend to more frequently place their savings in RCUP CUs than in other financial institutions. As wealth and income of households increase among respondents, the institution type wherein these RCUP CU members place the majority of their savings shifts from credit unions to banks, mostly private. The poorest respondents have the highest incidence of choosing credit unions for their primary financial institution at 92% in the lowest wealth category and 97% in the lowest income category, then falling to 68% in the highest wealth category and 69% in the highest income category. The percentage of households that place the majority of savings in private banks rises to 23% in the highest wealth category and 21% in the highest income category. Respondents are more likely to choose a private than a public bank as their primary depository of savings in all income and wealth groups.

Reasons for Choosing Primary Financial Institution

Table 31: Reasons Respondents Choose their Primary Financial Institution

	Highest Interest Rate	Most Secure	Access to Money	Checking Account	Require-ment for Loans	Loyalty	Repu-tation	Most Convenient Schedule	Quality of Service	Most Convenient Location	Other
2000 Survey	10%	11%	10%	1%	47%	4%	8%	0%	0%	4%	5%
1997 Survey	3%	6%	5%	0%	51%	9%	3%	0%	13%	3%	6%
2000 Respondents According to Choice of Primary Savings Institution											
CU	10%	8%	10%	0%	54%	3%	6%	0%		5%	4%
Public Bank	15%	25%	5%	10%		10%	25%				10%
Private Bank	4%	28%	13%	9%	8%	14%	19%				6%

Survey respondents' most common reason for choosing a credit union as their primary savings institution is still to acquire access to loans. Almost 47% of members who deposit most of their savings at a credit union do so to meet loan requirements. This percentage has fallen four percentage points from 51% of the overall 1997 survey respondents. A large group of credit union members continue to perceive their institution as primarily a source of loans. Whereas only 8% of those who choose private banks as their primary financial institution choose such as a requirement for access to credit, 54% of those who chose credit unions as their primary deposit taking institution in 2000 still see their savings behavior motivated by access to credit. This motivation is followed by 11% who choose the institution because it is the most secure and 10% who choose the institution because it offers the highest interest rates.

Notably, requirements for loans falls as a motive for choosing a savings institution from 51% for the lowest income group to 43% for the highest income group and from 45% for the lowest wealth group to 41% for the highest wealth group. It stands at 60% for those engaged in agriculture to 44% for those self-employed in business.

Household Savings Behavior

The total household savings is approximately three times larger than the mean and median values of RCUP CU individual savings accounts. If we sum the total savings of all members in respondent households to include all savings (including shares, deposits and checking) in all institutions, the mean is US$294 with a median of US$ 76. Thus, the total household savings is slightly less than three times the individual account mean of US$116 and median of US$32 from the full population of all credit union savings accounts (refer to Table 9). The mean shares account is

US$56 with a median of US$20. Deposits include: regular savings, fixed term deposits, youth savings, and special savings deposits. Average total savings is the average of all savings accounts across the household for all institutions.

Average total savings per household are highest for Integral (US$602) and La Union (US$456) and lowest for Capitalizadora (US$60) and Mujeres Agropecuarias (US$77).

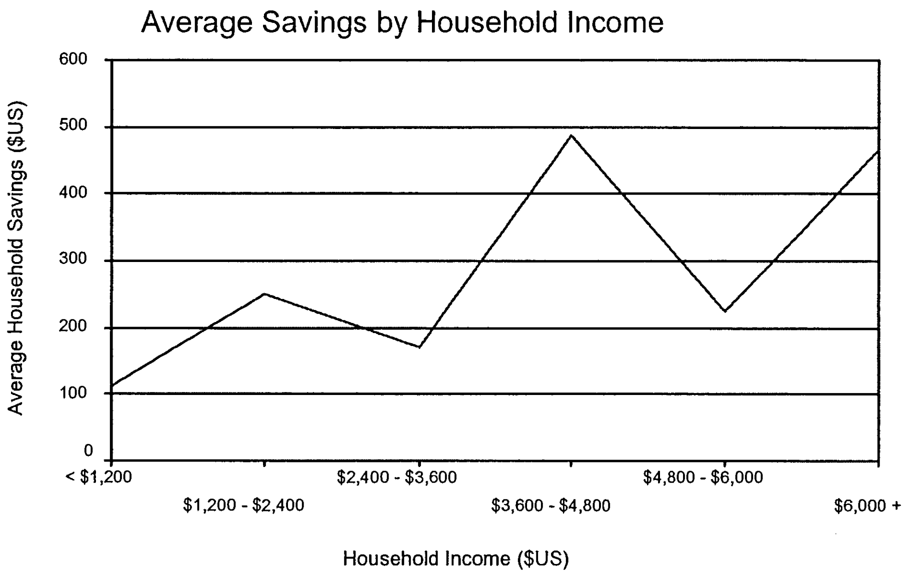
Table 32: Savings Behavior for Survey 2000 Respondent Households (in US$)

	Avg. Total Savings Per Household	Avg. Total Shares Per Household	Avg. Total Deposits Per Household	Avg. Total Checking Per Household
Median – Total Sample	$76	$8	$32	$0
Mean – Total Sample	$294	$33	$218	$26
Credit Union				
Avance	$229	$25	$199	$22
Moderna	$274	$22	$212	$27
Central, Jinotepe	$217	$36	$157	$3
Iaguei	$437	$22	$573	$9
Integral	$602	$19	$272	$150
LaUnion	$456	$90	$316	$15
Visión	$340	$73	$237	$10
Económica	$220	$21	$107	$20
Capitalizadora	$60	$18	$41	$0
Dinamica	$141	$15	$114	$2
Mujeres Agropecuarias	$77	$21	$45	$0
Profesional	$359	$27	$259	$30
Unica	$164	$42	$128	$7
Household Income				
$0 to $1,200	$112	$19	$71	$6
$1,200 to $2,400	$252	$37	$164	$4
$2,400 to $3,600	$171	$32	$118	$11
$3,600 to $4,800	$487	$37	$370	$25
$4,800 to $6,000	$226	$31	$260	$0
$6,000 +	$466	$53	$421	$43
Wealth Quintile of Household*				
1st Quintile	$134	$25	$92	$3
2nd Quintile	$238	$28	$186	$3
3rd Quintile	$321	$45	$216	$12
4th Quintile	$282	$35	$194	$26
5th Quintile	$481	$45	$366	$42

* Wealth quintile refers to non-financial household wealth, which does not including savings (see p30).

Household Savings Behavior by Household Income

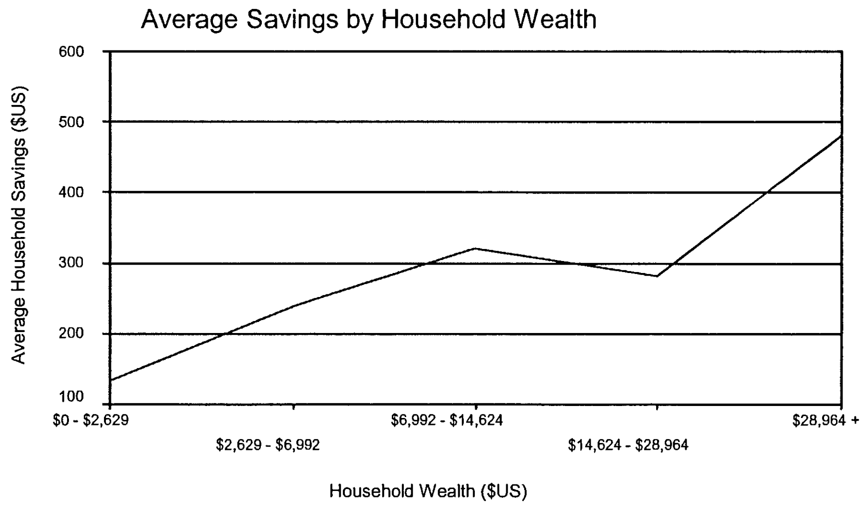
Average savings per household are lowest for the lowest income group at US$112, rising to US$487 and US$466 for the fourth and highest income groups. Although there is not a consistent increase in average household savings across income groups, the overall trend is upward.



Lower income households display a higher average propensity to save than higher income households. The average savings amount for the lowest earning respondents represents 19% of their average income, whereas the average savings amount for the highest earning respondents represents 7% of their average income.[8]

Household Savings Behavior by Wealth

Average household savings shows a more consistent upward trend across wealth levels, from US$134 for the lowest wealth groups to US$481 for the highest wealth quintile.



If household savings balances are disaggregated the by type of institution, the distribution total household accounts across financial institutions reveals much lower average balances in credit union accounts. Credit union share accounts average US$53 and deposit accounts average US$194. Public bank deposit accounts average US$ 812 while private bank accounts average US$665. Credit union average deposit accounts have increased since 1997 both due to savings growth and transfer of funds from shares to deposits. The average balance of savings accounts in all institutions has increased since 1997 with the exception of credit union shares accounts and "other" deposit accounts. Credit union shares accounts have been de-emphasized during RCUP.

Table 33: Average Household Savings by Type of Financial Institution: Survey 2000 Compared to Survey 1997 (in US$)

	CU Shares Account	CU Deposit Account	Public Bank Deposit Account	Private Bank Deposit Account	Other Deposit Accounts	Public Bank Checking Account	Private Bank Checking Account
	N=367	N=427	N=23	N=68	N=6	N=7	N=25
2000 Survey Households	$53	$194	$812	$665	$152	$$506	$$586
	N=n/a	N=n/a	N=n/a	N=n/a	N=n/a	N=n/a	N=n/a
1997 Survey Households	$168	$78	$531	$484	$400	$306	$80

Deposit Accounts include savings, youth savings, special accounts, and other.
Other Deposit accounts include Finance Company, Communal Bank, and NGO.

The distribution of total household credit union deposit accounts is concentrated in the bottom three size ranges: 31% are in accounts between US$81-400, 38% are in accounts below US$40 and 22% are accounts between US$ 41-80. If we compare the new households in the 2000 sample with those that were repeat survey respondent households from the 1997 survey, we find a larger percentage of households with small deposit savings ($0 to 80) among the newer households at 64% versus the longer time members at 41%. Longer time member households have a larger share of savings deposits in the higher range of US$401 or greater at 15% (versus 8% among newer households). Similarly, the average household savings for repeat respondent households, US$491, is much higher than the average household savings of US$260 for new entrants. These findings indicate that those households that have been with the credit unions for a longer period of time have been able to accumulate higher amounts of savings while newer households coming into the credit unions are in earlier periods of their savings accumulation trajectory.

Comparisons of the 2000 sample data with the 1997 sample data indicate that for similar size ranges, the 2000 sample shows a higher percentage of deposit accounts in the higher savings amount ranges.

Table 34: Household Credit Union Deposit Distribution (in US$)

	%	%	%	%	%
Range	0–$40	41–80	81–400	401–800	**More than** 800
Survey 2000: **Total Household**	38%	22%	31%	5%	4%
Survey 2000: **New Households**	42%	22%	28%	3%	4%
2000 **Sample Repeat Households** 1997	21%	20%	44%	12%	3%
	$1-50	$51 - 100	$101-500	$501-1,000	$1,001+
1997 **Sample – Total Household**	32%	19%	43%	5%	1%
	$1-45	$46-100	$101-500	$501-1,000	$1,001+
All RCUP CU Individual Deposit Accounts, 6/2000	70%	13%	13%	2%	2%

Of all RCUP CU individual credit union deposit accounts, 70% were below accounts below US$45 (refer to Table 10). Of Survey 2000 respondent households, 38% were below US$45. This reflects that households have more than one individual account, which they place in the credit union producing a higher percentage of household total deposits in the higher amount levels.

BORROWING BEHAVIOR

Survey 2000 respondents were asked to report on all loans, including both cash and in kind (trader credit), received or outstanding in 1999. The information is used to profile members' use of lending services provided by RCUP CUs and to evaluate members' use of the credit services provided by other formal and informal sources of credit, such as banks, non-governmental organizations (NGOs) and moneylenders. This section explores demographic and economic characteristics that help to explain differences in borrowing behavior.

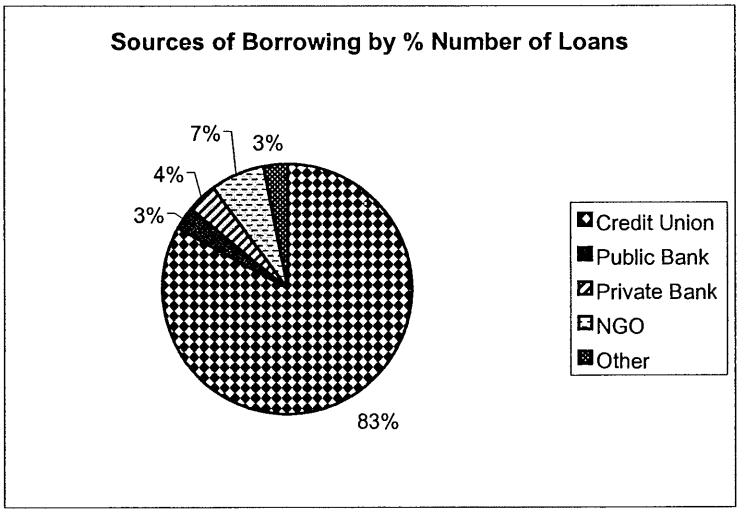
Table 35: Number of Loans Held by Survey 2000 Respondents' Households

N=742	
Zero	20%
One	31%
Two	27%
Three	13%
Four	5%
Five	2%
Six	2%

According to Survey2000, most households have accessed one or two loans in the year 1999. Thirty-one percent have borrowed from one loan, and 27% have taken out two loans. Thirteen percent have borrowed three loans, while a few households have taken out between four and six loans. Twenty percent of households have not borrowed at all.

Sources of Household Borrowing

According to Survey 2000, RCUP CUs remain the predominant source of credit to their member households in the 2000 sample, accounting for 83 % of the number of loans, up from 70% in 1997, and approximately 70% of the total amount of loans granted. The second most important source of loans is private banks, which provide only 4% of the loans but 12% of the total amount. This suggests that members access larger loans from private banks. This is followed by village banks, which account for 7% of the number of loans and 7% of the volume of loans.



Both public banks and moneylenders figure much less predominantly than in previous surveys suggesting credit union substitution for reduced public bank lending and replacement of moneylender operations. Only 3% of the number and 6% of the volume of loans were from public banks. Other sources – including money lenders, finance companies, merchants, family and friends, the agro industry, and production coops – account for 3% of the number and 5% of the volume of loans accessed by RCUP members.

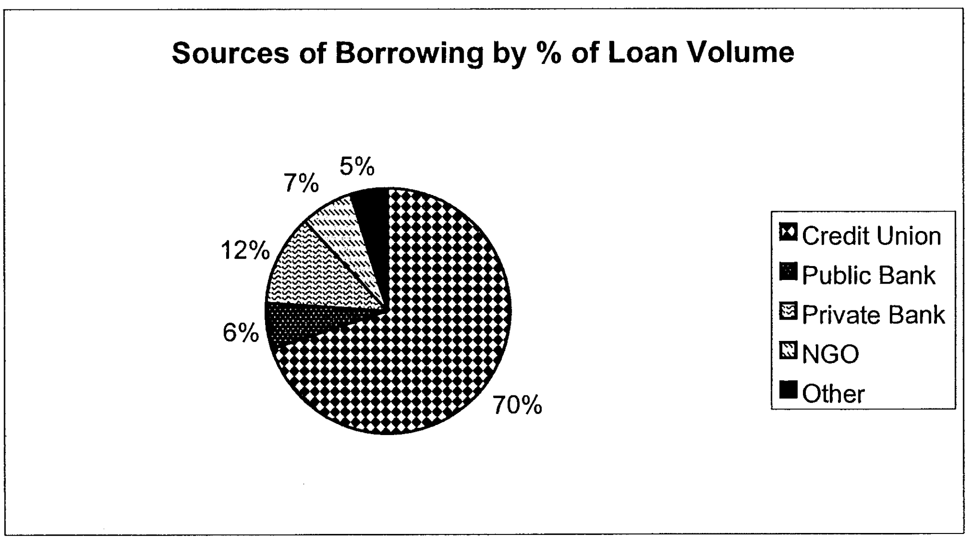
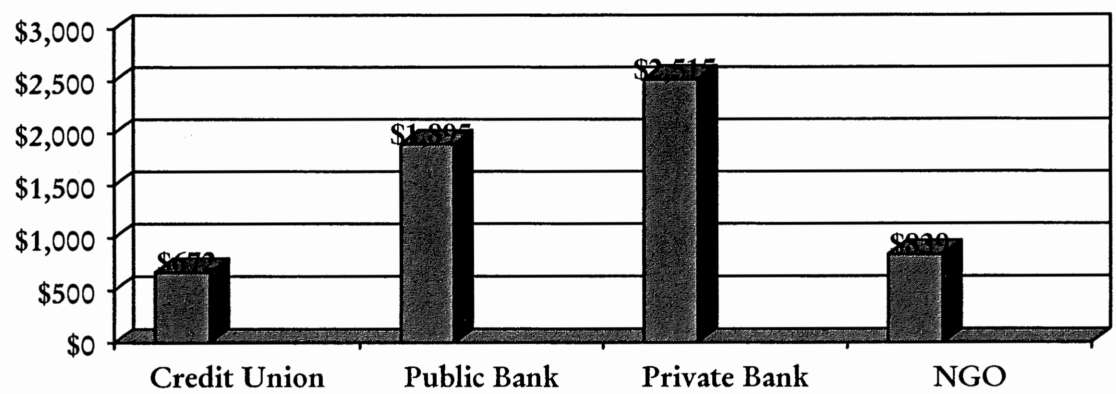


Table 36: Lenders' Share of Total Household Loans: Number of Accounts and Volume of Loans																						
Credit Union	Credit Union		Public Bank		Private Bank		Finance Co.		NGO/ Village Bank		Money lender		Merchant / Trader		Agro Industry		Family/ Friend		Production Co-op		Other	
	% of		% of		% of		% of		% of		% of		% of		% of		% of		% of		% of	
	N	Vol.	N	Vol.	N	Vol.	N	Vol.	N	Vol.	N	Vol.	N	Vol.	N	Vol.	N	Vol.	N	Vol.	N	Vol.
Avance	98%	92%	1%	6%							1%	2%										
Moderna	70%	55%	6%	14%	15%	24%	1%	0%	6%	6%	2%	1%										
Central, Jinotepe	87%	86%			4%	4%	1%	3%	2%	1%	2%	2%							3%	4%		
Iaguei	93%	82%	1%	1%	3%	15%			4%	2%												
Integral	78%	77%	1%	1%	3%	3%			14%	13%	1%	0%	1%	2%			2%	1%			1%	3%
La Union	83%	64%	2%	12%	2%	1%	1%	1%	10%	13%					2%	9%						
Visión	86%	57%	5%	7%	5%	32%			1%	0%									2%	4%		
Económica	66%	42%	17%	17%	5%	31%			6%	4%	2%	1%							5%	6%		
Capitalizadora	86%	84%			2%	5%			2%	2%	1%	0%	1%	1%	2%	1%			1%	0%	4%	7%
Dinamica	91%	98%			4%	1%			4%	1%												
Mujeres Agropecuarias	74%	73%			3%	17%	1%	1%	13%	6%							3%	0%			6%	3%
Profesional	78%	53%	5%	13%	9%	18%			6%	16%	1%	0%										
Unica	84%	75%	1%	1%					12%	20%	1%	3%									2%	2%

AVERAGE LOAN SIZE BY SOURCE



The average size of household loans from credit unions tends to be much smaller than the average size of loans from banks. The average size of household loans from credit unions, at US$672, tends to be one quarter the average size of loans from private banks, at US$2,515, and less than one third the size of loans from public banks, at US$1,895. Note that the average credit union loan average in the 1997 survey was US$690, not significantly different than the average credit union loan size in 2000. Surprisingly, for this sample, the average household loans from NGOs and village banks, at US$839, is larger than that of credit unions as well. Informal loans from family or friends are smallest at an average of US$174 and tend to be found at lower wealth levels only.

Table 37: Average Loan Size by Type of Lender and Household Wealth Groups* (in US$)

	Credit Union	Public Bank	Private Bank	Finance Co.	NGO/ Village Bank	Money Lender	Merchant/ Trader	Agro Industry	Family/ Friend	Production Co-op	Other Institutions
	N=565	N=29	N=37	N=4	N=57	N=10	N=2	N=2	N=2	N=7	N=9
Total	**$672**	**$1,895**	**$2,515**	**$610**	**$839**	**$740**	**$2,000**	**$2,392**	**$174**	**$1244**	**$1173**
1st quintile	$387		$2,715		$155				$174	$200	
2nd quintile	$423	$720	$160	$240	$339	$80					$600
3rd quintile	$568	$760			$896					$960	$240
4th quintile	$765	$769	$1,983	$240	$742	$1,300	$3,200			$240	$304
5th quintile	$1,110	$3,578	$5,022	$960	$1,878	$967				$1,920	$4,000

* Wealth quintiles refer to total household wealth, including savings.

As household wealth increases, loan size for all institutions increases. Twenty four percent of all public bank loans and 26% of all private bank loans were administered to the wealthiest quintile while only 3 of the 66 households with loans from private or public banks were in the lowest wealth group. The lowest two quintiles are more likely to use other sources of credit such as a family member or friend for credit access.

Household Use of Trader Credit

Supplier credit (i.e. loans in the form of input supplies or merchandise) is a less frequent form of access to credit. Ninety three (or 12% = of survey respondents accessed supplier credit. Still this percentage is higher than the incidence of loans from input suppliers reported to be 6% of households in the 1997 survey. In part, this reflects the membership entry of larger numbers of entrepreneurs who previously relied largely on supplier credit. The 1997 survey on non-member entrepreneurs found that such loans were reported by 23% of the entrepreneur households. Of the 2000 survey sample supplier credit advances, 65% was for agricultural products and 25% was for business inputs.

Table 38: Type of Product Received as Trader Credit

	N=133
Agricultural Products	65%
Business Products	25%
Personal Goods	11%
Other	2%

Comparisons with credit union loans and trader credit indicate that trade credit advances are smaller with an average of US$264 compared to US$672 average credit union loan (refer to Table 37). Of loans in kind (input supplies or goods), 40% are received from credit unions, 18% from merchants and traders, and 17% from agro industry. Average business input advances (US$478) are larger than average agricultural input advances (US$197). Trader credit is, on average, about 70% lower than the loans received from the financial institutions. (The average of all loans received from financial institutions is $857 while the average size of trader credit is $264).

Table 39: Average Household Loan Size by Types of Products Received as Trader Credit (in US$)

	Average Loan Size	# of Loans
Overall	$264	133
Agricultural Goods	$197	87
Business Goods	$478	33
Personal/Consumer Goods	$209	15
Other Goods	$118	3

There is a positive correlation between household income and wealth and size of trader credit. The average trader credit advance is US$91 for the lowest income group, rising to US$1,017 for the highest income group. The mean trader credit advance is US$136 for the lowest wealth group, rising to US$1,687 for the highest wealth group.

Table 40: Average Size of Trader Credit By Household Characteristics

Wealth Quintile*	Mean	# of Loans
1st Quintile	$136	13
2nd Quintile	$104	16
3rd Quintile	$106	18
4th Quintile	$243	18
5th Quintile	$1,687	6
Household Income		
$0 to $1,200	$91	29
$1,200 to $2,400	$111	24
$2,400 to $3,600	$302	10
$3,600 to $4,800	$93	4
$4,800 to $6,000	$507	3
$6,000 +	$1,017	15

*Wealth Quintiles refer to total household wealth, including savings.

Loan Characteristics by Borrowers

Of a total of 1214 loans from all sources, the average loan size was $857. Men's average loan size, US$ 994, is 40% higher than women's average loan size, US$ 708. Women, who represent 53% of the 2000 survey sample, received a proportionate share, 54%, of the number of loans, but--because of their lower average loan size— a lower proportionate share, 45%, of the total volume of loans.

Respondents engaged in self-employed business have the largest average loan sizes. Among occupation groups, self-employed business has the largest average loan size, US$976. This is followed by the self-employed in agriculture with a mean of US$826. Homemakers have the third largest average loan size, at $750. Average loan size for public workers ($506) is slightly smaller than for private sector employees ($$608).

Among age groups, loan size first increases with one's productive years, rising from an average of US$259 among respondent younger than 25 years old, to US$937 among respondents between 25 and 34 years old. Mean loan size remains fairly constant through the 45-54 year age group, then decreases to US$652 for the 55-64 year group as one passes the prime working age. In the oldest age group, the mean is back down to US$465.

Table 41: Average Loan Size for all Survey 2000 Respondents (in US$)

	# of Loans	Average Loan Size
Average Size Loan Per Respondent	1,214	$857
Gender of the Respondent		
Male	558	$994
Female	656	$708
Primary Occupation of Respondent		
Self-employed Agriculture	249	$826
Self-employed Business	628	$976
Public Sector Employee	109	$506
Private Sector Employee	153	$608
Homemaker / Family Worker	62	$750
Unemployed	1	**$120**
Other (Retired, Student, Invalid)	12	$447
Age Groups		
Younger Than 25	28	$259
25-34	242	$937
35-44	411	$877
45-54	322	$930
55-64	143	$652
65 and older	68	$465

	# of Loans	Average Loan Size
Household Groupings By Income		
$0 to $1,200	135	$398
$1,200 to $2,400	164	$662
$2,400 to $3,600	134	$730
$3,600 to $4,800	100	$1,126
$4,800 to $6,000	69	$958
$6,000 +	255	$1,305
Wealth Quintile*		
1st Quintile	93	$458
2nd Quintile	138	$424
3rd Quintile	131	$605
4th Quintile	148	$853
5th Quintile	167	$1,597

*Wealth quintiles refer to total household wealth, including savings.

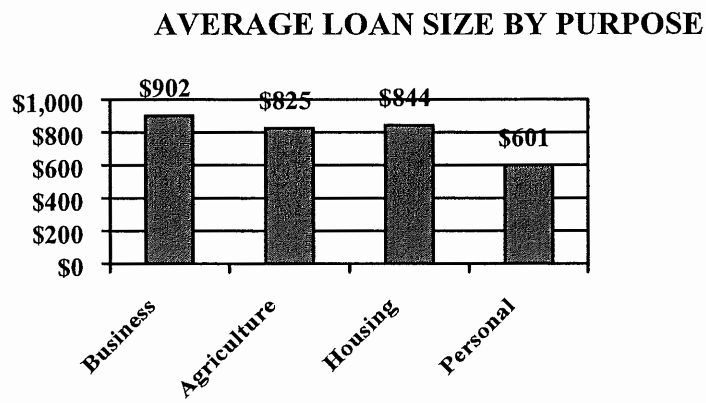
For the Survey 2000 respondents' households, 1214 total loans were accessed from all possible types of lenders; the average loan size was US$857.

- The average loan size for women (US$ 708) is 40% lower than that of men (US$994). Note that this difference decreased since 1997, when men's average loan size US$ 1,156 and women's average was US$ 639.
- Those engaged in self-employed business have a higher average loan size (US$976) than those engaged in agriculture (US$826), homemakers (US$ 750), public employment (US$ 506) and private employment (US$ 608).
- Credit union members between the ages of 25-44, who are in their prime working years, received 54% (down from 66% in 1997) of the number of loans.
- The largest average loans are among those in their prime working age of 25-34 years at (US$937), 35-44 years at (US$ 877) and 45-54 years at (US$930).
- Average loan sizes increase from US$ 398 for the lowest income group to US$1,305 for the highest income group.
- Average loan sizes also increase from US$458 at the lowest wealth quintile to US$1,597 for the highest wealth quintile.

Respondents' loan size increases as wealth assets and income increase. The credit which is made available to the poor tends to be significantly smaller than that received by higher wealth households which can offer greater collateral and higher repayment collateral. The respondents belonging to the wealthiest households, with average loan size of US$1,597,are receiving loans three and a half times as large as the average loan size received by respondents of the poorest households (US$458).

Loan average by income distribution shows a similar pattern, increasing from US$398 to US$1,305. In addition, households in the highest wealth and income categories received the highest number of loans. The highest wealth quintile, representing 20% of the sample, received 25% of the loans, and the highest income category, at 27% of the sample, received 30% of the loans.

Loan Size Distribution by Purpose



The largest average loan size was for business use (US$902), while the smallest average loan size was for personal use at US$601.

Table 42: Average Loan Size by Purpose

	N	%	Mean
Average Size Loan Overall	1214	100%	$857
Average Size Loan for Business or Commercial Use	591	49%	$902
Average Size Loan for Agricultural Sector Use	322	26%	$825
Average Size Loan for Home Use	86	7%	$844
Average Size Loan for Personal Use	206	17%	$601
Average Size Loan for Other Use	13	1%	$1,178

Forty nine percent of household loans were for business or commercial use with an average size of US$902. The next most common loan purpose was agriculture; twenty-six percent of all loans were used for agricultural purposes.

Household Access to Credit Sources

Table 43: Households Soliciting a Loan from a Public or Private Bank in 1999			
	Asked for Loan	Received Loan	
		YES	NO
Total Sample	N=42	88%	12%
Income Group			
$0 to $1,200	N=2	100%	0%
$1,200 to $2,400	N=4	75%	25%
$2,400 to $3,600	N=1	100%	0%
$3,600 to $4,800	N=3	100%	0%
$4,800 to $6,000	N=1	100%	0%
$6,000 +	N=13	92%	8%
Wealth Quintiles			
1st Quintile	N=1	100%	0%
2nd Quintile	N=1	100%	0%
3rd Quintile	N=3	86%67%	33%
4th Quintile	N=10	90%	10%
5th Quintile	N=11	91%	9%

A very small portion (43 households or 6%) of Survey 2000 respondents indicated that their household had asked for a loan from a private or public bank with 88% of that group successful in their application. The majority of those applications were from higher income and wealth groups. There were no significant differences in frequencies of approval or refusal of loan applications across income or wealth levels.

Table 44: Households Soliciting a Loan From a RCUP CU in 1999			
	Asked for Loan	Received Loan	
		Yes	No
Total Sample	N=507	93%	7%
Income Group			
$0 to $1,200	N=62	85%	15%
$1,200 to $2,400	N=64	87%	13%
$2,400 to $3,600	N=60	95%	5%
$3,600 to $4,800	N=41	95%	5%
$4,800 to $6,000	N=26	100%	0%
$6,000 +	N=96	94%	6%

	Asked for Loan	Received Loan	
		YES	NO
Wealth Quintile*		N=467	N=37
1st Quintile	N=47	91%	9%
2nd Quintile	N=59	86%	14%
3rd Quintile	N=51	92%	8%
4th Quintile	N=52	96%	4%
5th Quintile	N=60	95%	5%

*Wealth quintiles refer to total household wealth, including savings.

In 1999, 507 sample households (66%) requested a loan from a credit union. Of those households that asked for a loan from their credit union in 1999, 93% were granted that loan while 7% were denied. The rate of refusal ranges from 15% for the lowest income groups to 0% for the highest income groups. This refusal rate reflects both the applicants' increasing repayment capacity and the credit union's ability to measure the repayment capacity of these groups. The credit union loan applications demonstrate no clear difference in refusal rates for loans across wealth groups.

Table 45: Reasons Why Households Were Denied Loans from RCUP CUs in 1999

	Sample size	Could Not Provide a Guarantee	Incomplete Application	Cannot Repay	Previous default	Asked for a loan too small	Asked for a loan too big	Do not know	Other
TOTAL	N=36	14%	6%	3%	8%	3%	6%	42%	19%
Wealth Quintile*									
1st Quintile	N=3	67%							33%
2nd Quintile	N=8	13%						62%	25%
3rd Quintile	N=4	25%			25%			25%	25%
4th Quintile	N=2							100%	
5th Quintile	N=3				335			33%	33%
Household Income									
$0 to $1,200	N=9	11%	11%				11%	33%	33%
$1,200 to $2,400	N=8	25%			13%			37%	25%
$2,400 to $3,600	N=3							67%	33%
$3,600 to $4,800	N=1							100%	
$4,800 to $6,000	N=0								
$6,000 +	N=6	17%	17%		33%		17%	17%	

***Wealth quintiles refer to total household wealth, including savings.**

Reasons such as complicated procedures, high interest rates, too small credit sizes requested, all dominate at a more frequent rate among private and public banks as compared to credit unions. Among reasons why households were denied loans from both credit unions and private or public banks rank highest the categories of insufficient collateral and unknown reason for denial.

IMPACT OF MITCH ON RCUP CU MEMBERS

Few natural disasters have exacerbated the incidence of poverty more than the hurricane that struck in late 1998 — Hurricane Mitch. Hurricane Mitch was one of the most destructive natural disasters to hit Central America in decades. Heavy rain, flooding and winds of up to 180 mph caused an estimated total direct and indirect damage to $1.2 billion, which is 57% of 1998 GDP (Cardemil et.al 2000, 3). The human toll included death or injury of 323,000 and displacement of one-fifth of the population (870,000 people) of which 45% were children. Over 250,000 homes, 500 schools and 300 health centers were affected (IMF 1999, 7).

Sixty five percent of survey respondents were affected by Hurricane Mitch. This section reviews the destruction and loss suffered by RCUP CU members as a result of Hurricane Mitch. Of the 764 respondents, 495 or 65% reported that they were affected by the hurricane. The highest concentration of interviewees that suffered from Mitch are located in the rural areas (89%) while municipal areas only reported 58% of respondents affected. Respondents with primary occupations in agriculture reported that their households were affected by the hurricane at a greater frequency than any other occupation. Ninety two percent of agriculturalists stated that they suffered losses due to the hurricane while only 55% in self-employed business sector and 55-67% of public or private sector employees were affected. While there is no strong pattern in wealth quintiles reporting affects of Mitch, the lowest income bracket shows 75% of respondents affected while the wealthiest bracket reports only 53% of respondents experienced losses.

Table 46: Households Affected By Hurricane Mitch

	Yes		No	
	N	%	N	%
Total	495	65%	269	35%
Occupation of Respondent				
Self-employed Agriculture	154	92%	14	8%
Self-employed Business	198	55%	161	45%
Public Sector Employee	45	67%	22	33%
Private Sector Employee	54	55%	45	46%
Homemaker	33	61%	21	40%
Other	8	67%	4	32%
Wealth Quintile*				
1st Quintile	49	59%	34	41%
2nd Quintile	54	65%	29	35%
3rd Quintile	56	67%	27	33%
4th Quintile	51	61%	32	39%
5th Quintile	54	66%	28	34%
Income Level of Household				
$0 to $1,200	75	75%	25	25%
$1,200 to $2,400	3164	65%	35	35%
$2,400 to $3,600	12159	72%	23	28%
$3,600 to $4,800	31	60%	21	40%
$4,800 to $6,000	27	73%	10	27%
$6,000 +	71	53%	63	47%

*Wealth quintiles refer to total household wealth, including savings.

Asset Destruction and Loss Experiences By Households from Hurricane Mitch

Types of destruction among members surveyed include family member deaths, land and animal loss and destruction of homes. The most common types of destruction or loss caused by Hurricane Mitch was "destruction to home", "land loss" and "animal loss". The latter two types of losses suggest that agricultural RCUP CU members were most affected by Hurricane Mitch.

Table 47: Affected Households by Type of Destruction

No. of Households	Type of Destruction or Loss
226	Destruction to home
216	Land loss
106	Animal loss
42	Other losses or damage
15	Job loss in Household
10	Destruction to Business
6	Death in family
5	Farm machinery loss
2	Injury in Household

Distribution of Damage Caused By Hurricane Mitch among RCUP CU Households

Of the 407 households that reported a value for the amount of destruction caused by Hurricane Mitch, the average amount of damage was US$1,541 per household Damage was calculated by adding losses in assets and subtracting costs occurred by paying for hospital and doctor bills, funeral services, lost income, etc.

Of respondent's primary occupation, the agriculturalists reported the highest frequency with damages over $800 at 47% while other occupations reported ranges between 32%-39% of respondents with damages over $800.

Table 48: Distribution of Hurricane Damage (in US$)

		0-200	201-400	401- 800	801-2000	2001-4000	4001-8000	8001 and more
Total Sample	N	86	85	78	81	41	25	11
	%	21%	21%	19%	20%	10%	6%	3%
Location								
Rural	N	32	27	25	31	15	12	2
	%	22%	19%	17%	22%	10%	8%	1%
Municipal	N	54	58	53	50	26	13	9
	%	21%	21%	20%	19%	10%	5%	3%

		0-200	201-400	401- 800	801-2000	2001-4000	4001-8000	8001 and more
Occupation of Respondent								
Self-employed Agriculture	N	24	21	29	32	19	12	6
	%	17%	15%	20%	22%	13%	8%	4%
Self-employed Business	N	32	34	34	23	15	9	4
	%	21%	23%	23%	15%	10%	6%	3%
Public Sector Employee	N	9	10	5	8	2	1	
	%	26%	29%	14%	23%	6%	3%	
Private Sector Employee	N	8	11	4	10	2	2	1
	%	21%	29%	11%	26%	5%	5%	3%
Homemaker	N	9	5	5	8	3		
	%	30%	17%	17%	27%	10%		
Household Income								
$0 to $1,200	N	19	14	17	7	5	6	1
	%	28%	20%	25%	10%	7%	9%	1%
$1,200 to $2,400	N	13	12	9	13	6	3	2
	%	22%	21%	16%	22%	10%	5%	3%
$2,400 to $3,600	N	9	14	10	6	5	3	
	%	19%	30%	21%	13%	11%	6%	0%
$3,600 to $4,800	N	4	4	1	6	2	2	
	%	21%	21%	5%	31.6%	10.5%	10.5%	
$4,800 to $6,000	N	5	3	2	5	1	2	1
	%	26.3%	15.8%	10.5%	26.3%	5.3%	10.5%	5.3%
$6,000 and more	N	11	6	12	15	6	2	2
	%	20.4%	11.1%	22.2%	27.8%	11.1%	3.7%	3.7%
Wealth Quintile*								
1st Quintile	N	19	13	5	2			
	%	48.7%	33.3%	12.8%	5.1%			
2nd Quintile	N	13	9	18	7	1		
	%	27.1%	18.8%	37.5%	14.6%	2.1%		
3rd Quintile	N	10	9	7	9	6	1	
	%	23.8%	21.4%	16.7%	21.4%	14.3%	2.4%	
4th Quintile	N	2	10	9	11	9		1
	%	4.8%	23.8%	21.4%	26.2%	21.4%		2.4
5th Quintile	N	6	8	8	9	5	3	5
	%	13.6%	18.2%	18.2%	20.5%	11.4%	6.8%	11.4

*Wealth quintiles refer to total household wealth, including savings.

Table 48 suggests that wealth has a stronger association to the amount of damage incurred by Mitch than income. In the first and poorest wealth quintile, 49% of households with reported damages fell into the lowest damage category (<$200), compared to only 5% of households of the last and richest quintile. We also see that there are no households in the poorest quintile exceeding damages over $2,000.

The total number of RCUP CU member households reporting damage due to Hurricane Mitch is 407, approximately half of Survey 2000 respondents. At the first wealth quintile, the average percent of asset damage is 71% while the average percent of damage in the wealthiest quintile is only slightly over 5%.

Table 49: Percentage of Wealth Damaged By Hurricane Mitch by Wealth Quintile

Wealth Quintile*	Average % Wealth Damaged	N
1st	71%	39
2nd	13%	48
3rd	10%	42
4th	7%	42
5th	5%	44

*Wealth quintiles refer to total household wealth, including savings.

Table 50: Households That Repaired Damage Caused By Hurricane Mitch

	Yes		No	
	N	%	N	%
Total	202	41%	293	59%
Occupation of Respondent				
Self-employed Agriculture	61	40%	93	60%
Self-employed Business	86	43%	112	57%
Public Sector Employee	20	44%	25	56%
Private Sector Employee	19	35%	35	65%
Homemaker	10	32%	21	68%
Other	6	46%	7	54%
Wealth Quintiles*				
1st Quintile	13	27%	36	74%
2nd Quintile	30	56%	24	44%
3rd Quintile	29	52%	27	48%
4th Quintile	20	39%	31	61%
5th Quintile	20	37%	34	63%
	Yes		**No**	

	N	%	N	%
Income of Household				
$0 to $1,200	31	41%	44	59%
$1,200 to $2,400	25	39%	39	61%
$2,400 to $3,600	18	31%	41	69%
$3,600 to $4,800	12	39%	19	61%
$4,800 to $6,000	11	41%	16	69%
$6,000 and Higher	30	42%	41	58%

*Wealth quintiles refer to total household wealth, including savings.

Overall, 41% of respondents affected by the hurricane repaired damages, leaving 59% without repairing damages (see Table 50). In many cases, it is impossible to repair damages caused by the hurricane. Such cases include death in family, livestock and devastated farmland. Other households did not have the financial means or help to repair damages from the hurricane. There is no clear pattern of repair among respondents' occupation, wealth quintile or income.

Table 51: Funds Used to Repair Damage Caused By Hurricane Mitch				
	Yes		**No**	
Sources of Funding	N	%	N	%
Sold Items of Wealth	35	17%	167	83%
Used Loan from Credit Union	34	17%	167	83%
Used Loan from Bank	7	3%	194	97%
Used Household Savings	119	59%	82	41%
Other Means	16	8%	185	92%

The majority of surveyed credit union members affected by Hurricane Mitch funded repairs through credit unions services through either household savings or a credit union loan.

Households Holding Credit Union Loans at the Time of Hurricane Mitch

At the time of the hurricane, 280 households were holding loans administered by the credit union (twelve households held two loans). Out of a total of 292 credit union administered loans, 226 or 77% have been repaid, 56 or 19% are still being repaid and 10 or 3% are in default. Of these 280 households, 34% restructured their loan after Hurricane Mitch.

In a comparison between restructured loans and non-restructured loans, for restructured loans, 64% of households paid, 30% are still paying and 6% defaulted. For the non-restructured loans 85% paid, 14% are still paying and 1% defaulted.

At the time of the survey, 18 months had passed since Hurricane Mitch. It is obvious that households that restructured their loans are still having more difficulty paying them back than households that did not restructure their loans. There is a higher "still-paying" and default rate for households restructuring loans compared to the other grouping.

IV. INDICATORS OF FINANCIAL AND ECONOMIC IMPACT ON CLIENTS

In this section, we examine 657 member records to provide a history of these members' access to financial services.

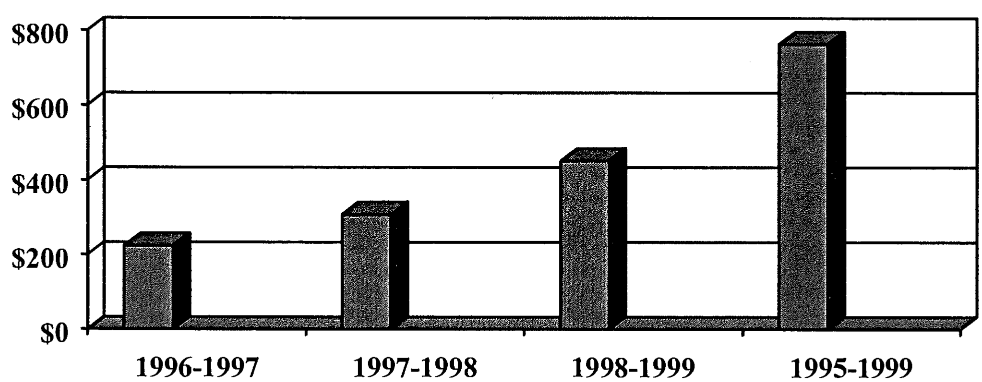
FINANCIAL SERVICES ACCESS GROWTH

Credit union members surveyed display access to increasing amounts of credit over time. RCUP CU members display access to increasing amounts of credit with each year. At RCUP's inception in 1997, 497 members acquired a new loan after having received one in 1996. Of these, 113 received a smaller loan. Forty-two received a loan of the same size and 342 received a larger loan. *The average increase in loan size was US$224.* In 1998, 130 members received a smaller loan, 30 received a loan of the same size and 450 received a larger loan than the loan amount in 1997. *The average increase in loan size was US$308.*

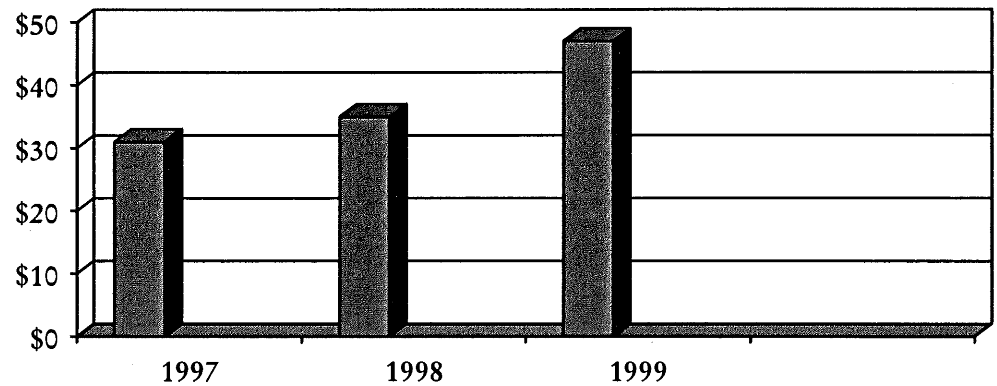
In 1999, 118 members received a smaller loan, 62 received a loan of the same size and 427 received a larger loan. *The average increase in loan size was US$451.* On an institutional level, this increased access to credit reflects a combination of greater liquidity at the credit unions and increased member savings, which were leveraged for loans. On a client level, this reflects increased member income and wealth.

Where we compare loans to those members who had a loan both in pre-RCUP 1996 and in 1999, we find that the average increase in loan size was US$763.

AVERAGE LOAN SIZE INCREASE: FOR LOANS IN BOTH YEARS



AVERAGE INCREASE IN MEMBERS DEPOSITS



Member deposits show small but increasing increments to deposit accounts each year: US$31 in 1997, US$35 in 1998 and US$47 in 1999.

ECONOMIC GROWTH

Credit unions can help lower income groups increase their assets by establishing a credit relationship, accessing working capital, meeting housing credit needs and increasing wealth through savings. This section examines 111 households who were surveyed both in 1997 and again in 2000. The distribution of these surveys by credit unions is as follows:

Table 52: RCUP CU Members surveyed in 1997 and 2000 by Credit Union

Avances	20
Central (1)	12
Iaguei	22
Integral (2)	27
La Unión	13
Moderna (3)	17
TOTAL	**111**

Note: (1) formerly COODEPAGRO
(2) formerly La Hermanidad
(3) formerly San Antonio

This information permits us to monitor the impact of the RCUP by tracing changes in wealth, savings accumulation and occupational behavior over time. The changes over time can be represented by "transition matrices", which cross-tabulate the position occupied by credit union members at two points in time (in this case, 1997 and 2000). Each row of the transition matrix gives the distribution of RCUP CU members belonging to a particular socio-economic category in 1997, in terms of their position in the socio-economic scale at the end of the period.

Note that for the purposes of these comparisons, household here refers to the survey respondents (RCUP CU members) and their spouses. While the 2000 included questions about the whole household (defined as all individuals living in the same house), the 1997 survey only referred to respondents and their spouses.

Changes in Non-Financial Household Wealth

The table below records the movement of credit union members between different non-financial wealth categories between 1997 and 2000.

Table 53: Changes in Non-Financial Household Wealth

1997 Non-Financial Wealth Categories (in US$)	2000 Non-Financial Wealth Categories (in US$)					Total
	0-40	40-80	80-400	400-800	800&more	
1-40	3 (50.0%)	2 (33.3%)	1 (16.7%)			6 (10.9%)
40-80		5 (45.5%)	4 (36.4%)	2 (18.2%)		11 (20.0%)
80-400		2 (10.0%)	6 (30.0%)	10 (50.0%)	2 (10.0%)	20 (36.4%)
400-800				6 (54.5%)	5 (45.5%)	11 (20.0%)
800 & more			1 (14.3%)	2 (28.6%)	4 (57.1%)	7 (12.7%)
Total	3 (5.5%)	9 (16.4%)	12 (21.8%)	20 (36.4%)	11 (20.0%)	55 (100%)

Notes:
1. The information in the table is based on resurveyed credit union members for whom we have complete information on wealth
2. For the purposes of this table, assets are defined as all business, agricultural and residential assets.
3. For the purposes of this comparison, household wealth refers to assets owned by the respondents and/or their spouses. Note that the 2000 survey does not differentiate between value of secondary residents held by CU members' spouses and value of secondary residents owned by other household members. This is likely not a serious problem for the purposes of this comparison because only 5 of the 111 CU members re-surveyed mentioned a "secondary resident owned by either their spouses or other household members".
4. The exchange rate to U.S. dollars is US$1.0=C$9.0 for 1997 and US$1.0=C$12.5 for 2000.

Of the 55 RCUP CU members for which we have wealth measurements in both 1997 and 2000, there are signs of considerable upward mobility. Of these, 9% showed a decrease in their assets, 44% have a constant value and 47% show and increase in the value of their non-financial assets.

Changes in Household Savings Behavior

Table 54: Changes in Household Savings Behavior

1997 Savings Categories (in US$)	2000 Savings Categories (in US$)					
	0-40	40-80	80-400	400-800	800&more	Total
1-40	3 (15.0%)	5 (25.0%)	2 (10.0)		4 (20.0%)	14 (19%)
40-80	2 (14.3%)	1 (7.1%)	6 (42.9%)	1 (7.1%)		10 (14%)
80-400	5 (10.0%)	7 (14.0%)	16 (32.0%)	1 (2.0%)	8 (16.0%)	37 (50%)
400-800	2 (20.0%)		4 (40.0%)	1 (10.0%)	3 (30.0%)	10 (14%)
800 & more			2 (50.0%)		1 (25.0%)	3 (4%)
Total	12 (10.8%)	13 (13.5%)	30 (13.5%)	3 (3.6%)	16 (17.1%)	74 (100%)

Note: the information is based on resurveyed credit union members for whom we have complete information on total savings held at a financial institution.

The table above records the movement of 79 RCUP CU members between different total savings categories between 1997 and 2000. Of these 74 members, 12% show lower levels in 2000, 30% show constant levels and 40.5% show higher levels.

Table 55: Changes in Occupational Behavior

Occupational Category of RCUP CU Members in 1997	Occupational Category of RCUP CU Members in 2000 Self-Employed Agriculture	Self-Employed Business	Public Sector Employee	Private Sector Employee	Home-maker	Un-employed	Total
Self-Employed Agriculture	9 (69.2%)	3 (23.1%)	1 (7.7%)				13 (11.7%)
Self-Employed Business	1 (1.2%)	73 (89.0%)		6 (7.3%)	2 (2.4%)		82 (73.9%)
Public Sector Employee		2 (22.2%)	4 (44.4%)	3 (33.3%)			9 (8.1%)
Private Sector Employee		1 (20.0%)	1 (20.0%)	3 (60%)			5 (4.5%)
Homemaker					1 (100.0%)		1 (0.9%)
Unemployed		1 (100.0%)					1 (0.9%)
Total	10 (9.0%)	80 (72.1%)	6 (5.4%)	12 (10.8%)	3 (2.7%)	0 (0.0%)	111 (100%)

The table above records changes in the primary occupation of CU members between 1997 and 2000. The majority of households remained in the same categories over this period, which is not surprising considering the brevity of the period under consideration. However, there is some movement of self employed agriculturists to self employed business and of self employed business to private sector employee.

RCUP CUs help members climb a ladder of modest, but increasing, asset accumulation. As new members join a credit union, they are able to access credit in small amounts, increasing with successful repayment. Many credit union borrowers use credit to establish and expand their enterprises or those of other family members. Members look for ways to access increasing amounts of working capital with flexible repayment terms. Over time, they take out larger loans for housing and production needs, based on repayment capacity and real collateral. This pattern is supported by the results presented in Table 53, which demonstrates that among the small group of RCUP CU members examined, there is significant mobility between wealth groups; approximately 48% shifted to a higher wealth bracket.

These same members initially contribute little to deposit savings – their focus is on borrowing. As their assets and income increase, they save more and borrow less. As they shift to larger loans or reduce their borrowing, members stop investing in shares and shift their investment to deposit savings. Members become net savers, investing savings in with-drawable deposit services offering market rates of return. This pattern is also reinforced by the results presented in Table 54, which shows 38% of RCUP CU members saved more in 2000 than they did in 1997.

V. CONCLUSION

The Rural Credit Union Program (RCUP) was designed to strengthen credit unions. Pre-RCUP CUs were serving the poorer elements of society but were financially weak and unsustainable. Some credit unions were financially strong but were not reaching as many poor as they might. The goal of WOCCU's RCUP has been to assist participating credit unions to maximize their financial sustainability and to expand outreach.

Credit Unions Provide Greater Loans Outreach after Institutional Strengthening. RCUP CUs are providing a larger number and volume of loans today after undergoing an institutional strengthening process. Despite large write-offs of non-recoverable loans and historic losses, the number and volume of loans has increased. As of June 2000, the 18 RCUP CUs had 7,539 loans outstanding with a volume of US$4,083,396.

RCUP CUs operate as financial intermediaries that are not limited to poverty lending of loans less than US$300. However, they reach large numbers of small borrowers with loans of this size. In June 2000, the median loan size granted was US$343. In other words, 3,718 loans (50 percent of all loans made) were for amounts less than US$343. In June 2000, 3,397 outstanding loans (or 45% of the portfolio) were for amounts less than US$300. Throughout the process of strengthening institutional financial sustainability, the number of small loans has increased in both absolute and relative terms. The Nicaraguan credit unions involved in RCUP have increasingly been able to reach a larger number of low income or small borrowers while at the same time spreading their fixed costs across a larger portfolio of an expanded range of loan sizes and diverse loan purposes.

The diversification of loan purpose allows the credit unions to respond to the full household needs of members. The diversification of loan purpose also diversifies the credit union's risk across activities; not all of the credit union portfolio would be affected by an economic crisis in any one or two specific sectors. During the course of RCUP, the loan portfolio has increased the share of the number of commerce, housing and consumption loans. As credit unions have undergone the strengthening process, they have also provided greater access to loans for women.

Where we compare across institutions, average size of household loans from credit unions tends to be much smaller than the average size of loans from banks. As household wealth increases, loan size for all institutions increases. The credit which is made available to the poor tends to be significantly smaller than that received by higher wealth households which can offer greater collateral and higher repayment collateral. The average size of loans received by member households is strongly correlated with wealth. Among occupation groups, self-employed business has the largest average loan size, followed by agriculture. Loan sizes for public workers and for private sector employees are not significantly different.

Savings-led growth provides rapid expansion of outreach. What most distinguishes credit unions from other non-bank financial entities offering micro-finance services is the ability of the credit unions to mobilize mass numbers of small, voluntary, savings accounts. The average deposit in RCUP credit unions is US$116 while the median deposit is US$32. Deposit savings accounts are concentrated in the lower size ranges. Seventy percent of deposit savings accounts are less for than

US$45 for 13% are between $US46 -US$100. In all, 83% of savings accounts are for amounts less than US$100. Credit unions have experienced a very rapid expansion of small savings account services to many poor and low-income people who seek a safe place to save.

The most frequent motive for savings remains as a safeguard for emergencies. Lower income groups tend to more frequently place their savings in credit unions than in other financial institutions. Lower income households display a higher propensity to save than higher income households. Average household savings also rises linearly with wealth.

Growth in full community outreach reaches all groups, including the poor. Most RCUP CU members are engaged in self-employed business, seconded by an increased participation in agricultural production. Diversification of membership decreases the concentration of credit risk to the credit union. As credit unions have opened up their membership bonds, their membership base has diversified in economic activity and socio-economic condition. During the period of the RCUP, credit unions have expanded their membership outreach to all occupational groups. Women represent the majority of credit union members primarily engaged in self-employed businesses while men represent the majority of credit union members engaged in agriculture.

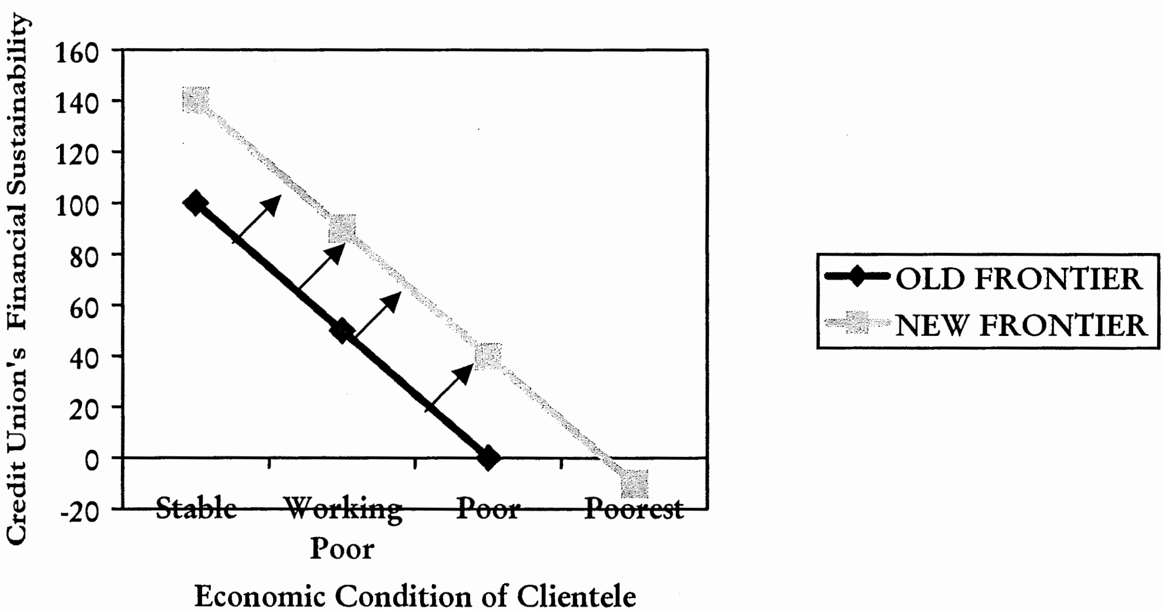
Almost 60% of Survey 2000 respondents own a micro or small enterprise. Extrapolated to the total RCUP membership as of June 2000, this figure would suggest that the 18 credit unions provide financial services to approximately 8,331 enterprises owned in the communities within which they operate. These enterprises provide employment to another 21,661 workers.

The highest income levels are found among members engaged in self-employed business while the lowest levels are found among members engaged in agriculture. Thirty one percent of Survey 2000 respondents' per capita annual household income fell below the extreme poverty line (US$1 per day) while 55% of Survey 2000 respondents' fell below the general poverty line (US$2 per day).

Female RCUP CU members tend to belong to households of lower wealth levels. Households represented by owners of business or enterprises tend to be more wealthy while those represented by family labor tend to be the least wealthy. The average value of business assets for women is approximately half of that for men while the average value of residential assets is approximately the same for men and women.

RCUP CUs help low-income members to increase their income and wealth. Members are observed to have gained greater access to financial services during the project period. Among those who accessed loans one year and then again in the following year, loans size increased in increasing amounts each year. Members have shown to make small but increasing increments to deposit accounts each year.

The current challenge is to expand "the frontier". RCUP has significantly improved the financial sustainability of the credit unions while expanding its outreach of service to the poor. One of the new challenges facing the Nicaragua credit unions is the further expansion of service to the poor. Drawing on experiences from credit union movements in Bolivia, Ecuador and the Philippines, RCUP CUs are now exploring the introduction of new information technologies and credit technologies that enable them to reach even deeper into the lower income groups in rural Nicaragua.[9] Recognizing that there exists some trade off between the two goals of financial sustainability and outreach to the poor, RCUP's long-term goal is to shift the frontier out in order to improve both objectives for all credit unions.



END NOTES

[1] See The Road to Jinotega, Part II for a detailed discussion of RCUP's institutional strengthening policies.
[2] The Microenterprise Act passed by the US Congress in October 2000 considers loans of $400.00 as poverty lending for Latin America:
[3] Note that the values for Survey 1997 are weighed by credit union size, but not for Survey 2000.
[4] The exceptions are members of the credit union Dinamica, averaging 39 years of age, (the youngest in the sample) and members of Central, Jinotepe and La Unión, where the oldest member averaged 51 years of age.
[5] According to the US Bureau of Census, International Database 2000, self-employed business is composed of 47% men and 53% women.
[6] Out of the 764 respondents, 128 of the respondents did not report their annual income because they did not know or did not want to respond. Out of these 128 respondents, 95 had primary occupations as self-employed agriculture, self-employed business, private or public sector employees and were therefore excluded from household per capita income and poverty lines since these occupations are expected to have an income. The

remaining 33 respondents' households were not included in calculations because the respondent was not expected to have an income (ie: homemaker).
[7] We use the conventional the 5% probability level to reject the null hypothesis.
[8]The median of the lowest earning income range (US$0-1,200) is $600. The average savings amount corresponding to this income bracket is $112. Therefore, this group's average savings amount represents 19% of their median income. Similarly, for the highest income range (US$6,000-+), the estimated median value is 7,000. The average savings amount for this group (US$466) represents 9% of their estimated median income.
[9] Some credit unions, such as several in Bolivia and the Philippines, offer solidarity group loans for poor or "downscale" micro or small producers. For many poor members and/or members who live in remote rural areas far from the credit union office, access to a local solidarity group provides them with a lower-cost method to access credit union services.
Credit unions in other countries, such as Ecuador, have developed new products that offer small producers products that are flexible, taking into consideration their typically irregular cash flow and offering increased access with performance. To satisfy the demand for working capital, some credit unions, such as those in Ecuador, offer "open-end" lines of credit or supplier credit through material suppliers for "upscale" micro or small producers.

BIBLIOGRAPHY

Beatriz Orlando, Maria and Molly Pollack. 2000. *MicroEnterprises and Poverty.* InterAmerican Development Bank, Sustainable Development Department. February.

Cardemil, Leonardo, Juan Carlos Di Tata and Florencia Frantischek. 2000. "Central America: Adjustment and Reforms in the 1990s", *Finance & Development*, vol.37, no.1, March.

Hulme, David and Paul Mosley. 1996. *Finance Against Poverty.* London: Routledge Press.

Lennon, Barry. 2000. *Rural Credit Union Program (RCUP)/ Nicaragua External Review.* MicroEnterprise Development Office (G/EGAD/MD) USAID/Washington. February.

Mesbah, Dina. 1997. *The Role of Credit Unions in Niacaraguan Financial Markets: Improving the Financial Access of Small Savers and Borrowers*. Madison: World Council of Credit Unions.

Rhyne, Elisabeth. 1998. "The Yin and Yang of MicroFinance: Reaching the Poor and Sustainability." In *The MicroBanking Bulletin.*

Von Stauffenberg, Damian, Todd Farrington, and Luca Tortorelli. 1998. *Microfinance in Nicaragua : an Assessment prepared for the United Nations Development Program.* Washington DC : Private Sector Initiatives Corporation.