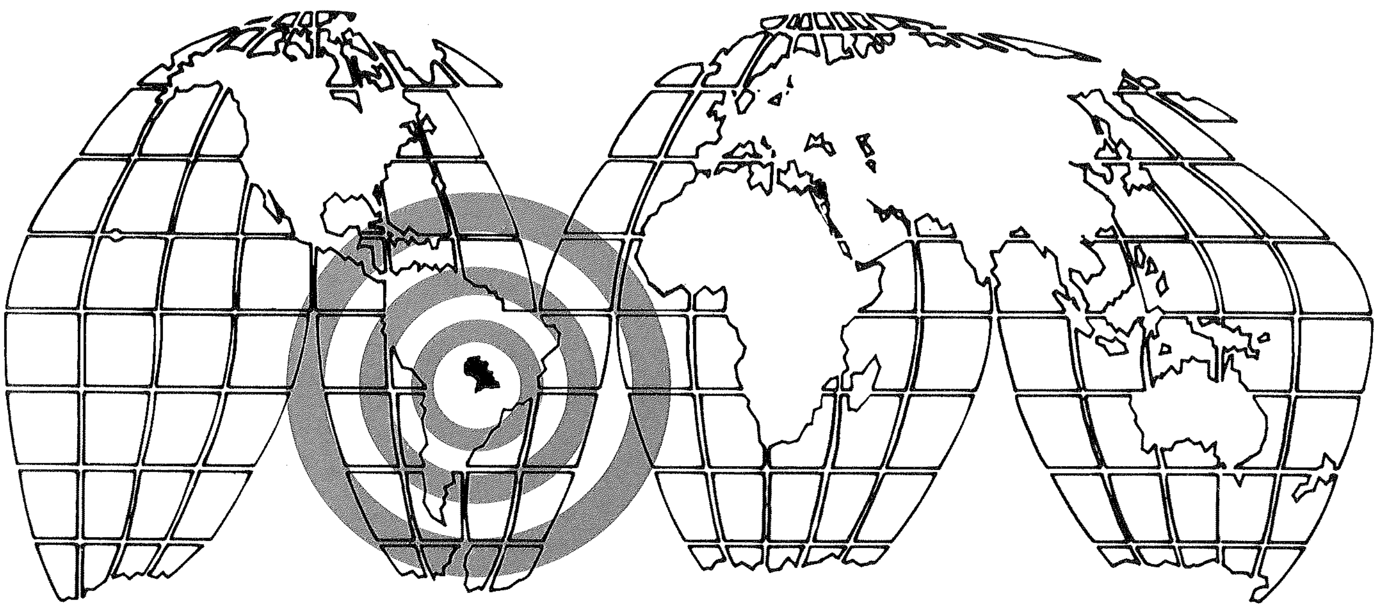
A.I.D. Project Impact Evaluation Report No. 56

U.S. Aid to Paraguay: Assistance to Credicoop's Agricultural Credit Union System



January 1985

U.S. Agency for International Development (AID)

PN AAL-041
ISN. 37912

U.S. AID TO PARAGUAY
ASSISTANCE TO CREDICOOP'S AGRICULTURAL CREDIT UNION SYSTEM

AID PROJECT IMPACT EVALUATION NO. 56

by

Richard Ray Solem, Team Leader/Economist
(AID/Washington)

Bruce A. Tippet, Small Business Development Specialist
(Consultant/USA)

Alison M. Fujino Miller, Development Communication Specialist
(Consultant/USA)

Miguel Angel Rivarola, Attorney/Coop Specialist
(Consltant/Paraguay)

Nicanor Invernizzi, Agronomist
(Consultant/Paraguay)

U.S. Agency for International Development

January 1985

TABLE OF CONTENTS

TABLE OF CONTENTS (cont.)

ACKNOWLEDGMENTS

Our team would like to express appreciation to directors, staff, and members of Paraguay's CREDICOOP credit union system for their friendly and generous support to our evaluation effort. We would also like to thank Mr. Abe Pena, USAID/Paraguay Mission Director, and Mr. Blair Cooper, USAID/Paraguay Rural Development Officer, without whose special support we could not have covered so much ground so quickly.

FOREWORD

In October of 1979, the Administrator of the Agency for International Development (AID) requested the Office of Evaluation in Aid's Bureau for Program and Policy Coordination to provide for a series of evaluations of the long-term impact of AID projects from representative sectors of the Agency's worldwide program. These impact evaluations are to be done with a view toward ensuring that cumulative findings are of use to AID and the larger development community.

This evaluation of Paraguay's agricultural credit union system (CREDICOOP) is one of a series of studies planned by AID to investigate the Agency's experience in delivering agricultural services to small farmers. Other studies have been carried out in Bangladesh, Korea, Tanzania, and the Dominican Republic. The common denominator shared by all is an interest in approaches/vehicles for service delivery. Of secondary concern is the type of service, that is, credit, extension, inputs, marketing, and so on.

Service delivery vehicles which have been scrutinized to date include some which are purely in the public sector and others which are hybrids--partly public, but with definite private sector characteristics. The range of services delivered by them is likewise broad--from assistance with farm inputs to extension and marketing support.

This study is the first in the series to focus on a private nonprofit organization, CREDICOOP. The services being thus delivered--credit, inputs, technical and marketing assistance--have been delivered through other channels in projects studied previously. The primary value of this study, therefore, is to provide for a comparison of CREDICOOP with vehicles used in other projects studied. Upon completion of the series, a final paper will be prepared comparing and contrasting the alternative agricultural service delivery systems.

Country	Vehicle/Approach	a/	Type of Service
Bangladesh	Fertilizer Development Corporation	MX	Produce and market fertilizer
Korea	Agricultural Ministry	PB	Extension, marketing, and price supports
Dominican Republic	Agricultural Development Bank	MX	Subsidized credit and extension
Tanzania	Agricultural Development Corporation	MX	Extension and marketing
Paraguay	CREDICOOP	NP	Credit, technical, and marketing services

[a]Public (PB), Mixed (MX), Private for Profit (PP), or Private Nonprofit (NP).

GLOSSARY

Acopiadores	Private traders, generally storekeepers who provide in-kind credit to small farmers
AID	U.S. Agency for International Development
AUCA	Association for Credit Users
BNF	National Development Bank
BNV	National Housing Bank
CAH	Agricultural Credit Improvement (an agency of the Ministry of Agriculture)
COLAC	Latin American Confederation of Savings and Credit Cooperatives
CREDICOOP	The National Cooperative of Savings Banks Credit Union National Association
CUNA	Credit Union National Association
GOP	Government of Paraguay
Guarani	Language spoken by 92 percent of the people of Paraguay
IBR	Institute of Rural Welfare
MAG	Ministry of Agriculture and Livestock
Minifundia	AID Project No. 526-0118, Minifundia Crop Intensification
SEAG	Agricultural Extension Service
UNIPACO	Paraguayan Cooperative Union

PROJECT DATA SHEET

Date	Form	Project Title & Number	PACD[a]	Approved	Obligated	Disbursed	Pipeline	Remarks
10/01/78	Grant	Credit Unions (526-0101)	09/30/81	$1,928,000	$1,928,000	$1,928,000	--	Included, under one umbrella, all grant assistance to the Paraguay Agricultural Credit Union system from 1970, with the earliest technical advisors, to establishment of CREDICOOP in 1973, to project completion in 1981. Composed of technical assistance, physical plant, operating funds, and training expenses.
06/30/75	Loan	5260113 Small Farmer Development CREDICOOP (526-T-029)	06/29/79	$3,000,000	$3,000,000	$3,000,000	--	Provided for a central source of credit funds to supplement member savings as well as related technical and marketing assistance for the emerging local credit union network.
08/03/78	OPG[b]	CREDICOOP Stabilization Fund (526-0122)	12/31/83	$ 266,000	$ 266,000	$ 245,400	$ 20,600	Provided for an emergency central loan fund to resolve widespread member cooperative liquidity problems in the wake of a nationwide crop failure.
08/15/79	Grant	Minifundia Crop Intensification (526-0118)	08/31/84	$2,250,000	$2,250,000	$1,163,700	$1,086,300	Engaged CREDICOOP as implementing agent for an agricultural production project whose goal was year-round production of fruit and vegetable crops. Composed primarily of technical assistance and training.

[a] Project Assistance Completion Date.

[b] Operational Program Grant.

SUMMARY

Paraguay's agricultural sector is characterized by a multitude of small farm operators (36 percent with less than 5 hectares and another 43 percent with 5-20 hectares) working in an environment of minimal supporting infrastructure. Price supports and crop insurance are unknown to Paraguayan farmers. The system for crop storage and marketing is extremely rudimentary, contributing to great variability in product price from transaction to transaction as well as from day to day. Even systems for providing farm inputs (seeds, fertilizer, equipment) and credit to pay for them are inadequate to the challenge of developing a progressive farm economy.

In short, the small farmer in Paraguay has traditionally been a lonely fellow engaged in a risky business (given the vicissitudes of weather, pests, etc.) without the "safety net" of government programs available to farmers in more developed countries. In most cases a "patron," perhaps a better capitalized neighborhood storekeeper, has proved his most reliable ally. The "patron," hereafter referred to as private trader, has helped with the cost of farm inputs, sometimes even personal expenditures incurred prior to harvest, and has likewise been there to purchase the harvested crop. Maybe the price wasn't always the best, but in a world without alternatives, who was to complain?

AID entered this environment in 1970 with several grant-funded advisors from CUNA International. The notion of a system of agricultural credit unions emerged, and in 1973 what was to become a nationwide system of agricultural credit unions (CREDICOOP) was established.

AID has nurtured CREDICOOP from its inception to the present, investing some $4.4 million in grant funds and $3.0 million in loan funds in the process. Starting out largely as classic credit unions, over the years CREDICOOP member institutions have expanded their scope of activities to include a broad portfolio of farmer services, including credit (both productive and personal), input supply (through cooperative stores), technical assistance (from the farm plan stage through harvest), and marketing (from group selling to, in the case of cotton, actual purchase of the member farmers' crops).

The track record of CREDICOOP and its member credit unions has been mixed. At the outset, flush with money from AID and predecessor government programs, it achieved rapid growth by offering high-ratio loans (in many cases members borrowed more than 10 times their share account balances), often with inadequate study and little or no collateral. Given the uncertainty of Paraguayan weather and markets, this policy inevitably

resulted in high loan delinquency rates--in 1982 some 15 percent for the system overall and as high as 90 percent in some member credit unions.

As CREDICOOP struggled to deal with the weight of these problems, endeavoring to nurse delinquent members back to health with new loans so long as they did their best to service prior debts, AID encouraged new and broader initiatives, at once helping to solve problems while adding to the overall administrative burden.

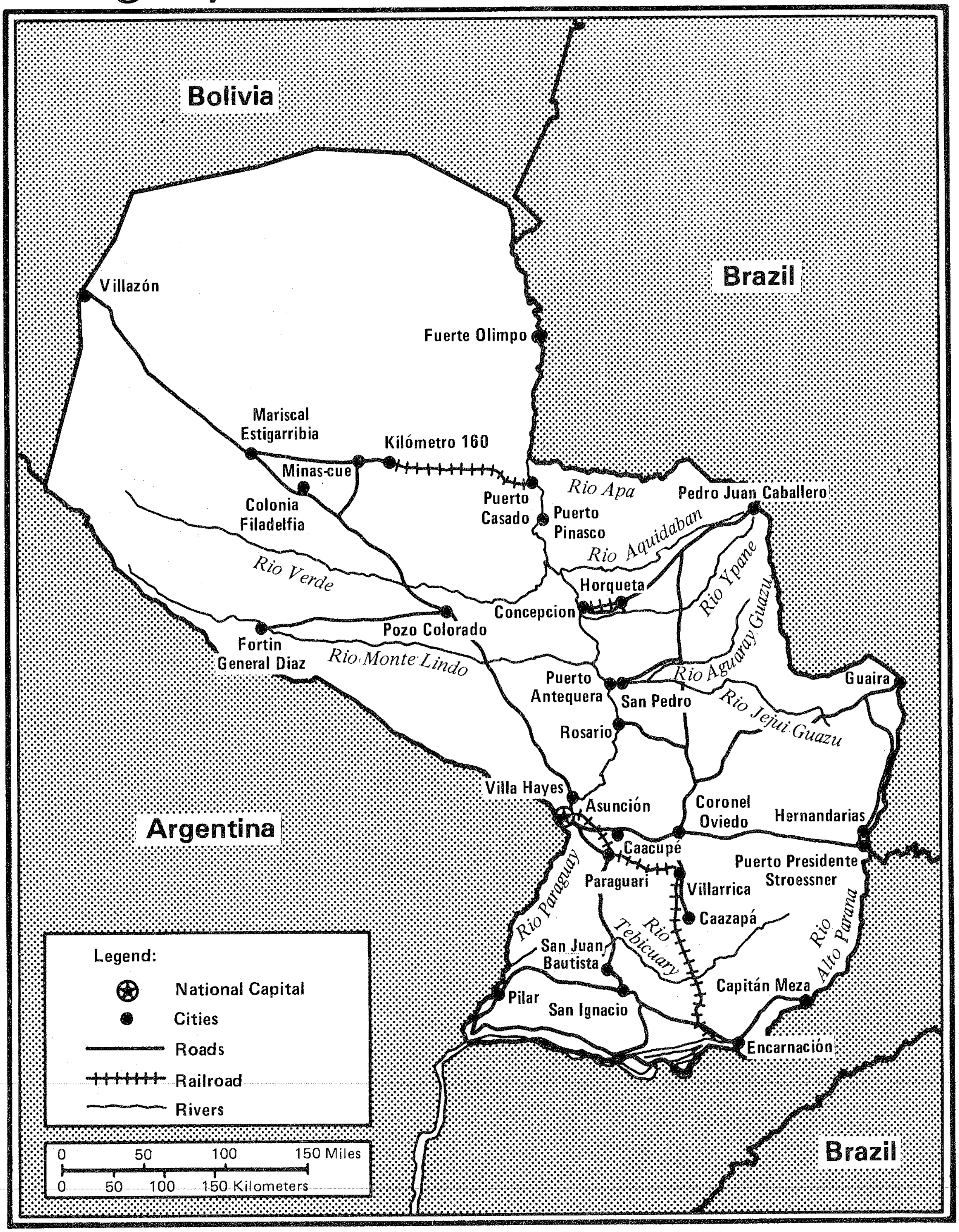
Several bad crop years (1981 and 1982) and a glut in the Paraguayan market, just as CREDICOOP members brought forth a bumper tomato crop in 1983, tested the system severely. A shortage of funds to purchase members' 1984 cotton crop, even as the CREDICOOP's recently acquired cotton gin stands idle, is the current emergency. After 10 years of hard work, CREDICOOP and its member credit unions continue to struggle, often on the very edge of disaster. Yet the system survives. It has developed an institutional toughness that defies logic.

The impact of the CREDICOOP system on its small farmer members has likewise been mixed. For many who over-borrowed during the early, exciting years, it has resulted in a debt burden they choose to ignore. Whether embarrassed by an inability to pay on time, or overwhelmed at the thought of ever paying, they have withdrawn, returning to the private trader relationship for help when it is needed.

Others have done better. They may have old loans still unpaid, but they are servicing them and continue to use credit, now more judiciously. Some members have truly prospered, expanding their production, adding on to homes (very common among active credit union members), and sometimes graduating to alternative credit sources at the National Development Bank and the Commercial banks.

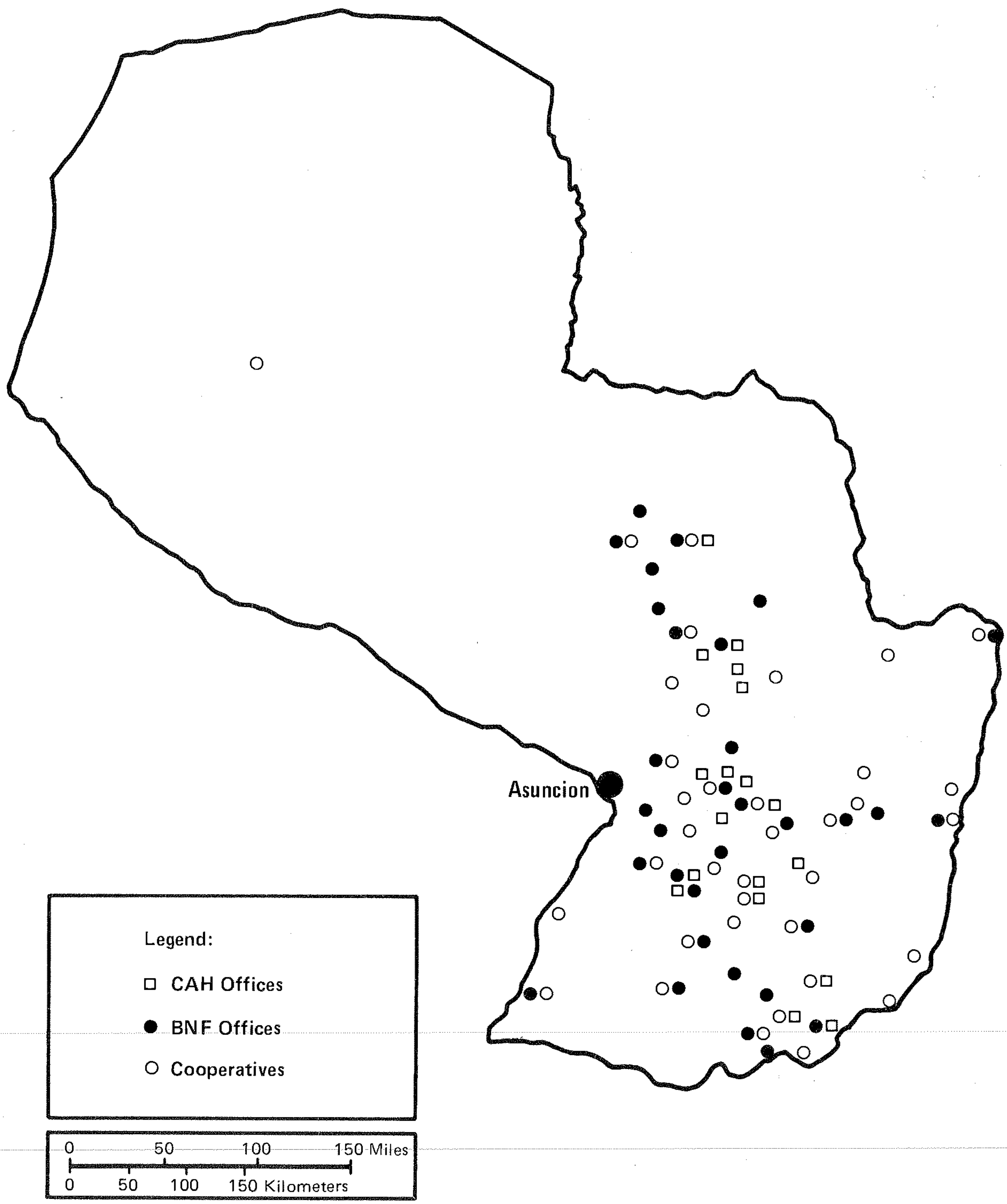
Clear from the CREDICOOP impact evaluation is that Paraguay's nationwide network of small, thinly capitalized village shopkeepers plays a very critical role in delivery of credit to farmers. Despite several decades of public sector support of large, formal agricultural credit institutions (a Ministry of Agriculture program, an Agricultural Development Bank and the CREDICOOP system), the indigenous private sector credit delivery system continues to command some 84 perent of the overall agriculture credit market and fully 98 percent of the small farmer market - this without subsidy or official support of any kind. AID should look closely at how these village level businesses operate, and both <u>learn from them and seek ways to work through them.</u>

Paraguay


Bolivia
Brazil
Villazón
Fuerte Olimpo
Mariscal Estigarribia
Kilómetro 160
Minas-cue
Colonia Filadelfia
Puerto Casado
Rio Apa
Pedro Juan Caballero
Puerto Pinasco
Rio Aquidaban
Rio Verde
Horqueta
Rio Ypane
Concepcion
Pozo Colorado
Fortin General Diaz
Rio Monte Lindo
Rio Aguaray Guazu
Puerto Antequera
San Pedro
Rio Jejui Guazu
Guaira
Rosario
Villa Hayes
Asunción
Coronel Oviedo
Hernandarias
Argentina
Caacupé
Puerto Presidente Stroessner
Paraguari
Villarrica
Rio Paraguay
Caazapá
Rio Tebicuary
Rio Alto Parana
San Juan Bautista
Capitán Meza
Pilar
San Ignacio
Encarnación
Legend:
National Capital
Cities
Roads
Railroad
Rivers
0 50 100 150 Miles
0 50 100 150 Kilometers
Brazil

Paraguay

MAP OF AGRICULTURAL CREDIT INSTITUTION LOCATIONS



AGRICULTURAL CREDIT INSTITUTION LOCATIONS

Department	BNF	CAH	CREDICOOP
Alta Parana	Hernandarias Mallorquin Stroessner		Stroessner
Boqueron	Mariscal Estigarribia		
Caaguazu	Caaguazu Col. Oviedo J.E. Estigarribia	Col. Oviedo San Jose La Pastora	Col. Oviedo Caaguazu J. O'Leary
Caazapa	Caazapa San Juan Neponuceno Yuty Yegros	Caazapa Gral. Morinigo	Yuty
Canendiyu	Salto del Guaira Corpu Cristi Coruguaty	Salto del Guaira	
Concepcion	Concepcion Horqueta	Horqueta	Concepcion Horqueta Loreto Belen
Cordillera	Caacupe Arroyos y Esteros Eusebio Ayala Itacurubi de la Cordillera	Caraguatay Santa Elena	Eusebio Ayala Arroyos y Esteros Itacurubi de la Cordillera
Guaira	Villarica Iturbe		Independencia
Itapua	Col. Bogado San Pedro del Parana Fran Encarnacion Cap. Mesa Hohenau Mayor Otano	Col. Bogado Fran Santa Rosa San Pedro del Parana	Col. Bogado Carmen del Parana Col. Unidas Gral. Artigas

Department	BNF	CAH	CREDICOOP
Misiones San	Ignacio San Juan Bautista		San Ignacio Santa Rosa San Juan Bautista
Neembucu	Pilar Alberdy		Pilar
Paraguari	Paraguati Carapegua Ybycui La Colmena Carapegua	Ybycui Acahay Quiindy Carapegua	Caballero Acahay Quiindy Yaguaron
San Pedro	San Pedro Rosario Itacurubi del Rosario	Chore Cruce Jhugua Rey Calle Bertoni	San Pedro Lima Chore Villa del Rosario

XV

Assistance to CREDICOOP's Agricultural Credit Union System

I. PROJECT SETTING

The background for the Agency for International Development's (AID) support of the agricultural cooperative (credit union) movement in Paraguay is viewed from two perspectives: (1) the institutional environment into which the new approaches were introduced and (2) the human context to which such new approaches had to be adapted.

A. Institutional Context

Paraguay's traditional system for provision of essential agricultural services to small farmers--reliance on private traders, often storekeepers--is a modern-day version of the colonial "patron" system. According to a 1974 study by the Paraguayan Center for Sociological Studies (CPES), in areas not served by cooperatives some 71 percent of the farmers with 0-5 hectares of land (35 percent of all Paraguayan farms fall into this category) rely on private traders for all or a portion of their agricultural service needs--primarily credit for input purchases. In the 5-20 hectare farm category (some 42 percent of all Paraguayan farms), reliance on private traders drops to 50 percent. In the 20+ hectare farm size category, it drops to 40 percent.

Paraguay also has a range of modern systems for delivering credit and related agricultural services to small farmers. Two purely public institutions, the National Development Bank (BNF) and the Small Farmer Credit Program (CAH) of the Ministry of Agriculture, operate throughout Paraguay, reaching 34,965 farmers in 1982 with credit and related technical services (primarily investment plans associated with loan applications). Commercial banks are also present in many Paraguayan farm towns. These, however, provide virtually no production or farm development credits, preferring to restrict their involvement to very short-term marketing loans for larger farmers and agribusiness. Because of the commercial banks' presence in many of the farm towns, and their potential as a credit source, they are discussed throughout this evaluation. The reality, however, is that they have no discernible impact on the types of agricultural credit with which we are concerned herein.

Tables 1, 2, and 3, below, indicate numbers and percentages of farms within three size categories, and sources of credit for each size category. Clear from a comparison of these tables is that formal credit sources are reaching only a small percentage of all Paraguayan farmers. The vast majority are either doing without credit or relying on the traditional system of private traders.

Table 1. Farm Sizes

Category	Farm Size (hectares) 0-5	5-20	20+	Total
All Farmers				
Number	90,078	105,574	53,251	248,903
Percentage	36.2	43.4	21.4	100.0

Table 2. Credit Sources—Formal

Credit Source	Farm Size (hectares) 0-5	5-20	20+	Total
BNF				
Number	860	12,083	17,725	30,668
Percentage	2.8	39.4	57.8	100.0
CAH				
Number	—	2,956	1,341	4,297
Percentage	—	68.5	31.2	100.0
Commercial Banks				
Number	—	—	—	—
Percentage	—	—	—	—
CREDICOOP				
Number	678	4,974	1,323	6,975
Percentage	9.07	1.3	19.0	100.0

Table 3. Credit Sources—Formal vs. Informal

Credit Source	Farm Size (hectares) 0-5	5-20	20+	Total
Formal				
Number	1,538	20,013	20,389	41,940
Percentage	1.7	19.0	38.3	16.8[a]
Other[b]				
Number	88,540	85,561	32,862	206,963
Percentage	98.3	81.0	61.7	83.2[a]

[a] Weighted averages.

[b] Refers to balance of farmers either using no credit or relying on private traders.

The present day institutional framework for reaching Paraguayan farmers with credit, technical, and marketing services is described in Table 4, below. Note that only the CREDICOOP system provides a wider range of services than the traditional private traders.

Table 4. Range of Agricultural Services

Source	Type of Service			
	Credit	Inputs	Tech. Assist.	Marketing
Private Traders	X	X		X
Commercial Banks[a]	X			
Government Banks				
BNF	X		X[b]	
CAH	X		X[b]	
CREDICOOP	X	X	X	X

[a] In theory only. Actual present day involvement of commercial banks in agricultural credit is negligible.

[b] Technical assistance with farm plans (for loan applications) only.

B. Human Context

Paragayans are a homogeneous people, descendants largely of a mixture of the native Guarani Indians and Spanish colonialists. Subsequent immigrations, mostly from Europe and Brazil, though of local importance where they have occurred, have had little effect on the overall mix. Approximately 90 percent of all Paraguayans speak Guarani, the native Indian language, while only 55 percent speak Spanish. It is thus Latin America's only truly bilingual culture, with the 10 percent who speak only Spanish being largely urban dwellers, and the 45 percent who speak only Guarani being largely farmers.

Only one of Paraguay's cities, Asuncion, is large enough to constitute a truly urban environment. The others are strongly farm oriented, with most industries relating to agricultural services. The great majority of Paraguayans either currently engage in farm activities, have farmed in the past, or have close relatives who farm. Just as there is no Spanish/Indian division in Paraguay, likewise there is no rural/urban division.

What this cultural and economic homogeneity has meant in terms of agricultural development is that change has been relatively even from one region to another, as well as from rural to urban areas. Traditions are strong, but where a truly useful innovation is introduced it tends to be accepted.

Paraguayans also hold their government and its policies in relatively high regard. When national authorities wish to encourage cultivation of a certain crop, Paraguayan farmers tend to be responsive, thus providing for a fruitful environment in which to develop new agricultural service programs.

Given such a generally progressive environment, it was natural that Paraguay's leaders would be intrigued by the successes of the many culturally distinct immigrant groups

(Mennonites from the United States, Mexico, and Europe; other Europeans; and Japanese) who began to form producer marketing cooperatives in the mid-1900s and by the late 1960s had developed formidable commercial farming operations throughout Paraguay. Group buying, group selling, pooling of equipment, and other techniques gave these mostly small farmers the strength and capital of large farm industries. In light of such successes, the idea of developing a similar cooperative network which might be made up of and provide services to native Paraguayan farmers came to the fore.

II. Program Description

AID assistance toward development of a cooperative vehicle for delivery of agricultural services to Paraguayan farmers began in 1970 with a $500,000 grant to assist in development of credit unions in general. This grant assistance led to the development of a national credit union system (CREDICOOP), which initially focused its efforts on Paraguay's farm towns. Subsequent grants with the same general objective, but encouraging development of small farmer membership, were formally pulled together in 1978 under the title "Credit Unions" (Project No. 526-0101) with total AID funding from 1970 through 1981 of $1,928,000. These grant funds were invested in technical assistance, marketing facilities, operating expenses, and training, much of it small farmer oriented.

In 1975, AID approved its second investment in Paraguay's credit union system, a $3,000,000 loan titled "Small Farmer Development" (Project No. 526-T-027) whose primary objective was to provide a central source of credit funds and technical assistance for the emerging credit union network.

As a result of the steady infusion of grant-funded technical assistance, followed by the loan-funded $3,000,000 capital infusion, CREDICOOP's national network of rural credit unions grew rapidly. Because enthusiasm was high and money seemingly abundant, lending was pushed hard. In many credit unions, farmers were permitted to place loans in excess of 10 times their share account balances--few of them secured by mortgages, many by no more than a co-signature or a lien against future production. The system became overextended and, with broad-scale crop failures in 1978, the inevitable happened--loan deficits reached high levels and many credit unions found themselves without funds to continue operating.

Once again AID stepped in, this time with a hurriedly prepared but vital $266,000 Operational Program Grant entitled "CREDICOOP Stabilization Fund" (Project No. 526-0122). The effect of this timely infusion was to carry a number of otherwise healthy credit unions through a brief liquidity crisis, until the next year's crop enabled many of the financially distressed members to reassume loan amortization. The crisis helped in another way as well. It taught the surviving institutions a lesson in caution that has not yet been forgotten. Loan-to-share ratios for member credit unions were reduced from 10-1 to 5-1 in some instances, and as low as 2-1 in others.

AID's final investment in the CREDICOOP system was approved in 1979 in the form of a grant of $2,250,00 to encourage production, processing, and marketing of selected fruit and vegetable crops grown in Paraguay's more extreme minifundia zones. In this activity, for the first time AID began to lead CREDICOOP away from the credit supply function toward that of innovator in development of new cropping systems, followup technical assistance and, finally, central marketing of members' production. The struggling young network of mostly farmer-oriented credit unions was dealt an entirely new set of responsibilities as they transformed themselves to full-service cooperatives.

III. PROGRAM IMPACTS

Impacts of AID assistance on the development of Paraguay's agricultural credit union system are examined from two perspectives: (1) institutional viability of the vehicle (CREDICOOP) itself and (2) socioeconomic impact on the intended small farmer beneficiaries.

A. Institutional Impacts

> "In the beginning CREDICOOP was like a father and the cooperatives like helpless children. Over time some of these "children" [cooperatives] learned to function on their own."
>
> Credit Union Member

In 1973, with the help of AID-funded advisors from CUNA International, representatives of 16 recently formed credit unions organized Paraguay's first credit union association--CREDICOOP. Of the founding members, nine were urban credit unions and seven were rural. The purpose of the central association was to promote growth and prosperity of credit unions nationwide, giving special emphasis to delivery of credit services to small farmers.

The performance of CREDICOOP, in terms of numbers of credit unions and numbers of individual credit union members, has been impressive. From a total of 16 credit unions (9 urban and 7 rural) in 1973, it has grown to 70 (17 urban and 53 rural) in 1982. During the same period, individual membership grew from 11,969 to 23,967. Except for the absorption of 18 separately organized cooperatives in 1981, all of these institutions were first organized under the CREDICOOP program.

In 1978 CREDICOOP amended its bylaws, converting from a savings and loan to a multipurpose cooperative. This enabled member credit unions to branch into a variety of small farmer-oriented services including sale of farm inputs, increased technical assistance (going well beyond assistance with farm plans), and marketing services. AID then involved CREDICOOP's member institutions in implementation of a major agricultural diversification project (Minifundia Crop Intensification), and on its own initiative CREDICOOP purchased a cotton gin so that it might engage in processing members' crops.

The results of this frenzied growth in the savings and credit function, combined with a mid-course adjustment to include a full portfolio of cooperative services, have been mixed. The sheer output of the system in terms of credit, input, technical, and marketing services is impressive. Effectiveness, however, has been only fair to poor.

Delinquency ratios on credits extended have been unacceptably high in many of the credit unions, especially those dominated by small farmer members, as well as in the system overall. Because of peculiarities in the way accounts are kept (delinquent loans are never "written off" and, where members continue to make efforts to service debt, they are allowed to continually refinance old debt), it is impossible to track with certainty, but it appears that CREDICOOP is steadily decapitalizing.

Although CREDICOOP's technical assistance program was very successful while it focused on farm plan development, when members were encouraged to borrow for an AID-supported tomato-growing program the result was devastating. The advice on what to grow, and how, was successful, but the resultant bumper tomato crop found no market. CREDICOOP is now struggling with a new challenge: to convert its major investment in a cotton gin from a "loss leader" to a profit maker.

A thorough analysis of CREDICOOP's development and institutional viability is presented in Appendix B of this evaluation. Following are observations concerning long-term viability issues.

1. Rural/Urban Mix

With the high priority AID gives to rural development and broad distribution of wealth, the small farmer is a highly favored target for much of its assistance. Throughout its 14-year effort to support development of Paraguay's system of agricultural cooperatives, AID's objectives have remained constant: to increase small farmer income through development of a vehicle for delivery of essential agricultural services. There were no special arrangements for seeking to better the lives of the urban or farm town professionals and/or business people. Fortunately, neither were efforts made to preclude involvement of urban dwellers in the program. This participation by urban members has turned out to be critical to the survival and development of the credit union movement.

Farmers, it seems, all come to the loan window at the same time. At the beginning of the crop year plans are made for the succeeding crop season. Farm plans are developed and related loan requests are approved. To minimize the rate of loan drawdown while reducing borrower interest costs, farmers are urged to take their credit in installments, as funds are needed. Funds are thus drawn for (1) seeds, fertilizer, labor, and equipment rental to plant; (2) labor and equipment during the growing season; and (3) labor and equipment at harvest time.

The technique of breaking loans into installments ameliorates the problem of seasonal capital outflows, but even so the problem is severe. In an exclusively agricultural credit union, loans are committed, drawn, and paid all in unison.

There are several negative consequences of such a member profile:

1. With all loans being drawn at once it is impossible to lend much in excess of a member's savings, thus defeating the basic purpose of pooling savings.

2. In the event of a general crop failure, the credit union has the additional problem of many loans becoming delinquent simultaneously, thus reducing capacity to provide loan funds for the next crop cycle.

CREDICOOP's central revolving loan fund, established with the help of AID's $3 million loan (Project No. 526-T-029), provided essential capital during these peak loan periods as well as in the event of crop failure. The problem proved greater than the resources allocated, however. Because Paraguay is a small country, loans nationwide tend to be drawn in unison, and crop and marketing failures also tend to be felt nationwide.

Even more important, however, is that one by one CREDICOOP's better managed rural credit unions came up with their own remedy to the seasonal loan demand fluctuations: they sought to build an urban membership base--members with different borrowing patterns. The effect of this emphasis on recruiting urban members, even while retaining the small farmer focus, has been overwhelmingly positive. Not only has it gone a long way toward smoothing out financial flows during the course of each year, it has also brought into the system a needed infusion of well-educated professionals to assist with credit union leadership.

A major concern today is that this demographic change in member composition and leadership eventually may lead away from the present small farmer orientation. Thus far this has not happened. Evaluation team questions at two of the credit unions visited, both with over 75 percent urban membership and strong urban member control of the board of directors, elicited no disagreement among urban members with their credit unions' small farmer biases; that is, the higher loan limits and free technical assistance associated with farmer loans. Among credit union leaders in Asuncion, however, there is a steadily growing concern that bears watching.

A footnote to the rural/urban member mix is that many of the urban member loans have been indirectly beneficial to the farmers themselves. Among urban borrowers interviewed were producers of cattle feed and mattresses, both of whom purchased byproducts of farm outputs that would otherwise have little value. Also interviewed were manufacturers of furniture and soccer balls, both of whom created considerable spare-time employment for urban and rural dwellers alike. The soccer ball manufacturer, for instance, has 70 employees, mostly part-time people engaged in hand sewing operations in their homes.

In a predominantly rural and farm town economy there is no clear distinction between rural and urban interests. What helps the farmers clearly helps the small town service sector, and to a large extent the reverse is also true. The rural/urban mix that has developed in CREDICOOP's system of agricultural credit unions has had a salutary effect on the overall system.

2. Spread (Reaching Small Farmers Without Self-Destructing)

The question of how much a credit institution should charge borrowers for the use of its money provokes unending discussion in economic development circles and is never resolved. On the public side it raises the enormously complicated question of rationing money in favor of one activity or another. By contrast, in the purely private sector the choice is simple--either "meet the market rate" or go out of business.

CREDICOOP, as a private nonprofit institution with access to low-cost public funds, lies somewhere between these two extremes. It is instructed to ration low-cost public money to small farmers, perhaps the most difficult of all borrowers to deal with, and it is also instructed to operate like a business, earning sufficient income to carry on without regular infusions of public support. This is no simple task, and the story of how CREDICOOP has dealt with the challenge offers interesting insights into the whole area of small farmer credit.

In determining spread between cost of borrowing and cost of lending, CREDICOOP's member credit unions must consider (1) its fixed administrative costs (e.g., rent and salaries), (2) its variable costs (e.g., delinquency rates and cost of borrowed money), and (3) the cost of the competitor's money. The overall competitive environment for CREDICOOP member credit unions includes three major types of players: (1) private traders, controlling 83 percent of the market; (2) several government-operated small farmer credit vehicles (the BNF and CAH); and (3) a network of commercial banks. However, to assess this competitive environment accurately, one must look well beyond nominal rates of interest. One must look into loan application procedures, collateral requirements, period and manner of repayment, and a host of other issues. Only when all this is done can one assess the viability of a credit package.

CREDICOOP, during its more than 10 years of operating, has yet to reach a system-wide equilibrium in terms of balancing the cost of doing business with business income. With the current preferred interest rate policies (production credit loans at 12 percent interest plus 12 percent fee), the exclusively urban member credit unions are doing quite well, and some of the better managed mixed rural/urban credit unions are in a stable position. It is fair to say, however, that the greater the rural, small farmer member composition, the greater the difficulty in attaining self-sufficiency at such rates. The costs of administering small farmer loans, and the high delinquency rates associated thereto, are simply not offset by a 24-percent interest rate.

The only formal credit institutions in Paraguay, aside from CREDICOOP, which are extending credit to small farmers are the two government programs, the BNF and CAH. Neither is required to pay its own way with the small farmer portfolio, and neither does. The other small farmer lender, the private trader, has a complicated system for credit pricing that results in substantially higher true rates for borrowers--probably averaging over 80 percent.

Because the private trader has been in the market since time immemorial, it seems safe to conclude that his loan portfolio is profitable. Because he continues to dominate the small farmer credit market despite the CREDICOOP, BNF, and CAH programs, it seems safe to say that the private trader is competitive.

CREDICOOP should see a lesson in this, and review its small farmer loan policies with a view toward making them truly pay their way. The alternative, the present course of drifting to increased levels of urban members--in effect asking these members to subsidize the farmer members--is a "time bomb." It will work for a while in a few well-managed credit unions, but sooner or later, because it defies the natural interest of urban members, it is likely to explode, breaking up the system in the process.

More likely, the answer is in credit terms far closer to those of the private trader. If the 50-percent or 100-percent effective interest rates charged by private traders are not viewed as a problem for small farmer borrowers, and if the 24-percent rate charged by CREDICOOP is resulting in decapitalization of the system, then a compromise is clearly indicated.

3. A Chain Is Only As Strong As Its Weakest Link

The old adage "a chain is only as strong as its weakest link" is borne out with a vengeance in the CREDICOOP project. For the project's Goal (increased farmer income) and Purpose (a viable agricultural credit institution) to be realized, a great many things must go well, all at the same time. Farmers must borrow money for the right inputs, plant their crops in timely fashion, enjoy good weather and absence of environmental threats (e.g., pests or hail), harvest at the right time, and find a buyer at a price that enables them to earn sufficient return to (1) pay back any loans and (2) care for any personal needs until the next loan or harvest.

To some extent this interdependence of variables is present in every business. What is different about agriculture is the dominance of variables which are entirely beyond the farmer's control. In the Paraguay context the two greatest threats to goal and purpose achievement are (1) the weather and (2) the market. Each of these has conspired to continually keep Paraguayan farmers at "disaster's door" and the CREDICOOP system itself on the edge of bankruptcy. With regard to the weather link, AID indirectly recognized the problem and dealt with it temporarily through approval in 1978 of the Credit Union Stabilization Fund. That small grant, coming at a time when a generally poor credit collection record had been exacerbated by a particularly poor crop, enabled the system to survive one very difficult crisis, but is clearly inadequate over the long haul.

AID also sought to deal with the market link, and here the results to date are even less impressive. Through a $2.5 million grant approved in 1979, an effort was made to diversify Paraguay's small farmers into growing fruit and vegetable crops for export. The idea was to smooth out the farmers' cash flow by enabling year-round harvest, while at the same time increasing productivity from a given parcel of land.

The result, to date, has been disastrous. A major push to raise tomatoes resulted in abundant output which could not be sold. As a result, many small farmers who demonstrated their faith in AID and CREDICOOP by borrowing money to produce tomatoes will be in debt for years.

Efforts to assist in cotton marketing likewise have been unrewarding. In 1983, faced with a shortage of working capital, CREDICOOP came up with the idea of offering its members an installment purchase arrangement whereby they shared the risk of price fluctuations upon resale. Although initially successful, when early participants saw CREDICOOP subsequently resell their produce on unfavorable terms, large numbers resumed the practice of selling to private traders, thus leaving CREDICOOP's cotton gin (a major investment) underutilized during much of the harvest season.

4. Importance of Being Persistent

> "The thing about credit unions--once they get going they are hard to kill."
>
> Credit Union Official

By all reasonable tests, the CREDICOOP system of agricultural credit unions in Paraguay should have died years ago. Too much money from various federal and international donor programs during the early years leading to a high percentage of bad loans, poor harvests due to natural disasters, and wildly unpredictable prices for crops have conspired to destroy the system.

Yet CREDICOOP lives. Membership is off from the peak years of 1973 to 1979, when loans were available no matter how many prior loans were in default, but those members who remain tend to be wiser and more cautious. Some of the member credit unions are near collapse, but others appear to have stabilized. Some, particularly those with a preponderance of urban members, are quite strong.

The key to this amazing survivability appears to be in the people themselves, in a "mystique" they bring to their task, rather than in any physical phenomenon. CREDICOOP personnel in Asuncion work long hours, including Saturdays. Personnel in the member credit unions are likewise dedicated. Turnover is very low. Many of the CREDICOOP and member credit union officials with whom the team met have been in the system since its inception. Wages are low, but dedication is high.

There appears to be an element of social change in the growth of Paraguay's credit union movement. It is not clear why it goes on, but there is a certain inevitability about it. If the CREDICOOP system does collapse at the national level, it seems likely that many of its member credit unions will survive. Likewise, where a member credit union collapses, it seems likely that some alternative vehicle will replace it.

The seeds of change have taken root. The only issue is what the plant will look like when it matures.

B. Socioeconomic Impacts

> "When I need help the private trader is there without delay. My crop depends on immediate help...."
>
> Credit Union Member

Paraguay's agricultural sector is characterized by a multitude of small farm operators working in an environment of minimal supporting infrastructure. Price supports and crop insurance, considered essential to long-term farm survival in most modern economies, are unknown in Paraguay. The system for crop storage and marketing is rudimentary, contributing to great variability in product prices from transaction to transaction, as well as from day to day. Even systems for providing farm inputs, and credit to pay for them, are inadequate to the challenge of developing a progressive farm economy.

For the vast majority of Paraquay's small farmers the sole ally in dealing with the daily challenges and risks of farm life has been the private trader. Typically, this individual has been a somewhat better capitalized neighbor. In many cases, the relationship has been akin to that of the colonial "patron" system.

Wise to the needs and abilities of his farmer neighbors, the private trader has had a very good instinct for how much credit might be extended, for what purposes, and how much might be extracted as payment. His overhead has been low because he is himself a member of the community, living much like his neighbors. His staying power has been great for the same reason. The private trader has thus proven a venerable institution for delivery of agricultural services to Paraguay's small farmers.

In the 1960s, several new agricultural service institutions appeared in Paraguay, established for the purpose of giving small farmers a modern-day alternative to the private trader. The National Development Bank (BNF) was established to facilitate capital investment in a variety of officially sanctioned sectors, including agriculture, and the Agricultural Credit Improvement Agency (CAH) of the Ministry of Agriculture was established to focus on the needs of the very small farmers. Paraguay's commercial banking system was also pushed a little closer to the farm sector with the requirement that it lend at least 10 percent of its funds to agricultural projects. Then, in the 1970s came the last of the new agricultural service institutions--the agricultural credit union system, formally charted in 1973 as CREDICOOP.

The idea with all these institutions was that for agricultural growth to take place, capital would be required, capital far in excess of what could be provided through the traditional private traders. Small farmers, policy-makers thought, would be interest rate sensitive and, when offered a choice, would turn to the more competitive formal institutions for their credit needs.

It hasn't happened. Although many of Paraguay's small farmers today have access to alternative suppliers of agricultural services, most continue to rely on the private trader. Why? Table C-2 in Appendix C provides some insight.

The data in this table indicate that the private trader excells in several areas important to the small farmer: his collateral requirement is zero, his process time very short, and familiarity is high. Herein lies the private trader's competitiveness. Farmers, it seems, have concerns that go well beyond interest rates.

On reflection, this is logical. The business of farming is very risky. For the farm operator to withdraw from his traditional mode of attaining credit, input, and marketing assistance in favor of dealing with an entirely new system requires a lot of faith. When one adds to the equation that in most cases the procedures, personnel, and values of the new formal systems are foreign to him, the difficulty is even greater. As is clear from the results summarized in Table 3 above, most farmers feel the risk is too great.

If CREDICOOP's system has any chance of meeting the private trader's competition it is because its member credit unions are locally controlled. They can thus identify to a greater extent than their government and commercial bank competitors with the farmer's interests and needs. Herein lies their real potential for growth.

Despite the continuing numerical dominance of the private trader, and the presence of several active government programs, the impact evaluation team identified two major impacts on target small farmers in Paraguay which are already seen as a result of the CREDICOOP operation. These are reviewed briefly below.

1. Collateral

One of the great differences between the credit union vehicle and its National Development Bank and commercial bank competitors in Paraguay is the credit union's capacity to make loans based on collateral other than mortgages. This capacity has both positive and negative effects worth noting.

a. Reach More Borrowers

Farmers worldwide tend to be conservative with regard to borrowing. More than in most businesses, they are dependent on forces outside their control for the success of their enterprise. An untimely rain or a long period of dry weather can spell disaster for the best farmer.

Loss of a crop, perhaps an entire year's income, as well as the money borrowed to produce it, is tough. It can easily take a farmer 2, 3, or 4 years to overcome such a setback. If, in addition to that loss, the farmer also has his land seized by creditors, he may never recover. This is why many of the very intelligent, forward thinking Paraguayan farmers never deal with the BNF or with the network of private commercial banks, both of which require land mortages as collateral. The risk of loss due to events beyond their control is too high to justify the possible gains.

This is not to say that the CREDICOOP member institutions do not require collateral for their loans. They do. Rather, the point is that where a farmer member otherwise appears to be a good risk, he is going to be offered an alternative choice. Commonly this alternative is a lien on the crop to be produced, a cosignature, or both.

b. Inability To Enforce Repayment

A loan secured by a lien on the crop it is intended to support is a hard one to collect if the crop fails or if there is no market for the produce. Unless the farmer has alternative employment, he probably has no money. If he is faced with losing his land (his means of livelihood) he might make a special effort--perhaps sell his cows or his home. Barring that, however, he is inclined to demand understanding of the lender, pointing out that he is not to blame for the loss and that the lender should accept this and lend to him again for the next planting season.

Nonpayment in such circumstances is hard to fault, even though it strikes at the very heart of the lender-borrower relationship. CREDICOOP member credit unions do not have simple answers. Some have responded by cutting off future credits, some by continuing to work with farmers by demanding token payments, and some by advancing new loans without any systematic effort to collect outstanding balances.

c. A Reasonable Compromise

The team drew several conclusions with regard to the collateral issue:

-- If one wants to reach small farmers one must learn to deal without mortgages as collateral.

-- When mortgage collateral is not held, one must be very careful to select borrowers who are dealing in good faith--who will work with the lender to increase the probability of farm success and, in the event of failure through no fault of their own, will reschedule the debt providing for minimal debt service even as new loan assistance is being arranged.

-- The moment it becomes clear that a member who is behind on his loan is not dealing in good faith (i.e., is making purchases beyond those required for subsistence without paying down on his loan), he should be disqualified for future credits.

2. Effect on Farmers' Competitive Position

A very important benefit from the CREDICOOP project which is unlikely to appear among statistical indicators is the impact it has on member farmers' ability to deal with other credit sources. Clear from the impact evaluation team's field visits is that analysis of how many farmers have joined agricultural credit unions and enjoyed credit union loans tells only a part of the story. Beyond that is another range of indirect benefits.

a. Alternative to Private Traders

Prior to the emergence of CREDICOOP member credit unions there was no formal source of agricultural credit available in Paraguay without mortgage collateral except for the very small program of the Ministry of Agriculture, referred to in this paper as the CAH. The willingness of the private trader (considered an informal source of credit) to provide farm input and consumption goods on credit without such collateral has always been his strong suit. To a risk-averse farmer an effective interest rate of 50 or 100 percent on a loan without a mortgage collateral requirement is generally preferred to a 12- to 24-percent loan wherein a mortgage is required.

In areas where CREDICOOP's member credit unions are active, the private trader has had to be more competitive. It was apparent from evaluation team members' discussions with farmers that credit union members and nonmembers alike have benefited from the competition. It is increasingly difficult for private traders to exploit their farmer clients with high repayment rates or unfair assessments of the value of their produce.

The great emphasis CREDICOOP member credit unions put on education has further accentuated the impact of such competition. The role and techniques of private traders form a central part of the sales pitch given to prospective members. The private trader's argument that sale of $100 worth of seed and fertilizer for $120 worth of cotton, due in 3 months, is somehow different from interest is debunked. The trader's tendency to undervalue the cotton when delivered is also exposed. Even prospects who do not join the credit union, or neighbors of credit union members who discuss these subjects over the back fence, reap the benefits of credit union education.

b. Bridge to National Development Bank and Commercial Banks

Although bridging to other formal sources of agricultural credit requires a willingness to mortgage one's property, the act of so doing is far less frightening when one has had prior experience with a credit union loan. Except for the nature of the collateral, credit union, National Development Bank, and commercial bank procedures are similar.

CREDICOOP's member credit unions require complete disclosure of borrower assets and liabilities as well as the borrower's financial history. More important, they also require development of a plan for the use of such funds (farm implementation plan). Through mastery of such procedures in the relatively helpful and nonfrightening environment of the credit union, the member can prepare himself to deal with alternative formal lenders. Even among the small sample of credit union members interviewed by the impact evaluation team, there were several who, having first learned to deal with formal credit through the credit union, had subsequently diversified to include loans from alternative formal credit institutions.

IV. CONCLUSIONS AND LESSONS LEARNED

A. Conclusions

In the final analysis, Purpose- and Goal-level impacts of AID's 14-year investment in Paraguay's small farmer credit union system can be summed up as follows:

1. Purpose

CREDICOOP is realistic in its objectives and has competent, dedicated people both nationally and in most of its local credit unions. At the same time, it is hampered by a heavy load of delinquent loans which, if they prove not to be collectible, will cause the system to decapitalize. Long-term institutional viability is thus still unclear. It hinges on the ability of CREDICOOP's member credit unions to collect the old debts while carrying on with the present, more conservative lending policies.

2. Goal

CREDICOOP appears to have had a positive impact on small farmers in the areas it reaches, both directly through provision of useful services to its members and indirectly by helping to change the competitive environment of the private trader. It is worth reiterating, however, that in a macro sense CREDICOOP has barely scratched the surface of the overall problem. Fully 98 percent of Paraguay's smallest farmers still rely exclusively on informal credit markets.

B. Lessons Learned

Lessons learned from the evaluation are summarized below.

1. Rural-Urban Mix

Integration of farmer and nonfarmer members in the same credit union can strengthen the institution by (1) helping to level financial flows during the course of the agricultural year and (2) providing relatively sophisticated leadership. The drawbacks of such a mix, for example, constant conflict of priorities among rural and urban members and the ever-present threat of domination by generally better educated urban members, appear to have been well contained in Paraguay. There is no significant cultural gap between rural and urban Paraguayans and, for the most part, urban members have taken pains to heed the need and special problems of rural members.

2. Spread

If an agricultural credit institution is to develop long-term sustainability it must charge a rate that takes into account both (1) its operating costs and (2) the costs of competitor's money. In most cases the appropriate competition reference is the private trader (because he must operate profitably or go out of business) not a government agency. His interest rate is more likely to reflect the true risk of the loan than any rate established by public policy. With private traders charging effective interest rates near 80 percent, and subsidized government programs charging 24 percent, CREDICOOP's realistic rate probably falls somewhere in between.

3. Factors Outside the Farmer's Control

The greatest weakness in any agricultural credit program is the unpredictability of weather and market conditions. No matter how effective the credit institution, if the farmer borrower realizes no income he will have difficulty paying off his production credits. AID needs to pay greater heed to these external risks to farmer borrowers and either work to minimize them or share the burden. In Paraguay AID's effective position has been the opposite--AID has tended to use the lever of credit to encourage farmers to try new crops and technologies and the results have been sometimes disastrous.

4. Importance of Being Persistent

In the final analysis, the most important ingredient to success in a free market environment is the determination to succeed. The unpredictability of weather and markets has kept CREDICOOP on the brink of disaster during much of its life. Despite this, it always manages to "come through" at the 11th hour, meeting the challenge of the moment. The key to survival, it seems, is that CREDICOOP's employees and directors identify with its purpose and are willing to pay the price of success, whatever it may be.

5. Collateral

The ability to lend without requiring mortgage collateral is an important strength of the credit union vehicle. By so doing, risk of default rises considerably, but so too does ability to reach small farmer borrowers. Default risk can be mitigated considerably by careful screening of borrowers prior to making a loan, and strict monitorship when a loan has been extended. By electing to operate in this fashion, much like the private trader lenders, credit unions can reach that great majority of small farmers who are unwilling to gamble their means of livelihood (farms) on a single crop.

6. Effect on the Farmer's Competitive Position

Whether or not individuals in the area served by a credit union have benefited directly, availability of the credit union alternative tends to make other agricultural services suppliers more competitive. More than any of its formal market competitors, credit unions invest heavily in educating members and would-be members alike about financial markets and institutions. In the process greater understanding is developed concerning all of the farmer's options--the private trader with his simple procedures and timely but expensive money and the formal lender with his cheaper money and cumbersome procedures.

7. Possible Collaboration Between Formal And Informal Lenders

The CREDICOOP impact evaluation shows that the informal market lenders are formidable competitors in the small farmer credit business. AID should learn from such private trader lenders and explore ways of working with them. A greater recognition of the contribution of indigenous credit delivery systems, and their particular effectiveness among the smallest farmers, is important for AID programmers.

Appendix A
Logical Framework

21

APPENDIX A

LOGICAL FRAMEWORK

From inception of AID assistance to CREDICOOP in 1974 until the present, AID's stated Goal for the project has remained the same: to increase the net income, productivity, and nutrition of small-scale Paraguayan farmers. The Purpose of AID's interventions has likewise been consistent: to develop a viable agricultural credit union system with capacity to provide technical and marketing assistance to farmer members. Originally this was to have been accomplished through two different entities: UNIPACO, to organize and develop marketing services cooperatives, and CREDICOOP, to develop an agriculture-oriented credit union system. Because of organizational difficulties, UNIPACO never got off the ground. AID assistance to that entity was subsequently deobligated and CREDICOOP was looked to as a counterpart in all areas.

Toward achievement of the goal- and purpose-level objectives, the following grant and loan assistance was provided by AID during a 14-year period from 1970 to the present:

I. 10/01/78, GRANT (526-0101), CREDIT UNIONS, $1,928,000

This grant, approved in 1978, provided an umbrella for all grant assistance to Paraguay's agricultural credit union system from 1970 until 1981. Its principal Outputs were the following:

1. Training of CREDICOOP staff, cooperative managers, and cooperative board members, and development of a system for continued training in the future

2. Standardization of procedures in accounting, capitalization, and credit for 30 rural cooperatives

3. Development of CREDICOOP's marketing department facilities and equipment

4. Augmentation of CREDICOOP's operating expenses

22

II. 06/30/75, LOAN (526-T-027), SMALL FARMER DEVELOPMENT, $3,000,000

This loan provided for a central source of credit funds to supplement member savings as well as related technical and marketing assistance for the local credit union network. Its principal Outputs were the following:

Through CREDICOOP

1. Preparation of 22 special courses to be conducted annually
2. Development of systematic operating procedures and accounting systems
3. Training of five individuals in administration of rural credit and two individuals in management and auditing

Through UNIPACO[1]

1. Establishment of in-country training programs for cooperative managers, directors, and accountants as well as for cooperative members
2. Development of marketing and supply operations and provision of related additional credit
3. Development of an accounting system for 50 member cooperatives
4. Equipment of 50 member cooperatives with facilities to carry out operations
5. Funding for general administrative/operating expenses

---

[1]Funds for this activity were never obligated because of UNIPACO's inability to resolve organizational problems.

23

III. 08/03/78, OPERATIONAL PROGRAM GRANT (526-122), CREDICOOP STABILIZATION FUND, $266,000

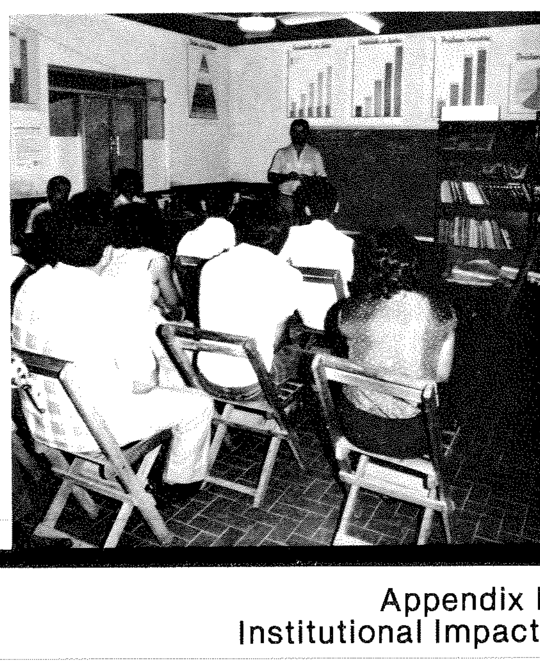
This fund provided an emergency central loan fund to resolve widespread member credit union liquidity problems during a nationwide crop failure. Nine cooperatives faced with grave liquidity problems in credit and marketing services were thus enabled to survive the crisis.

IV. 08/15/79, GRANT (526-0118), MINIFUNDIA CROP INTENSIFICATION, $2,250,000

This grant engaged CREDICOOP as an implementing agent for an agricultural production project whose objective was to increase the production of food crops as well as traditional crops with high labor requirements, and to reduce marketing constraints through promotion and exporting. Its principal Outputs were the following:

1. Training seminars in marketing, credit, promotion, and the handling of fruits and vegetables
2. Research studies of market opportunities, potential new crop varieties, and production technologies
3. Loans to enable farmer participation in the new crops
4. Construction of a cold storage and processing plant to serve CREDICOOP member credit unions

24



Appendix B
Institutional Impacts

APPENDIX B

INSTITUTIONAL IMPACTS

I. BACKGROUND

> "CREDICOOP has been a good institution ... [with] bright people who have made a lot of mistakes, but are honestly trying ...."
>
> Credit Union Member

CREDICOOP grew out of an AID/CUNA initiative to develop credit unions in Paraguay. From the mid-1960s to early 1973, 16 credit unions were developed, initially with limited membership. They quickly grew to an average of 500 members, which CUNA considered a necessary minimum to support adequate credit union infrastructure and overhead. At the initiative of the AID-supported CUNA program it was decided that a central organization was necessary to act as an intermediary between national and international institutions and supporters and the growing credit union movement. It was at this juncture that key members of the AID/CUNA team undertook the task of bringing together the 16 credit unions and constituting CREDICOOP as that central organization. A Paraguayan member of the AID/CUNA team became the general manager and a CUNA financial advisor was incorporated during the early management of the new central organization.

A. Growth Stages and Policies

1. The Early Years--Establishing the Network (1973-1976)

The original intention of CREDICOOP was to develop a credit union network in Paraguay, limiting its functions to those traditionally associated with credit unions--savings and lending services. The majority of early members of the original credit unions were urban salaried employees, such as teachers, but from the early days provision of credit union services to small farmers was a CREDICOOP objective. Agreements were established to use the Ministry of Agriculture extension agents to supply agricultural assistance both to the central office and, through local credit unions, to small farmer members. A similar agreement was made with the National Development Bank (BNF) to provide orientation at the central office and direct loans to the newly organized credit unions. An agreement was also made with UNIPACO to market member crops.

During the first few years, the extension assistance provided direct loans to credit unions. With AID's $3 million loan, however, the BNF began channeling credit funds to CREDICOOP for on-lending to credit unions rather than lending directly to the credit unions. This helped to secure CREDICOOP leadership. Unfortunately, CREDICOOP's initial strategy--promotion and organization in the field by generalist promoters supported by an auditor and, at the national level, development and coordination of financial and technical assistance sources--did not provide mechanisms for sufficient operating income or capital accumulation. As a result, although CREDICOOP grew in numbers, little progress was made toward financial independence during the early years.

2. Helping the Network Grow (1976-1979)

During the second major stage of CREDICOOP's development, operating emphasis shifted from developing new credit unions to assisting their growth. The CREDICOOP education program was strengthened, including further management training with emphasis on leadership, promotion, credit administration, and accounting. At this juncture, a plan to provide managers to certain problem credit unions was considered, but not adopted for lack of trained personnel and funds.

A second major shift occurred with the approval of the $3 million AID loan through the BNF to CREDICOOP. This loan made CREDICOOP a lender to its member credit unions. It created a mechanism for rapid capitalization of both CREDICOOP and member credit unions through sharing of the 10 percent share contribution retained from each loan. The AID loan also allowed flexibility for CREDICOOP and the credit unions to establish spreads which were necessary to cover operating costs.

CREDICOOP established a spread of 7-8 percent on the AID loan which was received at 2-3 percent. Their credit union affiliates added on an additional 8-percent spread. (These spreads have changed over the years with changes in interest rates.) These spreads allowed CREDICOOP and affiliates to progress rapidly toward covering their own operating expenses, and by 1978 CREDICOOP interest earnings covered approximately 90 percent of operating expenses. Under the former system of BNF direct loans to credit unions, CREDICOOP received no interest spread, and the credit unions received a meager 1.5-percent spread.

Under the AID agreement, loan funds were disbursed to CREDICOOP for on-lending, based on final borrower (i.e., credit union members') demand, rather than disbursed to CREDICOOP in lump sums for CREDICOOP to manage. This system had two negative effects. Lump sum disbursements would have aided CREDICOOP to more rapidly and effectively cover operating expenses (and possibly capitalize as well) through management of collected funds during the first years of loan disbursement. A second, more negative effect resulted from this disbursement procedure and schedule. Because disbursement was tied to final borrower demand with ambitious projected levels of borrowing, CREDICOOP and affiliates felt considerable pressure to "push loans on farmers" for project-approved purposes. Under this pressure, credit approval criteria and followup procedures were relaxed, with attention focused on "getting out the funds." The result was a lack of attention to loan recuperation (before and after loan disbursement) and resultant high delinquency rates. If resources had been under CREDICOOP's management without a rigid schedule for loan placement with final borrowers (farmers), it is likely CREDICOOP would have given more attention to loan administration, recuperation policies, and procedures of their affiliate credit unions.

A third major shift occurred during this stage which related to the services provided by CREDICOOP. Under the original plan, UNIPACO (a marketing central cooperative) was to be the marketing channel for most CREDICOOP members' agricultural products, particularly cotton. After UNIPACO's dissolution, CREDICOOP took steps in 1976 to directly assist small farmers to market their products, particularly cotton. First, CREDICOOP made an agreement to supply a cotton ginning company. In 1979, CREDICOOP rented a gin and finally, in 1981, constructed its own gin.

CREDICOOP's decision to develop its own marketing vehicle changed its original policy of concentrating its resources on savings and loan services. CREDICOOP backed into marketing unprepared. The motivation for this change in policy directly affected loan recuperation. Small farmer loans are repaid when the harvest is sold, so CREDICOOP management considered the marketing function absolutely necessary to recuperate small farmer loans. With the failure of UNIPACO, CREDICOOP attempted to fill this gap, first as an intermediary, then as both intermediary and processor-exporter. A marketing department was formed within CREDICOOP during 1975-1976, which has become more specialized as new functions have been added. Management time became increasingly diverted from the marketing role. Because of time constraints it was not possible to evaluate the real alternative marketing strategies open to CREDICOOP at the time of UNIPACO's failure, but the question is raised whether an alternative strategy would have better served the CREDICOOP system to strengthen its savings and loan functions.

3. Developing New Services

The third stage of CREDICOOP's institutional development formally began in 1978 with a change in CREDICOOP's bylaws. CREDICOOP was transformed from a centralized savings and credit organization to a multipurpose cooperative. Affiliated credit unions also made this fundamental change. This continued the trend toward diversified services at both CREDICOOP and local affiliate levels, which required additional personnel specialized in the new service areas. The diversification appears to have occurred prior to the consolidation of CREDICOOP's basic savings and loan function, including the upgrading of local credit union management to effectively administer the flow of AID credit funds.

During this stage of development CREDICOOP was selected by AID to administer a new small farmer crop diversification program. This program included crop research, demonstration, production, and marketing of vegetables and fruits for the purpose of establishing year-round cash crop research, with attendant income benefits for small farmers. Although the final outcome of this program, which is still in progress, may be positive, the institutional impact on CREDICOOP (and the affiliate participants) has been mostly negative, at least in the short run. Total grant funding of $2.25 million was approved for the project and partly disbursed at a time when CREDICOOP was trying to live on its own earnings. By reintroducing grant funding, CREDICOOP relaxed its efforts and diverted its concentration from loan recuperation and financial self-sufficiency to implement a complex, high-risk program beset by problems during early development.

In addition to participating in the crop diversification program, CREDICOOP decided to build its own cotton gin. This required resources not only for construction and related staff, but also for working capital to purchase credit union members' cotton harvests.

B. Consolidation and Survival

Over the past 3 years, CREDICOOP has been forced to shift to a policy of consolidation and survival. This retrenchment has been brought about by a combination of factors: (1) recent crop failures and the collapse of prices that occurred during the height of CREDICOOP's involvement in the marketing of fruits and vegetables, and (2) failure of credit union members to sell sufficient cotton to CREDICOOP to keep its new cotton gin operating profitably. In addition, the lack of systematic attention to loan recuperation over the past years, combined with delinquency generated by recent crop failures, led to critical financial conditions in approximately 30 percent of affiliated cooperatives, and an overall low rate of CREDICOOP recuperation on loans to affiliates. For 1983, the overall recuperation rate was only 34 percent. (Loan recuperation is discussed in Section II.A.4.e.)

A number of policies have been established to confront this situation. CREDICOOP field promoters, who originally served geographic regions, are now assigned to assist categories of affiliates with common characteristics (strong, fair, critical, etc.) CREDICOOP promoter-managers have recently replaced local managers in four of the weakest affiliates to try to recuperate them. This is the first time CREDICOOP has intervened and provided full-time managers for poorly managed affiliates. Based on an evaluation in late 1982, CREDICOOP has reduced its central staff to cut costs, reorganized its operating structure to reflect the need for vertical integration of its new income-generating services, and eliminated technical assistance functions that can be performed by outside agencies. A campaign to recuperate delinquent loans has been underway recently, and a Peace Corps volunteer is presently studying the causes and levels of delinquencies at the request of CREDICOOP management.

Over the past few years, CREDICOOP has faced a liquidity crisis whenever the time came to buy the cotton harvests. Purchasing cotton requires cash on hand in each affiliate to make competitively priced purchases. CREDICOOP has not yet fully developed local sources of short-term working capital to finance this critical period, relying instead on COLAC in Panama to provide loans for this purpose. A recent innovation, required by local currency fluctuations in relation to the

30

dollar, has been the use of dollar loans (kept in dollar accounts) as a guarantee for local currency loans.

In relation to the crop diversification program, CREDICOOP and AID are shifting emphasis to local rather than export markets and seeking alternative channels for processing vegetables and fruits that the local market for fresh fruits and vegetables cannot absorb.

II. ANALYSIS

The institutional impact of the CREDICOOP system (the Central Cooperative and its local affiliates) will be examined from various perspectives at both the local and national levels, through a description of CREDICOOP's participation and role versus the other institutional providers of services for small farmers, highlighting the relative strength and weaknesses of CREDICOOP and other service institutions as vehicles for effectively reaching the small farmer. This examination will include a discussion of the service delivery mechanisms, management style, and economic viability of the CREDICOOP system, compared, where possible, to alternative vehicles. A few key issues which emerged during the evaluation will be treated with special emphasis under this section of institutional impact.

A. The National Context

Paraguay is a small country with a limited internal market. Asuncion, the capital, is the only city of significant size in this country where towns and small cities, ranging from 3,000 to 40,000 inhabitants, predominate. The majority of the small farmer population is concentrated in the eastern and southern zones of Paraguay, less than a day's drive from the capital and near a town or small city. Under the Stroessner regime the country has had political and public administrative continuity for decades, with relatively little change in institutions and personnel. In contrast to Paraguay's limited size, population, and market, two of its neighbors, Brazil and Argentina, are the giants of Latin America and are major markets for Paraguay's agricultural production.

1. Key Institutions

Various public and private institutions provide services directly or indirectly (credit, technical assistance, etc.) to the small farmers in Paraguay. In the public sector these include the National Development Bank (BNF), with branches in 46 towns and cities, and the Agricultural Credit Improvement Agency (CAH) and the Agricultural Extension Service (SEAG), both under the Ministry of Agriculture. In the private sector, the small farmer can obtain limited service from the private commercial banking system and, to a significant degree, from cooperatives and credit unions, a portion of which are affiliated with the CREDICOOP system. The most widespread service provider to the small farmer is the local private trader (called an acopiador). The private trader is a local merchant-storeowner who retails basic goods and also has established relationships with processing industries. He acts as their local buyer or intermediary for purchase of the harvest from local farmers. To what extent do each of these institutions meet the needs of the small farmer?

2. Participation of Major Institutions in Small Farmer Services

Table B-1 shows the total number of small farms in Paraguay, based on the census of 1980. It disaggregates farms according to land area and the number of farms assisted with credit by the BNF and the CAH in each size stratum of farms. The figures for CREDICOOP assistance to farms below 20 hectares, the target segment, shows that 3.5 percent are being assisted by CREDICOOP and that CREDICOOP has achieved 172 percent and 54 percent, respectively, of the numbers assisted by CAH and BNF. This is particularly significant given the relatively short life of CREDICOOP and its affiliates in comparison with that of the CAH and BNF.

Table B-1. Small Farm Universe by Size Segments and Credit Assistance by Key Lenders

Farm Size	Number of Farms	No. of Farms Assisted by			Number Assisted	Deficit
		CAH	BHF	CC		
0-4.9 ha	66,750	-	674	1,503	2,177	64,573
5-9.9 ha	31,492	740	2,976	2,065	5,781	25,711
10-20.9 ha	43,096	2,100	5,320	1,315	8,735	34,361
Total	141,338	2,840	8,970	4,883	16,693	124,645

32

Data on nonaffiliated agricultural cooperatives, although incomplete, suggest that an additional 500-1,000 small farms are being assisted by cooperatives outside the CREDICOOP system. Many of these cooperatives are composed of immigrant groups such as Japanese, German, Brazilian (near the border), and Mennonites, who have successfully developed agricultural cooperatives in Paraguay from the 1920s to the 1950s.

The private commercial banks are required to allocate 10 percent of their loan portfolios to agricultural loans, but these allocations generally go to large farms and agrobusinesses rather than to small farmers. Commercial banks do assist processing industries and are active in export credits. Under the separately AID-financed Paraguay Rural Enterprise Project, loans were made by commercial banks to agribusinesses. In turn, such agribusinesses utilized small farmer inputs for processing.

Undoubtedly, the traditional local private trader is the primary source for the majority of small farmer services. Because of the diversity and independence of these private traders, little statistical information is available. A study by the Paraguayan Center for Sociological Studies (CPES) in 1974 estimated that 71-81 percent of small farmers with 0-5 hectares (over half of Paraguayan farmers) utilize the services of these local private traders to supply most or all of their credit needs. As the farm size increases, the dependence on private traders decreases. In subsequent sections of this evaluation, private trader practices will be compared with the alternative source of services.

3. Cooperatives in Paraguay

The cooperative movement in Paraguay was started during the 1920s. Immigrant groups including Mennonites, Japanese, Germans and, more recently, Brazilians have formed and developed successful agricultural production cooperatives. Their members generally own enough land to fall outside the small farmer classification. Many of the early Paraguayan cooperatives were formed by priests. The Ministry of Agriculture established a department for cooperatives, which approves bylaws and registers them. This process started in 1973.

In 1983, 172 cooperatives were registered in four categories: production, credit unions, service, and consumer cooperatives. In Table B-2, the distribution by type is presented with membership totals for each category. There are two major central organizations for cooperatives: FECOPROD, the Federation of Production Cooperative, which is primarily a representational body; and CREDICOOP, a multiservice savings and loan

37

central. Formerly a third national body, UNIPACO, acted as a marketing central with local affiliates, but it is no longer in operation. Many of its affiliates are joining CREDICOOP, although these figures are not reflected in the table.

Table B-2: Cooperatives in Paraguay in 1983

Category	Total		FECOPROD		CREDICOOP	
	No. of Coops	Members	No. of Coops	Members	No. of Coops	Members
Production Coops	102	14,533	24	5,775	13	4,603
Credit Unions	52	24,422	-	-	39	20,711
Service Coops	8	9,843				
Consumer Coops	10	315				
Total	172	49,113	24	5,775	52	25,314

Source: Data obtained from the Director General of Cooperatives of the Ministry of Agriculture, and adjusted and updated using CREDICOOP and FECOPROD data.

4. Growth of the CREDICOOP System

In 1968-69, CUNA conducted a feasibility study to assist the new credit union movement in Paraguay. Between 1970 and 1973, 16 credit unions were formed and 8 others were being formed under an AID/CUNA project. An umbrella agency was needed to service existing credit unions and establish new ones, as well as a strong central entity to relate to national institutions and international donors such as AID. As a result, representatives of the 16 credit unions organized CREDICOOP in October 1973. AID grant funds were invested from 1970 through the early years of CREDICOOP formation to support operating expenses, technical assistance, training, and physical planning.

34

a. Credit Union Affiliates

CREDICOOP started with 16 member credit unions of which 9 were urban and 7 were rural. It is important to point out that the urban credit unions are composed entirely of nonfarmer members, while the rural credit unions, located in secondary towns, are composed of varying mixtures of local farmers and nonfarmer members. From 1973 through 1983, total CREDICOOP affiliated credit unions and cooperatives rose from 9 to 17 in urban areas and from 7 to 53 in rural areas for a 1983 total of 70 cooperatives (see Table B-3). In 1983, 18 agricultural cooperatives from the dissolved UNIPACO central marketing cooperative were absorbed by CREDICOOP. CREDICOOP tripled its affiliate membership in less than 10 years before incorporating the UNIPACO cooperatives.

Table B-3. Growth in Credit Union Affiliates

Year	Urban	Rural	Total
1973	9	7	16
1974	11	17	28
1975	10	23	33
1976	11	26	37
1977	13	26	39
1978	13	29	42
1979	13	30	43
1980	13	33	43
1981	15	35	50
1982	15	53	68[a]
1983	17	53	70

[a]In accordance with an agreement signed between both centrals, 18 agricultural cooperatives were incorporated after UNIPACO's failure.

Source: CREDICOOP Annual Reports and Balance Sheets, 1974 through 1982.

b. Credit Union Membership

As Table B-4 illustrates, membership doubled from 1974 through 1982 (11,594 to 23,967 members) following the extremely high growth years of 1970 through 1973. Average membership per

35

credit union has fluctuated from 350 to 500 members, but range in size is from 100 to 3,000.

Table B-4: Composition of Credit Union Membership

Urban Coop Total Year	Rural Coop Non-Farmer (a)	Total Non-Farmer (b)	Rural Coop Farmer (a/b)	Rural Coop Total (c)	Grand Total (b/c/d)	(a/d)
1973[a]						
1974[b]	5,076	2,995	8,071	3,523	6,518	11,594
1975	5,036	3,227	8,263	3,706	6,933	11,969
1976	5,054	3,599	8,653	4,166	7,765	12,819
1977	4,409	5,481	9,890	4,833	10,314	14,723
1978	5,046	5,699	10,745	5,200	10,899	15,945
1979	5,893	6,142	12,035	5,584	11,726	17,619
1980	7,270	6,802	14,072	6,260	13,062	20,335[e]
1981	8,855	7,609	16,464	6,187	13,796	22,651
1982	10,036	6,956	16,992	6,975	13,931	23,967
1983	11,111	6,531	17,642	7,672	14,203	25,314

[a]CREDICOOP was founded in October 1973.
[b]First CREDICOOP Annual Report.
[c]CREDICOOP has urban and rural members in rural coops; therefore, we are providing separate figures obtained by subtraction.
[d]Figures taken from 1973/1974 Annual Report.
[e]Figures taken from 1980 Annual Report.

Source: CREDICOOP Annual Reports.

For purposes of this evaluation it is important to note that 42 percent of members are in purely urban credit unions, and 58 percent are members of rural credit unions, of which nonfarmers and farmers each constitute about 50 percent. Thirty percent of total members of CREDICOOP affiliates are farmers. This farmer/nonfarmer ratio has been maintained from 1974 through 1982, as each category of membership doubled.

The composition of CREDICOOP's affiliates, the mix of urban and rural credit unions, has important managerial, operational, and financial implications, as does the mix of nonfarmer and farmer memberhsip within each rural credit union. These implications will be described and analyzed in subsequent sections.

c. Growth in Share Capital of CREDICOOP and Credit Unions

CREDICOOP's share capital comes from the affiliate credit unions in two forms: 2.5 percent of affiliate member share capital is paid annually to CREDICOOP, and 5 percent of loan resources which CREDICOOP lends to member credit unions is retained to capitalize CREDICOOP. The local credit union lends these external resources to members with the requirement that 10 percent be capitalized; in essence, this means that the local cooperative retains 5 percent and CREDICOOP retains 5 percent in the name of the final borrower.

CREDICOOP share capital has grown from 2.4 million guarani in 1974 to 101.5 million by the close of 1982 (9 years) which represents a 23-fold average growth in share capital per credit union affiliate and a 20-fold average growth per credit union member in absolute terms (without adjustments for inflation). The high rate of share capital growth was largely due to the high ratio of external to internal funds used for lending to members (i.e., AID and other external sources of loan funds) with the forced capitalization program feature of the lending program.

This rate of share capital growth is not evenly spread across the urban versus rural credit unions, or between farmer and nonfarmer members. Purely urban credit union share capital has increased from 52 percent to 55 percent of the total share capital, with approximately 42 percent of total membership, while rural cooperatives have decreased their portion of total share capital from 48 percent to 45 percent while maintaining 58 percent of total member numbers. Furthermore, the farmer members' (who have continued to constitute 30 percent of over all membership) percentage of share capital has declined from 28 percent to 17 percent of total shares. This implies that farmers are receiving fewer loans, or receiving smaller average loans, and making fewer voluntary share capital purchases. Given the history of crop failures and marketing problems, this trend is logical.

d. Growth of Service Offered to Member Cooperatives

A list of the services provided by CREDICOOP to its members with the year each service was initiated (and terminated, where applicable) is provided in Table B-5. These services will be compared in the next section to those offered the small farmer by alternative local providers.

Table B-5. Services Offered by CREDICOOP to Member Cooperatives

Services Offered	'74	'75	'76	'77	'78	'79	'80	'81	'82	'83
Coop. Promotion and Organization	o	o	o	o	o	o	o	o	o	o
Financing	o	o	o	o	o	o	o	o	o	o
Education	o	o	o	o	o	o	o	o	o	o
Audit	o	o	o	o	o	o	o	o	o	o
Accounting Procedures	o	o	o	o	o	o	o	o	o	o
Administrative, Accounting and Legal Advice	o	o	o	o	o	o	o	o	o	o
Representation and Lobbying	o	o	o	o	o	o	o	o	o	o
Agricultural Technical Assist.	o	o	o	o	o	o	o	o	o	o
Life Insurance and Share Bonds	o	o	o	o	o	o	o	o	o	o
Marketing of Agri. Products			o	o	o	o	o	o	o	o
Sale of Coop Prod.			o	o	o	o	o	o	o	o
Product Transportation										
Product Exportation							o	o	o	o
Supply of Bags, Crates, etc.				o	o	o	o	o	o	o
Transportation of Inputs						o	o	o	o	o
Processing							o	o	o	o
Accounting by Computer										o

As examples of the growth in services provided by CREDICOOP, Tables B-6, B-7, and B-8 cover the volume and value of agricultural products marketed from 1975 through 1983, the value of agricultural inputs and equipment sold to affiliates from 1977 through 1983, and the volume of loans made to affiliates over the life of CREDICOOP.

e. Loan Recuperation from Member Cooperatives

An analysis of CREDICOOP's loan recuperation experience during 1983 is helpful in illustrating the general health of the CREDICOOP system, the importance of the urban-rural mix of the member cooperatives, and other specific indicators.

It is important to emphasize that the CREDICOOP system is basically built on loans and loan recuperation. The whole system is capitalized largely by a percentage of its loan activity. If large losses are incurred, share capital will be rapidly eroded and potentially eliminated. If new sources of outside long-term capital dry up, forcing CREDICOOP and its members to rely only on loan recuperation to replenish the supply of funds for new lending, the system will be in serious trouble.

During 1983, CREDICOOP had a total of 304 million guaranies in loans due from 46 member cooperatives; 55 percent of that debt was due from years prior to 1983 and 45 percent came due in 1983. Thus, over half the debt was past due, and a significant portion for a number of years. Of the total due, 34 percent was recuperated during 1983 and 66 percent remained delinquent. In other words, the delinquent portfolio preceding 1983 was carried over and increased.

A continual, unanswered question is what percentage of the unrecuperated loan portfolios is actual or probable loss and what percentage will be recuperated? CREDICOOP and member cooperative practices of rolling over past due loans or carrying them on the books rather than writing them off makes a reasonable estimate nearly impossible without an in-depth analysis. Part of the unrecuperated portfolios stems from crop failures and related disasters, and therefore CREDICOOP expects to recoup some of this category of delinquent loans over a period of years.

The recuperation rate by CREDICOOP from rural cooperatives in 1983 was only 27 percent on total outstanding debt. In contrast, the rate for urban cooperatives was over 100 percent (the rate was over 100 percent because some cooperatives paid in more than was due). Table B-9 contains the 1983 data on CREDICOOP debt recuperation.

Table B-6. CREDICOOP Loan Volume to Affiliated Credit Unions
(in thousands of guaranies)

Category	1975	1976	1977	1978	1979	1980	1981	1982
Agri. Production	2,009	8,909	117,831	118,247	237,685	288,035	179,506	91,386
Marketing Advances	0	24,297	32,228	41,080	109,005	94,705	98,248	56,577[a]
Operating Capital	1,950	4,049	2,780	13,819	23,048	33,243	26,041	3,920
Admin. Loans (startup assets)	2,163	2,024	2,580	12,092	25,246	36,262	3,749	4,229
Land Purchase	0	0	2,614	16,250	3,919	2,616	573	0
Other	0	1,214	735	945	1,126	1,734	53,182	4,214
Total	6,122	40,493	158,768	202,433	400,029	456,595	361,299	160,326

[a]Estimated figures from 1982 balance sheet.

Source: Annual Reports 1975 to 1982.

Table B-7. CREDICOOP Marketing
(in tons and thousands of guaranies)

Product	1974	1976	1977	1978	1979	1980	1981	1982	1983
Cotton									
tons	1,762	1,370	3,898	4,427	5,044	6,189	6,754	3,872	4,727
guaranies	82,800	63,000	194,900	194,700	262,359	377,500	391,500	186,000	383,000
Tobacco									
tons	0	191	77	6	69	104	0	0	0
guaranies	0	10,779	3,421	364	4,394	6,493	0	0	0
Corn									
tons	0	0	0	106	72	15	0	76	379
guaranies	0	0	0	1,614	1,118	188	0	1,444	12,286
Wheat									
tons						8	0	0	0
guaranies						200	0	0	0
Vegetables									
tons	0	0	0	0	0	490	0	300	450
guaranies	0	0	0	0	0	33,000	0	7,500	11,250

Source: Table prepared by the Marketing Department of CREDICOOP.

Table B-8. Agricultural Production Inputs Sold to Affiliates
(in guaranies)

Input	1977	1978	1979	1980	1981	1982	1983
Implements	9,624,800	10,779,776	28,110,625	31,483,900	39,702,500	18,425,000	8,625,600
Insecticides	11,425,900	12,911,267	19,623,784	21,586,162	42,000,000	22,425,000	19,432,800
Fertilizers	2,800,000	3,220,000	7,019,800	8,000,000	8,500,000	3,000,000	3,425,700
Total	23,850,700	26,911,043	54,754,209	61,070,062	90,202,500	43,850,000	31,484,100

Source: Table prepared by the Marketing Department of CREDICOOP.

Table B-9. CREDICOOP Loan Recuperation from Member Cooperatives

Percentage Recuperation	Urban Cooperatives	Rural Cooperatives	Total
100	10	8	18
75 to 99	0	3	3
50 to 74	0	2	2
25 to 49	0	4	4
11 to 24	0	5	5
0 to 29	1	13	14
Total	11	35	46

Urban cooperatives have a strong recuperation record, while 62 percent of the rural cooperatives have paid less than half their obligations to CREDICOOP. Approximately half the rural cooperatives are serious problem cases, considering that CREDICOOP is generally their largest creditor. A spot check demonstrates that the majority of rural cooperatives with satisfactory repayment levels to CREDICOOP have a clear majority of nonfarmer members. A study now in progress shows that delinquency is higher in cooperatives with a high ratio of farmer members whereas in larger cooperatives with heavy nonfarmer (urban) membership, delinquency rates are comparatively lower for farmers and much lower for nonfarmers. This suggests a different level of management capability as cooperatives become "more urban" as well as reaffirming the relative weakness of loans to farmer members

The more general conclusions drawn from this analysis are that:

-- The urban cooperatives are critical to CREDICOOP's short-term liquidity position and overall institutional survival.

-- The stronger rural cooperatives have a large nonfarmer membership base which provides liquidity, relatively more competent management, and a hedge against the financial impact of farmer member delinquency due to crop failures and poor loan management.

-- It is unlikely that CREDICOOP can survive for long as a savings and loan institution with recuperation rates as low as 34 percent, without continuing infusions of long-term external loans (or grants) with extended grace periods.

B. <u>The Local Context</u>

This section compares the services available to the small farmer from the principal Paraguayan institutions, judged from the perspective of type/range of services, cost of services, delivery mechanisms, management characteristics, and style of provider institutions. The following paragraphs summarize qualitative differences using CREDICOOP as the standard for comparison. Statistical comparisons are contained in tables for each area discussed.

1. <u>Types of Services</u>

Table B-10 presents the types of services provided to small farmers by type of institution. The CREDICOOP network (and other nonaffiliate agricultural cooperatives) provide the widest range of services of any institution. This is due to CREDICOOP's evolution to a multipurpose cooperative, combined with its continuing policy of channeling additional services (technical assistance, medical assistance, home loans, etc.) from other institutions through the CREDICOOP network. CREDICOOP is the only group which generates client capital formation through share purchases and in addition promotes small farmer and urban member savings, an important distinction between

Table B-10. Services Offered to the Small Farmer

Service	CREDICOOP Ag. Coop/ Member Coop/	BNF	CAH/ AUCA	Private Trader Agri-Business	Commercial Banks
Financial Services					
-credit for working capital					
production	o	o	o	o	
marketing	o			o	
fixed assets	o	o	o	o	
equipment	o				
Capital Formation					
-share purchase	o				
-savings accounts	o				
Technical Assistance					
-farm/loan plans	o	o	o		
-agri. orientation	o	o	o		
-marketing orientation	o	o	o		
Agricultural Inputs					
-products	o		o	o	
-equipment	o		o	o	
Marketing Services (by product)					
-purchase harvest	o			o	
-warehousing	o		o	o	
-transport	o		o	o	
-agri. processing	o			o	
-sales					
domestic market	o			o	
export market	o			o	
Educational Services					
-coop education	o		o		
-credit education	o		o		
Institutional Participation					
-ownership	o				
-directors	o		o		
Misc. Services					
-provision of personal supplies (education/health)	o			o	
-emergency asst.	o			o	
-subsistence food	o			o	

institutional alternatives. The cooperative education program is another service area in which CREDICOOP is strong, combining cooperative and credit education with traditional agricultural planning and technical extension services. Only the cooperatives and the CAH have promoted the organization of farmers in local committees (based on geographical location) for mutual support and instituitonal communication, and CREDICOOP cooperatives have taken this a step further with member ownership.

As Table B-10 shows, private commercial banks seldom provide even direct credit services to small farmers, whereas the BNF and CAH provide both credit and planning/extension services to those farmers who meet each institutions's criteria, which in the case of the BNF are stricter than alternative sources. Small loans for education or consumer goods are rare from the BNF and formal banking sources, while the private trader and the cooperative have been the primary sources for such loan assistance.

Equipment and farm production inputs are being supplied primarily by the local private trader and cooperatives. Indications are that cooperative competition in the local marketplace tends to reduce private trader prices and open an alternative source for small farmers.

Marketing is another critical field in which banks do not operate. Formerly, marketing was the exclusive domain of local traders in concert with agribusiness companies which handled processing and final sale in the domestic or export market. CREDICOOP and other agricultural cooperatives are now competing both locally in crop purchasing and nationally in the processing or domestic export sale of some major crops, particularly cotton and vegetables. CREDICOOP's share of the cotton processing is small (2 percent in 1982/1983) but growing.

2. Pricing of Services

The costs of services provided by the public sector institutions (BNF and CAH) are recovered, partially or totally, through interest and commission charged on borrower loans. The same is true for private commercial bank operations, when they occur. CREDICOOP, other nonaffiliated agricultural cooperatives, and the local traders provide the widest range of services, follow different procedures, and in some cases charge substantially different rates for services.

CREDICOOP and affiliates have traditionally used standard interest rates for loans that are competitive with BNF rates, yet they provide a wider range of services (education, etc.) to smaller loan clients. The credit union does not have the resources of the government or a large private bank to absorb high loss rates or carry delinquent portfolios over extended periods of time. Therefore, it is probably not realistic for CREDICOOP to operate at such rates of interest. In contrast, the local private trader charges substantially higher interest rates with less risk exposure. The private trader packages his interest rate differently, however, including it in the cost of items sold or reducing the price on items purchased from farmers, rather than openly expressing it as a percentage of funds borrowed.

CREDICOOP's forced share purchase mechanism (10 percent on each loan) effectively increases the cost of its loans for borrowers, yet the shares stay in the client's name. From an institutional perspective, this share purchase feature helps to capitalize the cooperative and the central, but it should not be used to cover operating losses and high default (or delinquency) rates, which will rapidly decapitalize the institution. Projected operating losses and default rates should be built into the basic interest rate.

CREDICOOP initiated the provision of production inputs and equipment to lower costs to its members. In many cases the local competitors' prices have decreased as a result.

CREDICOOP is now pursuing a healthy policy of bulk purchases at reduced rates. Where competition permits, they are adding sufficient margins to wholesale prices so that these services are, at a minimum, self-sufficient, or profitable for the cooperative, yet less expensive for member clients. It appears that costing by service is a recent innovation at CREDICOOP, thus allowing the setting of adequate margins.

CREDICOOP pricing policy for services in the processing and marketing of cotton is now similar to that of private traders and agroindustry. The daily market price determines the cost of purchasing the harvest, and external market prices determine the final sale price of processed cotton. CREDICOOP is learning how to operate in this market climate. Early attempts to commit member farmers to sell crops to CREDICOOP for fraternal reasons, or at lower prices, or with delayed payments were ineffectual. CREDICOOP is now meeting the competition with cash in hand. This policy is necessary for CREDICOOP's cotton gin operation to survive. It must get sufficient quantities of cotton for economic use of the gin and to meet export contracts.

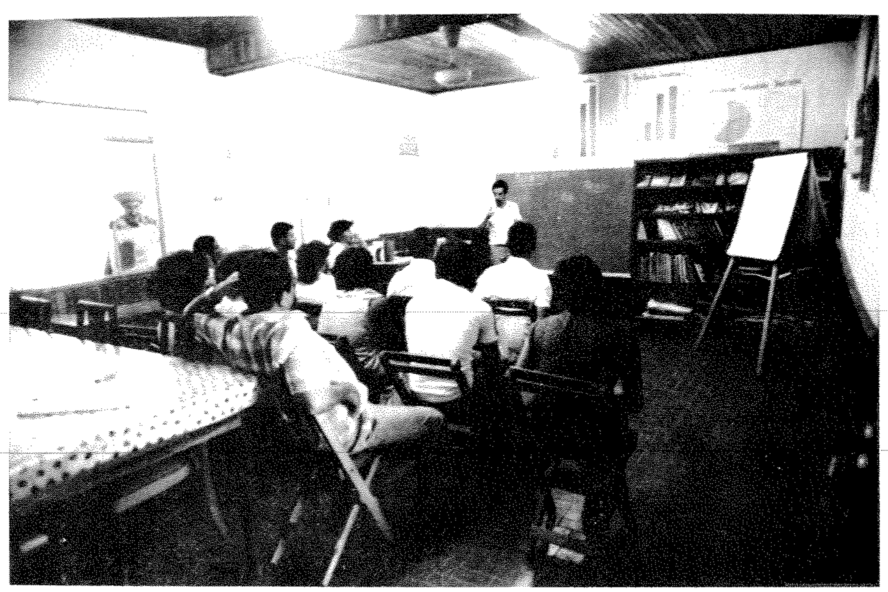
3. Delivery of Services

Table C-2 in Appendix C compares credit terms from the various institutions dealing with Paraguayan farmers. Various important factors for service delivery to small farmers should be considered (such as accessible location, paperwork and bureaucratic requirements, delays in approval, and guarantee and collateral requirements) in addition to monetary cost.

Credit delivery procedures vary greatly among institutions. Private traders are located near clients. They do not require paperwork, signatures, or formal guarantees, and they furnish credit in cash and in kind when needed without delay (if they trust the small farmer). They generally risk a lower percentage of expected harvest value than formal institutions and charge higher rates. The trader's geographic proximity protects his investment, because he is there to buy the harvest when it is ready, discounting cash or in-kind loans at the time of purchase.

Cooperatives follow procedures similar to those used by banks for approval of credit. They both require farm plans as a basis for loans and require signed loan documents. The cooperatives generally do not require mortgage guarantees as do banks, but accept liens on implements, animals, and the harvest. As a result, the time, document costs, and disbursal delays are less with cooperatives than with banks, as is the fear of property loss in case of crop failure. Often the interest charges for credit are quite similar at the cooperative and the bank, and are much lower than the charges of the local trader.

4. Management Style



The cooperative has a special relationship to its clients, because they are also shareholders. This increases access for the less educated small farmer and creates a more informal, comfortable atmosphere compared with alternative credit sources such as public or private commercial banks. This sense of ownership and informality can have negative effects if a serious business climate is not established for the loan and other transactions. The private trader probably best exemplifies an effective balance between easy access combined with businesslike transactions. The most successful cooperatives have developed this balance. The cooperatives are private and are managed generally by socially motivated local residents with long-term commitments to their geographic areas and their cooperative. In contrast, most public agency and bank personnel are outsiders (often relocated) and are not perceived to have the commitment of cooperative personnel. The cooperative is also the only local service organization constituted under a local board of directors elected by clients. Therefore, policies, procedures, and services can be acted on locally.

The fact that cooperatives are locally constituted and directed creates a major challenge for local managers, particularly during the early years of formation and growth. The manager must lead, promote, educate, and administer services. Managers with this range of capabilities are rare, particularly in the interior and, when available, command salaries far beyond that which fledgling cooperatives can afford. CREDICOOP found that recruiting young local people with "potential" and supporting them in the key functions was the best of their limited alternatives. Where this worked, the cooperatives became relatively strong, and vice versa.

5. Economic Viability at the Local Area

In this section, the economic viability of individual cooperatives (affiliates of CREDICOOP) is compared to the formal government institutions delivering agricultural services through local branches. In addition, key factors playing an important role in the economic viability of individual cooperatives are examined through the comparison of one large and one small rural cooperative which are a part of the CREDICOOP system.

Table B-11 compares a small BNF branch bank, a large CREDICOOP affiliate, a small affiliate with mostly farmer membership, and a CAH district office which provides small farmer loans through the Ministry of Agriculture. The BNF branch and the large cooperative have approximately equal loan portfolios and operating costs (± 9 percent of portfolio), yet the cooperative provides a greater range of services to its farmer

69

Table B-11. The Operating Cost of Alternative Delivery Systems at Branch Level

Item	BNF Rural Branch	% of Port-folio	Large Urban Coop	% of Port-folio	Small Rural Coop	% of Port-folio	CAH Dist. Office	% of Port-folio
Total Loan Portfolio	139,921	100.0	140,930	100.0	6,749	100.0	53,745	100.0
Income From Interest	30,097	2.5	31,568	22.3	2,159	31.3	0	0
Operating Costs	13,340	9.5	12,849	9.0	1,514	22.3	15,054	285.0

members. Income from interest is also nearly equal for the two, which charge an average of 21-22 percent interest on loans.

The small cooperative and the CAH office have considerably higher operating costs as a percentage of total portfolios (22 percent and 28 percent). The small cooperative charges 32 percent to generate sufficient income to cover operating and capital costs. (See discussion in Appendix E on the Juan E. O'Leary cooperative.) Many of the smaller rural cooperatives have followed CREDICOOP's general policy of charging 24-percent interest on loans, yet spread analysis shows that each cooperative should set rates based on an analysis of its own cost structure. In the case of the Juan E. O'Leary cooperative, a rate of 32 percent is necessary to cover minimal operating costs given the relatively small total portfolio and cost of funds. Information for the CAH district office interest income was not available, although under normal CAH policy a rate of 14 percent is charged. At this rate, 50 percent of operating costs plus total cost of funds must be subsidized by the Paraguayan Government; thus the small cooperative has a more economically viable approach to reaching small farmers.

Viability of the branch structure of these alternative institutions depends on a mix of factors including the size of loan portfolio, operating costs, loss rates, and cost of funds. For financial viability, each individual cooperative needs the flexibility to set interest rates and local spreads in order to reflect its local cost structure. BNF and CAH branches are not separate legal entities. Blanket interest policies can be set at the national headquarters of those two public institutions, with a concern only for aggregate financial viability. Whereas CREDICOOP rural affiliates' main competition for agricultural services is the private trader, who charges considerably higher rates, the cooperatives can increase rates substantially and remain below the rates of the local trader.

6. Factors Determining the Viability of Two CREDICOOP Affiliates

Table B-12 presents a financial analysis of the CREDICOOP affiliates that represent opposite ends of the spectrum among the CREDICOOP rural affiliates. Many of the critical factors determining the viability of individual cooperatives and the systems as a whole can be illustrated by the comparison of these two examples.

Table B-12. Comparative Figures for Two CREDICOOP Affiliates

Category	Coop A	Coop B
Number of Members	2,404	152
Percentage of Portfolio by Sector		
Agricultural Loans	25%	81%
Urban Loans	75%	19%
Percentage of Portfolio Finances by Cooperative's Own Capital		33%
Portfolio in 1983 (millions of G)	141	6.7
Interest Rate (average annual)	22%	32%
Average Annual Cost of Loan Funds	5.3%	11%
Operating Costs as % of Portfolio	9%	22%
Estimated Loss Rate	2%	5%

Cooperative A is a large rural cooperative with a preponderance of urban membership; 75 percent of its loan portfolio is lent to urban members for personal, housing, and commercial purposes. In spite of its urban focus, the rural membership and portfolio of Cooperative A is larger than that of Cooperative B in absolute terms and therefore makes a larger relative contribution to delivery of agricultural services.

Cooperatives with a high percentrage of urban membership have clear advantages based on their capital structure, cash flow requirements, and cost structure. Cooperative A financed 63 percent of its 1983 portfolio with its own capital resources, while Cooperative B could cover only 33 percent, thus requiring 67 percent of its portfolio to be covered by external borrowing. Traditionally, urban membership has been required to capitalize more, borrowing on an average only 2 times capital. In addition, the urban members have been more active in spontaneous capitalization, as well as in maintaining savings accounts. As a result, cooperatives such as Cooperative A have a substantially stronger capital structure, resulting in numerous benefits in terms of viability.

The cost of loan funds of Cooperative A (5.3 percent) is less than half that of Cooperative B (11 percent) because of the differing levels of their capital versus external

SV

resources. The estimated loss rate of Cooperative A is lower, because of its urban membership performance, risk level, and capitalization ratio compared with the largely agricultural membership of Cooperative B.

The cooperatives with a large membership also have a cash flow advantage, because urban loans are taken out in a more even pattern over the year and repaid by salaried members on a monthly basis. Agricultural lending occurs in a more bunched manner, determined by planting and harvest cycles with repayment occurring all at once at the time of the sale of the harvest. Therefore, cooperatives with large urban memberships do not need external cash flow financing to the extent of those with primarily farmer membership.

Size is another important factor associated with viability. Adequate management, staff, and operating infrastructure for a cooperative require minimum expenditures in operating costs. The minimal costs are relatively higher for agricultural loans and related services. As the loan portfolio of a cooperative increases, the percentage of operating expenses tends to decrease dramatically, to 9 percent for Cooperative A and 22 percent for Cooperative B. Therefore, the larger cooperatives can break even at lower final interest rates. Cooperatives with substantial urban membership (associated with larger towns) tend to have larger overall membership and are better able to support the overhead costs associated with agricultural services to small farmer members.

These factors lead to the conclusion that the greater the overall size, and especially the size of the urban component, the greater the overall viability of cooperatives. Some CREDICOOP affiliates have pursued a policy of increasing both overall size and urban membership to reach an urban/rural mix which maximizes economic viability. A similar strategy, which to our knowledge has not been utilized by CREDICOOP, would entail transforming small rural cooperatives into subsidiaries of a larger cooperative in the region in order to increase the size, urban/rural mix, and management capability.

The preceding analysis demonstrates that the larger CREDICOOP affiliates with a substantial urban base in rural towns are as viable economically as the branch bank and more viable than the subsidized CAH system. They serve the small farmer with a broader range of services. In contrast, the smaller cooperatives with largely farmer membership are less viable economically than the branch bank. To survive and grow they must establish interest rates and margins on loans and services with spreads sufficient to cover costs of funds, losses, and operations.

III. Conclusions

A. Local/National Penetration of CREDICOOP Network

CREDICOOP has established a very significant network over the past 10 years which is recognized both locally and nationally.

Geographic penetration, with 70 locally run credit unions and cooperatives spread throughout the country, surpasses that of the National Development Bank and other formal service institutions. With over 50 percent of Paraguay's total cooperative membership, including a majority in rural towns and surrounding farm areas, CREDICOOP has become a major force in the cooperative movement.

The CREDICOOP system has effectively established both political and administrative credibility with many affiliate locations at the national level. This includes well-developed working relationships with government agencies, technical and banking communities, and international donor and support agencies such as AID, IDB, Peace Corps, and COLAC. More recently, CREDICOOP has developed the private sector relationships required for agricultural and marketing services, and has initiated contacts with private banks which are important for future survival and growth. CREDICOOP's weakness stems from lack of consolidation of this cooperative network, and the range of services offered to members.

B. Range of Services and Impact on Institutional Development

CREDICOOP initially established a system of savings and loan credit unions. Subsequently, before national consolidation of the savings and loan system could be solidified, CREDICOOP went on to develop a range of agricultural services, (e.g., production inputs and assistance with marketing, processing, and crop diversification) for its fledgling rural cooperative affiliates.

While the impact of this expansion in services may be positive for CREDICOOP's farmer members, from an institutional perspective it has been negative. The task of consolidating the savings and loan functions has been set back, and the resultant inequitable division of services for urban and rural cooperatives and members has caused some dissent in urban coops. Each new service program entails "a high cost of learning" (management/staff time, operating losses, etc.) which the CREDICOOP system is not well prepared to absorb.

It remains to be seen whether CREDICOOP and its weaker affiliates will eventually consolidate some or all of the range of services, or fail as a result of overextension and excessive concentration on agricultural member services. Even under the worst of these circumstances, however, CREDICOOP's stronger affiliates should survive and continue to grow.

C. Management Factors--Focus on Basic Priorities

Management is the key factor in the success or failure of cooperatives. Many of the local and national managers are highly motivated, committed individuals with a strong sense of mission. This attitude has been essential in helping them to overcome obstacles. Where cooperatives were poorly managed, they were in critical condition, and vice versa. Diversifying services has diverted CREDICOOP's central management from the fundamental task of strengthening affiliate cooperatives institutionally and providing savings and loan services. To accomplish this task, CREDICOOP must further develop its program to provide managers and institutional development for its "weakest links." Given limited resources, this may require elimination of current services which now occupy management time and resources.

D. Viability of the CREDICOOP System

The viability of the CREDICOOP system to date has been based on external concessionary financing and the urban/rural mix of affiliates.

Urban credit unions, followed largely by nonfarmer rural cooperatives, have had excellent-to-satisfactory loan recuperation rates, thus providing liquidity (and share growth) to their respective cooperatives and to CREDICOOP. In contrast, rural cooperatives, with significantly higher farmer membership, reflect a poor record of loan repayment (and share growth) which restricts their liquidity, profits, and so on, creating a negative impact on CREDICOOP nationally. This contrasting situation evolved without causing a major liquidity crisis until 1982, because of continual external infusions of grants and concessionary loans with long grace periods. Now CREDICOOP is faced with the need to find additional external resources (concessionary) or continue to reduce financing to member cooperatives, thus rationing funds according to loan recuperation. This could eventually lead to a policy of financing member cooperatives based on recuperation rates and resulting in reallocation to urban cooperatives and urban-weighted rural cooperatives.

Other CREDICOOP agricultural services have generated operating deficits or negligible profits. If cotton processing and export programs can generate significant operating profits annually, it may help to offset other losses but will not overcome the liquidity crisis generated by low rates of loan recuperation. To work itself out of the liquidity crisis, CREDICOOP and those affiliates with low rates on loan recuperation must take major adjustment measures (cut costs and services, increase recuperations, and raise spreads on loans) or find grant-subsidy sources to maintain present overheads and services.

56

Appendix C
Socioeconomic Impacts

57

APPENDIX C

SOCIOECONOMIC IMPACTS

I. BACKGROUND

With nearly two-thirds of its population residing in rural areas, Paraguay's economy has changed little since colonial times. Small farmers comprise practically the entire rural population. For them the land provides an adequate subsistence, but little extra monetary return. Nevertheless, Paraguay's small farmers are among the best fed in Latin America. The explanation for this apparent dichotomy is that most rural Paraguayans manage the resources available to them very efficiently.

Despite agrarian reform laws designed to provide farmers with their own plot of land, most rural Paraguayans are still tenant farmers or squatters. The majority of the country's farms are modest in size, half of them consisting of 10 acres or less. Despite their small size, only 43 percent of that total are owner operated. The majority are farmed by tenants and squatters, with the most common form of tenancy being sharecropping.

Most small farmers are isolated geographically and culturally. Poor communication with other areas restricts influences for social change. Long neglect of rural education, the traditional immobility of the rural dweller, and a low level of political consciousness have left the small farmer remote from the ebb and flow of national and world events, feeling little influence from them.

Rural Paraguayan society is little organized. Gatherings for cooperative labor-sharing, for religious festivals, and for visits to markets at nearby towns are among the few group activities. For the most part, life is very individualistic.

Although the typical small farmer in Paraguay boasts little formal education, and lives in poverty, he is responsive to changes in his economic environment. This appendix will attempt to look first at the prototype small farmer and the impact of the CREDICOOP credit union system on his life, and subsequently at the impact on urban members in the system.

II. IMPACT ON FARMER MEMBERS

Impact on farmer members of the CREDICOOP system is viewed from several perspectives: (1) productivity, (2) ability to confront the marketplace for agricultural services, and (3) quality of life.

A. Productivity

The evaluation team found the task of quantifying the changes in productivity resulting from CREDICOOP activities very difficult. Clear from observation and interviews during our travels around Paraguqy was that some members have indeed prospered since affiliating with their local credit union and taking advantage of its services. Many have experienced substantial growth in income and net worth (good proxies for productivity) during the past 10 years, and some were eager to give credit to the crucial role of CREDICOOP in the development of their farm enterprise.

The team also met farmers who seemed not to have benefited from CREDICOOP--members and nonmembers alike. Several of the current and past CREDICOOP members interviewed had been all but bankrupt due to unsuccessful credit experiences. Some of these farmers continued to believe in the potential benefit of credit even as they look toward years of paying off old debts. Others have rejected the entire formal credit experience and returned to the safer, older ways of "making do" with personal resources and limited help from the neighborhood private trader.

With a view toward broadening the base from which impressions of farmer productivity were drawn, the team commissioned a small survey while in the field. Two economists from the Paraguayan Ministry of Agriculture were employed to visit a sample of eight member credit unions selected to provide a range of size and portfolio mix. Certain items were to be viewed as proxies for productivity: farm size, area planted, farm assets, and credit utilized. The survey team was asked to look at files of members active during all of the years 1974, 1978, and 1982. The results were revealing in ways not anticipated, as can be seen in Table C-1.

1. Member Turnover

The small number of farmer members who had been active during the entire period, or even during the latter two periods, was a surprise. Clearly, the "shake out" process referred

Table C-1 CREDICOOP Loan Portfolio

Location (sample)	1974	1978[a]	1982
Carmena			
Size of Farm	2	20	21
Area Planted	8	-	7
Farm Assets	1,020,453	1,202,781	2,275,987
Amount of Credit	98,941	49,273	115,044
Coronel Bogado			
Size of Farm	19	20	16
Area Planted	4	6	3
Farm Assets	371,959	457,929	-
Amount of Credit	67,653	116,301	92,109
La Rosena			
Size of Farm	No Data	13	13
Area Planted	"	4	4
Farm Assets	"	2,100,190	1,979,978
Amount of Credit	"	95,980	101,524
Quiindy			
Size of Farm	No Data	6	7
Area Planted	"	2	2
Farm Assets	"	194,500	438,070
Amount of Credit	"	62,800	152,565
Itacurubi			
Size of Farm	No Data	12	13
Area Planted	"	4	3
Farm Assets	"	563,984	1,141,497
Amount of Credit	"	110,594	112,290
Coronel Oviedo			
Size of Farm	13	14	16
Area Planted	2	3	2
Farm Assets	276,489	646,844	733,930
Amount of Credit	46,706	95,718	85,826
Caaguazu Poty			
Size of Farm	No Data	10	10
Area Planted	"	3	2
Farm Assets	"	-	-
Amount of Credit	"	52,503	50,736
Juan E. O'Leary			
Size of Farm	22	13	14
Area Planted	3	4	4
Farm Assets	-	-	-
Amount of Credit	56,113	74,301	172,408
Average			
Size of Farm	14.0	13.5	13.75
Area Planted	4.3	3.7	3.4
Farm Assets	333,780.0	861,038.0	1,303,892.0
Amount of Credit	67,353.0	82,183.8	110,314.0

[a] 1978: CREDICOOP loan fund disbursement.

60

to by several of the credit union managers has been dramatic. Financial failure due to credit misuse, bad weather, and/or unstable markets has taken a very heavy toll on farmer members, and withdrawal from active participation is a common response.

If, indeed, the sample surveyed was of a minority of "survivors," there is a real danger that the data represented are unduly positive. We may well have reached only the most successful of all members.

2. Farm Size and Area Planted

There does not appear to be any trend toward increasing size and land holdings, nor is there any upward trend in area planted. This is probably explained by current farming systems. There is very little mechanical equipment on the small Paraguayan farms, and without such equipment there is no possibility to cultivate extensively. In short, the farmers already have all the land they can work unless they are prepared to bridge to a completely different operation--mechanized farming on a purely commercial basis. Only one case of such transformation was noted, that of a very entrepreneurial man operating with rented equipment on leased land.

3. Farm Assets and Credit Used

In both of these areas, the sample survey provided impressive results. Clearly those surveyed (possibly the most successful members, given their longevity) have used ever greater amounts of credit and accumulated assets in the process. These trends, given the stable farm size, are curious on the face of it. Familiarity gained from the evaluation team's field visits enables understanding, however. Many credit union members have invested in more intensive farming (e.g., livestock and multicropping) and many have upgraded their homes. Indeed, the team was impressed by the generally high standard of living that farmer members have been able to extract from such a small resource base.

In the final analysis, however, it seems unwise to judge the CREDICOOP system either positively or negatively based on changes in member productivity. The overall environment for Paraguayan agriculture is entirely too unstable for one element (increased access to credit at lower rates than was the previous norm) to make a difference in any consistent fashion. When the weather and markets are good simultaneously, the farmer prospers. When either is bad, the farmer suffers. Use of credit tends to intensify the highs and lows alike.

B. Ability To Confront the Marketplace

Perhaps the most interesting of the socioeconomic impacts of the CREDICOOP project noted by the evaluation team is the effect it has had on farmer choices with regard to sources for agricultural services. Although it is not possible to quantify this impact in terms of income or asset growth, it is clear that the terms of trade in agricultural intercourse are gradually changing. Over the long run, this promises to prove important.

In Paraguay's traditional rural environment the sole source of agricultural services for small farmers has been the private trader--normally a neighborhood storekeeper or a somewhat better capitalized farmer. This trader has provided for farmer needs ranging from seeds and fertilizers at planting time, to medicine and school books all year long, to a market for produce at harvest time. Because his has been the "only game in town," and because his own assets are generally very limited in relation to potential demand for them, the trader has been able to dictate the terms of trade. In traditional society the prices of credit and inputs are set arbitrarily, based on the trader's own perception of fair/reliable return. There has been little room for negotiation.

Over the past 20 years, this purely traditional economic environment has been steadily and increasingly altered by modern day interlopers--formal institutions with roots in Asuncion. Branches of the large commercial banks, the publicly sponsored National Development Bank (BNF) and Agricultural Credit Bank (CAH), and credit unions have opened for business in many Paraguayan farm towns which had previously been untouched by modern agricultural service systems. The influence of these modern institutions on traditonal terms of trade for small farmer credit, input supply, technical assistance, and marketing is examined below.

1. Credit

> "When I need help the private trader is always there, without delay. My crop relies on immediate help . . . ."
>
> Credit Union Member

No part of the agricultural services industry has been more affected by the development of modern institutions than credit, and in no part of the industry is competition keener. It seems that government policy-makers have long viewed

62

low-cost access to capital as a requisite to economic growth and have sought to provide it to Paraguay's small farmers by all means possible. Farm credit is a major thrust of the BNF program and the sole task of the Ministry of Agriculture's CAH. The government has similar objectives in mind in its support for the nationwide CREDICOOP system and in its legal requirements that commercial banks allocate at least 10 percent of their total loan portfolios to agricultural credit.

Despite this impressive effort, the proportion of small farmers who have dealt with these "modern" credit institutions is very small--approximately 1.7 percent of all farmers operating farms of 5 hectares or less and 19 percent of those with farms in the 5- to 20- hectare range. Clearly the traditional credit systems are still preferred. For insight into the resilience of the traditional credit system in the face of the well-financed (in most cases, subsidized) network of modern credit institutions, a look at the small farmer's criteria for determining where to do business is indicated. What is the Paraguayan farmer looking for in a credit institution and what are his choices?

a. What Is He Looking For?

Investigation into farmers' priorities with regard to services was interesting in that it revealed the great importance given to non-monetary considerations.

(1) Access

Is the credit institution convenient? For a small farmer a trip to a regional market town is not coveniently undertaken. Rarely does he possess motorized transportation, and often public transportation is inconvenient and/or expensive. In many cases he also finds travel to such towns traumatic. Being among strangers, especially the often faster talking, more assertive townspeople, is an uncomfortable experience. The closer a credit institution is to its farmer clients, the more likely it is to be called on in the farmer's time of need.

(2) Institutional Good Will

There is a self-screening process underway constantly in traditional rural societies. Those who enjoy diversity tend to move to more diverse environments. Those who like the familiar "tried and true" tend to stay put. The result of this constant

63

screening process is that rural societies are generally conservative, and the value of institutional good will is very high. For city people, accustomed to a steady flow of new ideas, a new credit institution is likely to be viewed as presenting new opportunities. For a small farmer it is likely to be viewed with suspicion and mistrust.

(3) Systems

Paraguay's small farmers are like businessmen anywhere when it comes to red tape. The less they have to deal with it the better. They are particularly averse to detailed forms (reading and writing may not be their "strong suit") and to protracted reviews by unseen committees (farmers are accustomed to doing business face to face).

(4) Process Time

Success in farming, more than in most businesses, is dependent on good timing. There is a time to plant, to fertilize, to harvest, and to sell. If one misses any of those times by a week the result may be disaster. Unfortunately, one cannot always know the time well in advance. It changes depending on the weather, market factors, government policies, and so forth. To the extent that capital is needed for any of those activities, farmers need to be able to put their hands on it fast--preferably in hours rather than days or weeks.

(5) Interest Rate

The cost of borrowing is also important. Although it is a rare small farmer in Paraguay who has studied economics, most have a keen sense of the cost of things. Whether paid for through the rate charged for money, the cost of goods acquired, or the price received for farm produce sold, farmers are aware of what is going on in a general sense, and they take it into cognizance in making credit decisions.

b. What Are His Choices?

Given the above criteria, how do the various competitors for the small farmer's credit business measure up? Perhaps by examining this we can attain insight into the relative success/failure of the various modern farm credit institutions.

64

(1) Private Traders

This traditional institution clearly gets the highest marks overall, falling short in only one category--interest rates. In terms of access, no one is as close. In most cases the private trader lives among his borrowers and deals with them on a daily basis.

The private trader also enjoys the greatest institutional good will. No matter what his prices or personality, he or his father have often been active in the credit business as long as the farmer-borrower can remember. Often he is a modern day "patron," someone who is turned to for all manner of family needs. In such a situation, for a farmer to turn elsewhere for credit may be viewed as a personal insult to the "patron."

As to systems and process time, the private trader enjoys a tremendous advantage over his competitors. Because he has lived his entire life among his borrower clients, he does not need to subject them to a complicated review process. He knows what their assets are, whether they pay their bills on time, and whether they are good farmers. Application forms are superfluous in such a case. Likewise, he can move fast. Since the money being loaned is his own, there is no board of directors or credit committee to consult. He alone can decide, and he can do so immediately.

Only in the area of interest rates is the private trader seriously challenged. Modern institutions, most of which are subsidized, have focused their attack on this one area, in some cases charging only a fraction of the private trader's rate. This attack has taken a toll. Among farmers with more than 20 hectares, there has been large-scale affiliation with modern institutions. This does not all represent abandonment of private traders, however, since in many cases these farmers simply shifted from self-financing to institutional financing. Indeed, many of these larger farmers function as private traders themselves vis-a-vis their small farmer neighbors. Among small farmers the shift to modern credit sources has reached 19 percent in the 5- to 20- hectare farm size--a substantial inroad given that the alternatives have existed for less than 20 years.

(2) Commercial Banks

Paraguay's network of private commercial banks extends into most of the larger farm communities, and government banking policies require that 10 percent of each bank's loan portfolio be for agricultural activities. Despite this presence and policy, there have been virtually no dealings between commercial banks and small Paraguayan farmers. The problem, it seems, is that the commercial bank operators do not want the business. They feel that it is not economic. Given their built-in systems for credit application and review, and the size and risk associated with small farmer loans, the client and institution do not match. Small farmers cannot meet the banks' standards, and the banks cannot make a satisfactory return on such loans. The 10-percent credit portfolio requirement is thus met mostly through very short-term loans to large farmers and agroindustrialists--mostly for relatively safe marketing and processing activities.

(3) Public Credit Institutions

Paraguay has two public credit institutions that seek to deal with small farmers, the BNF and the CAH. Both view themselves as specialists in this area, and both have endeavored to shape their lending policies accordingly. How do they measure up?

The BNF and CAH are about equal as far as access is concerned, as are the other modern credit institutions. They are located in most of the major farm towns, but economies of scale do not permit truly rural locations.

The BNF and CAH are likewise close to the other modern credit institutions with regard to good will. Carrying, as they do, the government imprimatur has both positive and negative connotations. It suggests policies with a social orientation, but it also suggests transcient employees from other areas who have no roots in the community.

With regard to systems and process time, the BNF and CAH have some important differences. The BNF requires mortgage collateral; the CAH does not. That requirement alone scares away a great many small farmers. The BNF also takes somewhat longer to process applications. That, too, tends to screen out smaller loans. Much of the cost of processing is fixed (time and cost associated with mortgage certification, filling out forms, review time, etc.) and it may be worth paying for a large loan, but not for a small one. The screening out of small farmers is thus a natural economic process.

Only in the area of interest rates are the public farm credit institutions truly competitive. Because they are not required to operate profitably, they can and do fix credit rates lower than anyone else in the business; 14 percent for CAH and 18 percent for BNF. That more small farmers do not prefer such loans over the far more expensive money (averaging 80 percent) of the private trader is a commentary on the importance small farmers attach to the other criteria listed above. Indeed, it has been argued that when a monetary price is put on the time and cash cost of dealing with public agricultural credit institutions they often charge a higher rate for small loans than the private traders.

(4) CREDICOOP

Paraguay's agricultural credit union system has done a better job than its commercial bank, BNF, and CAH competitors in "scoping out" the competitive environment for small farmer credit, and the result is a set of policies that more closely relate to the farmer's criteria.

With regard to access the problem is the same as with other modern credit institutions--economies of scale do not permit truly rural locations.

With regard to institutional good will, however, the credit unions have been very competitive. Drawing their depositor base, their boards of directors and, for the most part, their professional managers from the communities in which they are located, they do not suffer the "us and them" syndrome that hurts the commercial bank, BNF, and CAH organizations.

They are also making inroads over other modern credit institutions in the areas of systems and process time. This is not to say that CREDICOOP member credit unions do not use forms, but rather that they minimize such documentation to the extent possible. Mortgage collateral may be waived entirely because each credit union is independently owned and operated, the number of forms and procedures is limited to those needed locally and, because credit union members are generally known to credit reviewers, credit decisions do not require extensive, formal credit reviews.

Though CREDICOOP members are less competitive than their public sector competitors because of the necessity of operating profitably, their scale of operations and access to certain government incentive programs have allowed them to charge substantially less than private traders. Indeed, given the high rate of delinquency for small farmer loans and the relatively low priority such borrowers attach to interest rates, it seems probable that CREDICOOP member institutions could and should charge more for their credits.

For a summary view of Paraguayan farmers' credit alternative, see Table C-2.

2. Input Supply

> "They never give you the price when you buy it."
>
> Credit Unit Director

In confronting the marketplace of input suppliers, the Paraguayan farmer's choices are less diverse. Although some of the agricultural service institutions discussed earlier are in the business of furnishing inputs, all are primarily credit institutions, with other activities being offered only as by-products. Following is a brief discussion of the comparative roles of such institutions with regard to meeting the small farmer's needs for timely inputs, production and consumer goods alike.

a. Private Trader

Because a great many of Paraguay's small private traders are farmers themselves, for them to sell production and consumer goods to their neighbors is a natural outgrowth of their day-to-day activities. Given the high cost of going to town to purchase goods and transport them home, it is to everyone's benefit if the neighbor possessing his own truck or ox cart can purchase and haul for everyone. A markup for this service is likewise considered reasonable by everyone, and where farmers lack cash, payment sometimes can be delayed until crops are sold. For the most part, the private trader's price is substantially above what is paid in town, but for a small purchase the trip to town is not justified.

The step from buying and reselling agricultural inputs to doing the same with certain consumer goods, and making them available year-round, is easily made--thus the real strength and long-term survivability of the private trader. At the least developed stage of business his cost of selling inputs is effectively zero because the entire process is an outgrowth of his own farm enterprise.

Table C-2. Comparison of Agricultural Credit System Alternatives for the Small Farmer

Institution	Requirement/ Collateral	Farmer Compatibility With Loan Procedure	Turnaround Time (Processing)	Terms/Payment Rate	Terms/Loan Penalties	Payment Penalties	Application Costs	Crop Risk Assistance
Private Trader	No	Yes, many years of use	Immediate return	One-time payment after harvest	Estimated 80% per annum	No formal penalty	None	Will extend loan payment date
Commercial Bank[a]	—	No exposure	—	—	—	—	—	—
Government Banks								
BNF	Mortgage collateral	Very little exposure	15 days to 1 month	One-time payment, usually after harvest	18% per annum	Loss of mortgage	Mortgage certification[b]	Will extend loan payment date min. 6 months; after will take mortgage
CAH	Membership in AUCA	Yes, 6 years of exposure to system	Minimum of 15 days	One-time payment, usually after harvest	14% per annum	No formal penalty	None	Will extend loan payment date, with continued charge of interest/commission
Member Cooperative	1. Membership 2. Share account 3. Cosignature	Yes, 10-14 years exposure to system	Minimum of 8 days	One-time payment, usually after harvest	24% (+) per annum[c]	1. Cosigner responsible for payment 2. Liens on crops[d]	None	Will extend loan payment date, with continued charge of interest/commission

[a] Does not make substantial loans to the small farmer.

[b] Processing of mortgage certification: charge of U.S. $145 + 2% of value of collateral.

[c] Some cooperative loan rates are higher.

[d] Practiced in some cooperatives.

69

b. Commercial Banks

None of Paraguay's commerical banks engages in input supply.

c. Public Credit Institutions

The BNF does not engage in input supply. The CAH does, but restricts its activities strictly to production inputs. Its policy is to charge prices similar to its urban competitors, but since both are located in town this does not depress prices.

d. CREDICOOP

Many of CREDICOOP's member credit unions have moved into the business of input supply, some of them making it a major business activity. In most cases they deal only in agricultural inputs, but some have taken on a broad range of consumer goods as well. Prices are set well below those of other urban storekeepers so that net effect on clients is both convenience and savings. For some credit unions (the one visited at Juan E. O'Leary, for instance), earnings from retail operations have been critical to meeting costs of operating the overall system. Where the retail operations are well managed, they have also encouraged membership growth and utilization of other services.

For a summary view of the Paraguayan farmer's input supply alternatives, see Table C-3.

3. Technical Assistance

> "If you prepare, you earn. The cooperative helps me to prepare."
>
> Credit Union Member

Over the past two decades the Paraguayan Government has shown great interest in programs to assist its small farmers to increase agricultural productivity. Traditional free market systems had developed virtually no capabilities in this area. The private traders had found no way to make money at it and central government programs that operated through the Ministry of Agriculture had limited outreach. The result was a largely stagnant agricultural economy in which innovation was uncharacteristic.

10

Table C-3. Input Supply Alternatives Available to Small Farmers

Institution	Type of Goods Offered	Form of Payment	Pricing
Private Trader	Seeds, fertilizers, insecticides, tools, and equipment	Cash payment after harvest	No fixed price at time of need; final payment is usually marked at a higher price than other sources
Commercial Bank	-0-	-0-	-0-
Government Banks			
BNF	-0-	-0-	-0-
CAH	Agricultural products only	Immediate payment	Fair market price
Member Cooperative	Seeds, fertilizers, insecticides, small tools, farm machinery, personal goods[a]	Cash payment after harvest	Usually 5% above coop wholesale cost (25% discount in comparison with market prices)

[a]A small number of cooperatives are offering inputs of a personal nature, such as medicines and school supplies.

With the establishment of the BNF and CAH agricultural credit program, the government and donor agencies involved tried to fill this gap by tying elementary technical advice to farmer loans. The same concerns were addressed with the development of CREDICOOP programs. As a result, Paraguayans now have a range of technical assistance alternatives available to them related to use of production credit. Table C-4 summarizes these services.

Table C-4. Technical Assistance Options Available to Small Farmers

Institution	Type of Assistance	Cost
Private Trader	NA	NA
Commercial Bank	NA	NA
Government Banks		
BNF	Farm loan application assistance	free
CAH	Farm loan application assistance, agricultural extension help through SEAG personnel	free
Member Cooperative	Farm loan application assistance, agricultural extension assistance -in-the-field courses -credit education courses -experimental workshops (various topics, from agriculture to quality of life)	free

How do the BNF, CAH, and CREDICOOP compare with regard to their performance in meeting farmer needs for technical assistance?

12

a. BNF

BNF employs a technical loan assistant in each of its branches. This person's job is to instruct credit seekers in loan application procedures including (1) development of a farm investment plan and (2) registration of mortgage collateral. Interviews with farmers who have dealt with the BNF revealed that the emphasis on BNF technical advice is toward expediting credit review and investigation rather than toward assisting farmers per se. Many small farmers are intimidated by the BNF and its procedures, and unless the emphasis of its technical assistance program changes it will not be meaningful to farmers themselves.

b. CAH

As an organization, the CAH senses the need to provide not only loan processing assistance to small farmer borrowers but also continuing support during planting, growing, and harvesting. Unfortunately, their institutional arrangements do not permit such follow through. As a credit arm of the Ministry of Agriculture, CAH is only authorized to provide assistance through loan applications. Anything beyond that is the responsibility of the Ministry's extension agency, SEAG. Although SEAG officials are generally competent and their assignments are coordinated to cover CAH offices, the number of qualified agents is inadequate to the needs of even CAH's client borrowers.

c. CREDICOOP

ALL OF CREDICOOP's member agricultural credit unions sponsor programs to provide farmer members with technical assistance related to credit extended. As with the BNF and CAH, the beginning and core of this assistance is development of a farm investment plan in which seed, fertilizer, labor, and equipment needs for the crop year are projected. More than their public agency counterparts, however, credit union technical advisors endeavor to follow through with advice during planting, cultivation, and harvest. The involvement of the credit union in input supply encourages this continuing dialogue, and where the credit union also runs a marketing program it is ensured to the end of the economic cycle.

On the negative side, it should be noted that although credit union intentions with regard to technical assistance are always good, actual results are mixed. In some of the credit

13

unions where management was weak, technical assistance programs function poorly, if at all, and in others there are complaints that the technical preparation of credit union extensionists is not much greater than that of the farmer members being helped. Clearly the strongest part of the technical assistance programs run by the credit unions is that which relates to the use of credit itself. Beyond that, CREDICOOP's extensionists sometimes are "stretching," but where it is clear that an extensionist has the farmer's best interest at heart even a poorly trained extensionist can provide valuable support.

4. Marketing

> "Marketing is the biggest problem; the whole country suffers from the lack of marketing ability. . . ."
>
> Credit Union Official

In confronting the subject of marketing services, the Paraguayan farmer's choices are few. Only the private trader and cooperatives offer viable marketing services to the farmer (see Table C-5).

a. The Private Trader

In any established community the need for marketing services exists. In the past, it has been the private trader who has assumed the role of buying and selling the farmer's produce. Farmers usually sell their crops through the private trader in order to pay off their loan to him. This transaction is generally not obligatory. As long as the farmer pays his loan, he can continue to receive credit from a private trader even if he chooses to sell to another buyer. However, some private traders charge interest on cash loaned to individuals who do not sell their products to them, and no interest to those who do. Nevertheless, a binding marketing relationship between the private trader and farmer exists because of the farmer's need for credit transactions and to market quickly. The general custom of marketing through the private trader has set an uninterrupted and satisfying precedent for years, and is difficult to break.

On the negative side, the private trader tends to look out for his own economic interests first, negotiating for the best purchase price and perhaps preying on the farmer's marketing inexperience. These practices are being reviewed more carefully by farmers since the advent of alternative credit

24

Table C-5. Credit System Marketing Services

Institution	Type of Service	Form of Payment	Market Price
Private Trader	Purchase of harvest, warehousing, transporting, processing, domestic and export markets	Immediate cash payment or exchange	Usually negotiates for an amount below market price
Commercial Banks	--	--	--
Government Banks			
BNF	--	--	--
CAH	--	--	--
Member Cooperative	Purchase of harvest, warehousing, transporting, processing, domestic and export markets	Farmer is given a receipt for product and is paid when cooperative sells the product to marketing sources. Gives cash payment after loan debt is subtracted.	Usually meets fair market price

institutions. Experience is teaching the farmer to be more businesslike in his marketing transactions.

b. CREDICOOP

All of CREDICOOP's member agricultural credit unions operate marketing programs to provide a method of economic exchange for the farmer's produce. Since its early marketing efforts shortly after the dissolution of UNIPACO, CREDICOOP has continued to grow in importance as a marketing force and can be reasonably expected to develop more forceful marketing power in the future.

Past experiences with marketing have been riddled with operational setbacks such as transportation problems and limitations in purchasing capital, storage, and general working knowledge of the fundamentals of marketing. These setbacks have cost CREDICOOP dearly, both in economic terms and in testing the faith of the farmer. During CREDICOOP's learning phase, it was more profitable for the farmer to deal with the "steady hand" of the private trader.

CREDICOOP has learned its lessons well and has diligently worked to rectify past marketing errors. Efforts to develop sound marketing procedures to make cooperative marketing of products more competitive still result in mixed success, however. It is no secret that the cooperative marketing system is the weakest link in the cooperative service chain, but steps are being taken to solve these problems and to establish a fair and operational marketing system that takes into account the needs of the farmer.

C. Quality of Life

Thus far we have analyzed the impact of the CREDICOOP system on farm income, productivity, and nutrition. In the following section we shall look at the broader measure of program success--the general effect on the target small farmers' overall quality of life. In what ways, if any, has their lifestyle been influenced? We shall pursue this question through analysis of CREDICOOP's management in two services that have broad social impact: home loans and personal loans.

1. Home Loans

Through home visits, the team was able to track a positive impact on the farmer's quality of life based on an overall pattern of improvement of personal housing facilities.

A growing trend of the need for assistance in improving farmers' homes has been slowly tracked through the years, and is directly related to the farmers' conscious attempts to raise their living standard due to availability of credit.

Our analysis revealed two viable credit sources extended to the small farmer: the private trader and CREDICOOP. Table C-6 below illustrates this.

a. The Private Trader

Until recently, the private trader was the only known source of "home" credit. Few farmers actually approached the private trader for a loan specifically for home improvements, but if such was desired, the private trader was the only source. The private trader rarely turned down a loan request if he felt the applicant could repay. These loans are high in interest and commissions, which keeps solicitation for them low in farmer priority.

b. CREDICOOP

With the conscious desire of farmers to improve their life styles, CREDICOOP and the member credit unions helped to establish a reasonable form of credit for farmer housing improvements. An example of cooperative home loan participation is cited below.

Table C-6. Quality of Life--Home Loans

Institution	Home Loans	Terms/Payment Period	Terms/Loan Rate
Private Trader	x	One-time payment after harvest[a]	Calculate as high as 60% per annum
Commerical Bank	-0-	-0-	-0-
Government Bank			
BNF	-0-	-0-	-0-
CAH	-0-	-0-	-0-
Member Cooperative	x	24-month loan (time of payment may differ)[b]	24% per annum

[a]Home improvement loans by private traders are seldom made.

[b]Payment schedule and interest rate may differ slightly from cooperative to cooperative.

In 1980, the National Housing Bank earmarked and distributed U.S.$4 million for low-income family housing projects. These funds were made available to a select group of cooperatives and private savings and loan organizations throughout the country. In 1983, 266 cooperative members received support in the form of small home loans giving eight cooperatives an opportunity to make loans available to their members. Loans were offered at 24-percent interest, with multiyear payback periods. For most credit union members these loans were the first affordable home improvement credits ever available to them, and participation in the program was enthusiastic.

2. Personal Loans

Small farmer personal loans are described as money necessary to cover nonbusiness needs. These personal needs fall largely into the categories of health and education.

98

Table C-7. Cooperative Home Loan Participation for 1983

Cooperatives	Disbursed Loan Amounts in U.S.$	No. of Loans to Coop Members
1. Col. Oviedo Ltda.	$247,747.00	100
2. San Juan Bautista Ltda.	71,507.00	32
3. Itacurubi Ltda.	46,746.00	17
4. Mburicao Ltda.	15,978.00	6
5. Educadores del Guaira	113,102.00	38
6. La Barrerena Ltda.	7,142.00	3
7. La Rosena Ltda.	40,781.00	35
8. Paraguari Ltda.	45,079.00	37
Total	$588,016.00	266

The general state of health of Paraguay's small farmer population is considered quite good compared to most rural poor in other developing countries. Paraguayans are knowledgeable about personal hygiene and are generally careful about sanitation conditions. Due to the low level of income, however, until recently most health-related problems of the small farmer were treated with simple herbal remedies. This was the only affordable medical attention available to the people. This is now changing.

The Paraguayan farmer is acquainting himself with the importance of good health practices, and turning to modern medical practices to provide protection for himself and his family. Unlike the other credit institutions (except the private trader), CREDICOOP has shown concern for the small farm family's health threats in three ways: (1) offering personal credit for health-related situations, emergency, death in the family, and long-term illness; (2) offering medical care plans, consisting of medical discounts at neighboring clinics and discount systems for purchasing medicines; and (3) cooperating with government agencies (SEAG and the Ministry of Health) in joint-operated health programs, such as vaccinating children and providing general health improvement seminars.

The Paraguayan farmer also has become aware of the importance of education, but educating one's children entails not only a personal commitment but also financial resources. Money is needed for the purchase of books, other school supplies, and clothing for the children. Even such small investments are frequently beyond the small farmer's means, so credit must be solicited. The capital comes from two sources, the private trader and the cooperative. The private trader extends a cash loan, whereas the cooperative gives cash loans for education as well as services. They offer educational supplies at discount with little markup in price, and educational classes in the form of workshops and seminars on topics of interest. These services not only disseminate information and educate the individuals, but condition the individuals to the process of learning.

For the small farmer, credit for personal needs is easily obtainable through two sources, although alternative credit is obtainable through other institutions (see Table C-8).

a. Private Trader

The oldest, most reliable form of personal credit is still the service extended by the private trader. Ease of solicitation and quick return have fulfilled personal credit needs. However, the negative side of such service is the cost of the credit service--an estimated 60 percent per annum.

Nevertheless, the private trader supplies a personal credit line, no matter what the day or time. Needs are taken care of, and that is the major concern for the individual seeking personal credit. Not having to wait a long time for a loan in times of dire need is more of a consideration than the actual cost of the loan.

b. Financieras and Consumer Loan Agencies

Private institutions for personal credit (*financieras*) and consumer loan agencies are personal loan alternatives, but are not favored by the small farmer. These entities impose strong collateral requirements and charge costly application fees and high interest rates. They also tend to have a slow process time--a too sophisticated and "severe" loan system for most small farmers.

c. Commercial Banks

Commercial banks offer personal loans, but at high interest and commission rates of 36-42 percent per annum. They require mortgage collateral calculated on the amount of the loan. For most small farmers, the conditions for applying for these loans is not applicable to their situations. Application is too complicated, form of collateral too restrictive, and interest rates too high. Also, the amount of the small farmer's

96

Table C-8. Comparison of Personal Loan Availability and Requirements

Institution	Collateral Requirements	Farmer Compatibility With Loan Procedure	Turnaround Time (Processing)	Terms/Payment Period	Terms/Loan Loan Rate	Payment Penalty	Application Cost
Private Trader	None	Yes	Immediate return	One-time payment usually after harvest	Estimate 80% per annum	No formal penalty	Collateral certification
Commercial Bank	Collateral calculated on loan amount	No	15 days to 2 months	12, 18, 24 monthly time payments	36-42% per annum	Legal action	Collateral certification
Government Banks							
BNF	--	--	--	--	--	--	--
CAH	--	--	--	--	--	--	--
Member Cooperative	1. Membership 2. Share capital 3. Cosignature	Yes	Minimum of 8 days	24 monthly time payments	24% (+) per annum	Extension possible	None
Financiera	Collateral calculated on loan amount	No	15 days to 1 month	Monthly	36-48% per annum	Legal action	Collateral certification
Consumer Loan Agency	Collateral calculated on loan amount	No	10 days to 1 month	Monthly	48% per annum	Legal action	Collateral certification

[a] (+) Some cooperatives may be higher.

[b] Estimated U.S.$145 + 2 to 2 1/2% on collateral value.

personal loan is usually not high enough to warrant the trouble of processing.

d. CREDICOOP

The development of personal loans through cooperatives has provided the small farmer with an alternative to the private trader in the form of easy solicitation, low-interest rate, and fairly quick turnaround time loans. Clearly, the most convenient source of personal credit and the easiest to qualify for is still the private trader, followed by the cooperative, which charges only 24 percent per annum, delivers the loan within a minimum of 8 days, and requires little collateral.

CREDICOOP's ability to compete with other credit institutions in supplying personal credit has put it in the position of leader among formal institutions. Unfortunately, promotion of personal credit through the cooperatives comes at a time when liquidity is at an unprecedented low. Whether CREDICOOP can manage its funds to cover all these personal requests is yet to be seen.

III. IMPACT ON URBAN MEMBERS

Although none of the AID loans or grants had a specific goal to better the lives of urban or farm town professionals and small business people, our impact evaluation found evidence of high urban credit and cooperative membership. The cooperatives are going a long way toward meeting the needs of urban members in both production and personal credit.

Urban members are usually salaried employees, which means they have steady funds to pay their loans on a regular basis. Their pattern of borrowing is likewise fairly evenly spaced over the course of the year. Farmers work to a different economic and borrowing pattern; their harvests yield payments only once a year, and they always need to borrow at the same time. This pattern of borrowing and payment is complemented by the urban members whose borrowing behavior helps to keep the cooperative's capital at a balanced level.

Evidence of a smoothing out of financial flows of the cooperative during the course of the years is beginning to show a positive pattern (see Table 8 in Appendix D). Another positive aspect of the union of farmer and nonfarmer members is the fusion of educated and dedicated professionals to form a more

As an example, we examined an urban business that produces soccer balls in Quiindy. Three years ago, the owner went to the Quiindy cooperative, became a member, and took out his first loan. This loan was the first time he had ever sought credit from any established institution. He went to the credit cooperative because it best met his credit situation. He continues to seek credit only from the cooperative. He has used his credit to pay for materials (when he purchases in volume his costs are less, and credit gives him the capital to purchase in volume) and cover salaries of his workers. Although sales were slow at first, the cooperative assisted him in finding markets in various regions of the country. Product demand grew, and he borrowed again to expand his production line. Now he has 70 part- and full-time employees working to produce from 200-300 soccer balls a week.

1. Productivity

The task of quantifying changes in small business productivity that resulted from CREDICOOP activities was extremely difficult, but observations and interviews revealed that a number of urban small businessmen have prospered from the use of credit services. This was indicated by their substantial production growth as well as their growth in income and net worth. Users of CREDICOOP credit expressed an overall positive opinion of the importance of CREDICOOP in the development of their businesses.

Small business loans were useful in covering the cost of materials, salaries, and equipment until sale, especially for manufacturers. Visits to various urban member businesses (mattress company, furniture manufacturer, etc.) gave evidence of the cooperative's successful participation in supporting small urban businesses. Each business interviewed showed strong indications of financial profit and stabilization of production.

2. Ability To Confront the Marketplace

Like the small farmer, the small businessman has the opportunity to face the credit marketplace in order to shop for the credit situation which suits him best. The small businessman is generally better socialized and educated, compared with the samll farmer. This sophistication assists him in better evaluating credit vehicles. His concerns are similar to those of the small farmer--ease of access and convenience--but his need is less immediate. He is not as intimidated by the system

84

or its red tape and considers the most critical factor in loan solicitation to be the rate of interest.

Because of the difference in credit priorities of the urban small businessman, the private trader is not the most advantageous credit source, as he may be for the small farmer. The small businessman cannot justify 80 percent per annum interest and commission rate when he can fulfill his credit needs at another institution for less than half the charge. He has more latitude because he is not dependent on an institution for immediate turnaround. He can afford to wait 1 or 2 weeks for the processing of his loan.

Both the BNF and commercial banks are competitive sources of business credit, but in most situations the commercial and BNF banks are much more bureaucratic in design and charge more for the use of their money. Time, expense of travel, and application fees complicate the process of soliciting for a loan. In many cases, commercial banks do not want to extend credit to small businessmen if their requested amounts are not substantial.

Of all the sources of small business credit, CREDICOOP and its member unions were evaluated to be the strongest vehicle for extending credit to the small businessman. CREDICOOP meets the small businessman's credit needs for reasonable interest and commission rates (24 percent per annum), turnaround time for processing (minimum of 8 days), and cost of application (membership, share account, and cosignature). There is little risk of losing his business when markets are down and he can not pay his loan, which gives him the ability to recuperate. Since terms of payment are reasonably favorable, there is little to fault in this system of credit.

B. Personal Loans

85

"Before I had no choice but to go to private traders for a loan to carry me over the months school was out. It was very difficult to get help. . . ."

Credit Union Member

The woman interviewed is a school teacher and has been an urban cooperative member for 6 years. She had never gone to any formal institution for credit until she became a member of the cooperative. Her needs were basic but real. She has borrowed twice in her life, once to cover living expenses during the months school was closed (to bridge a salary crisis because of lack of payment from the Ministry of Education), and once to buy a house. On a teacher's salary, that was the only way she could afford to buy a place to live. Being a salaried professional, she could make her monthly payments without difficulty.

As is the case with the small farmer, the extension of personal credit to the urban member for health and education expenses is desired. With the combination of a personal loan and a steady income, the urban member is able to achieve major improvements, enhancing the quality of his life.

1. <u>Health</u>

The investigation and interviews revealed that the urban member is also gaining an awareness of the importance of good health practices. The cooperative is the only credit institution which has made an impact on the standard of health of the urban member by providing the following services: (1) personal credit for health-related situations, (2) medical care plans, (3) government-assisted health projects (e.g., vaccination programs), and (4) general health workshops and seminars (e.g., sanitation programs).

2. <u>Education</u>

Urban members also seek credit assistance for education for their children as well as for professional training for themselves (such as special courses in the city). Private traders will still extend a loan for these needs, but CREDICOOP and its member credit unions fill the need with much less cost to the consumer.

96

IV. CONCLUSIONS

A. The Impact of Urban/Rural Members

CREDICOOP had a positive impact on its target clientele by (1) enabling increased productivity, (2) increasing competition among credit sources, and (3) enabling general improvements in their quality of life. The continued growth of CREDICOOP and its member credit unions is rapidly challenging the use of other credit institutions, creating increased competitiveness among them all.

CREDICOOP also has laid a foundation for social interactions that will lead to the overall improvement of the quality of life of the urban and rural member. CREDICOOP has defined itself as a leader in a range of innovative programs which can only better the lives of its members and benefit the nation overall.

While the net impact on the life of its members may be positive, it is yet to be determined whether CREDICOOP will continue to develop, maintain, and manage such industrious programming. Each existing and newly developed program demands a high level of management and investment, which the CREDICOOP system may not be able to maintain because of socioeconomic factors.

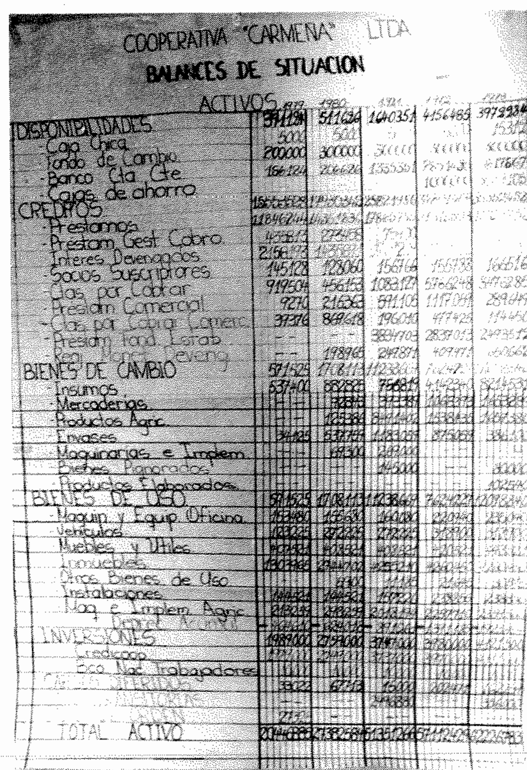
B. CREDICOOP as Teacher

CREDICOOP's success has been measured by its past ability to educate a large body of urban and rural supporters who work to strengthen the organization.

The development of many motivated, committed individuals with a sense of mission will greatly help to overcome organizational obstacles in the future. It will also help to educate the urban and rural members, ensuring a strong foundation for the institution and the country as well.

C. The Marriage of the Urban/Rural Sectors

CREDICOOP has been successful in meeting both urban and rural member needs. It has been able to envision the socioeconomic importance of an urban/rural membership mix in area cooperatives. The urban/rural mix can be a happy marriage in the credit union, but CREDICOOP must find a way to develop it so it meets the needs of both interests without favoring one over another.



COOPERATIVA "CARMEÑA" LTDA

BALANCES DE SITUACION

ACTIVOS

	1979	1980	1981	1982	1983
DISPONIBILIDADES	391124	511624	1640351	4156485	3978934
-Caja Chica	5000	5000	[illegible]	[illegible]	15312
-Fondo de Cambio	200000	300000	300000	300000	300000
-Banco Cta Cte	186124	206626	1335351	[illegible]	417667
-Cajas de ahorro				1000000	[illegible]
CREDITOS	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
-Prestamos	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
-Prestam Gest Cobro	[illegible]	[illegible]	[illegible]		
-Interes Devengados	[illegible]	[illegible]	[illegible]		
-Socios Suscriptores	145128	128060	156164	155738	166616
-Ctas por Cobrar	919504	456153	1088127	5766248	5472285
-Prestam Comercial	9270	216363	591105	1117051	289449
-Ctas por Cobrar Comerc	37376	869618	196010	477425	114450
-Prestam Fond Estab	---	---	3884705	2839013	2493512
-Reaj Monet Deveng	---	198965	249871	409973	[illegible]
BIENES DE CAMBIO	571525	1708113	[illegible]	[illegible]	[illegible]
-Insumos	537400	882828	756815	[illegible]	[illegible]
-Mercaderias	---	[illegible]	[illegible]	[illegible]	[illegible]
-Productos Agric	---	[illegible]	[illegible]	[illegible]	[illegible]
-Envases	34125	[illegible]	[illegible]	875068	[illegible]
-Maquinarias e Implem	---	189300	[illegible]		
-Bienes Ponorados	---	---	145000	---	30000
-Productos Elaborados	---	---	---	---	102540
BIENES DE USO	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
-Maquin y Equip Oficina	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
-Vehiculos	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
-Muebles y Utiles	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
-Inmuebles	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
-Otros Bienes de Uso		[illegible]	[illegible]	[illegible]	[illegible]
-Instalaciones	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
-Maq e Implem Agric	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
- Deprec Acumul	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
INVERSIONES	1989100	2754000	[illegible]	[illegible]	[illegible]
Credicoop	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Bco Nac Trabajadores	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
CARGOS DIFERIDOS	39022	67353	15000	[illegible]	[illegible]
[illegible] ANTERIORES	---	---	344884	[illegible]	[illegible]
[illegible] ORDEN	2132	---			
TOTAL ACTIVO	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Appendix D
Interest Rates

APPENDIX D

INTEREST RATES

TRANSLATED FROM SPANISH ORIGINAL

APPENDIX D-1

THE INTEREST RATE PAID BY THE FARMER

by

Gerald Nehman, Advisor
and

Wilfrido A. Zarate C., Expert

Technical Staff
Ministry of Agriculture and Livestock
Paraguay

July 1977

9

THE PROBLEM

There is great confusion about the interest rates charged by those businessmen who are working with farmers. These businessmen give three types of credit: in cash, merchandise, and inputs. They use different procedures to calculate the interest rate to be applied to each type of credit. They do not follow banking procedures.

The National Development Bank is charging a 12-percent annual interest rate plus a 2-percent commission on its loans. This means, for instance, that if one borrows 100,000 guaranies for a year he will be paying 12,000 guaranies as interest and 2,000 guaranies as commission. The National Development Bank collects interest on a yearly basis and charges a fixed commission. Now let us look at how the private businessman operates.

Commercial Credit in Cash

We will first talk about cash loans to show that different procedures are applied to calculate interest rates. These businessmen collect interest based on a percentage of the total amount of the loan instead of charging an annual rate. If one borrows 100,000 guaranies at 12 percent, he will have to repay 112,000 guaranies, apparently the same as if he were dealing with the National Development Bank. The difference is that in this case the time factor is not considered. If the borrower repays the loan after a year he will pay the same interest rate he would have paid the National Development Bank, but if he repays after 6 months he will still have to repay 112,000 guaranies, that is, 24 percent if the interest rate is calculated on a yearly basis.

Let us consider a specific case: Miguel Jimenez sowed cotton in September. In January he obtained a cash loan from a businessman to cover family expenses and wages for the harvest. The total amount of the loan was 10,000 guaranies. Interest was to be 2,000 guaranies, ostensibly a 20-percent interest rate. He harvested his crop in March and sold his product by the end of April. The loan was to be repaid in 4 months. Since he paid 2,000 guaranies for the use of 10,000 guaranies

---

Study financied by the Agency for International Development and Ministry of Agriculture and Livestock (AID-MAG). Source: Fifty-five interviews conducted with farmers in Paraguari Department (1977), Ministry of Agriculture and Livestock.

92

for one-third of a year, the true annual interest rate was 60 percent.

What we are trying to show with this example is that for the borrower it is important to know not only the interest rate he is paying but also the term and other conditions, such as commission and guarantees if he is dealing with the National Development Bank. Those services provided by the lender must also be considered since these services are very important for the borrower and have a bearing on the interest rate charged.

Merchandise on Credit

One of the most important services for the farmer is the possibility of buying merchandise on credit. This is a very important service for the family since it allows the farmer to provide for his basic needs. Neither the National Development Bank nor private banks have any interest in financing consumer goods. Businessmen usually get paid for their services by increasing the price of the merchandise or by collecting interest. In either case it is difficult to determine the annual interest rate they are collecting. Let us give an example to better illustrate the factors a farmer must consider before deciding which type of credit to use.

Let us go back to the case of Miguel Jimenez. When he ran out of money in September, he started to buy merchandise on credit. His monthly purchases totaled 4,000 guaranies. The businessman who gave him credit had two sets of prices: one for cash purchases and one for credit purchases. The average price difference between the two sets of prices amounted to 1 percent. This means that if he bought one liter of oil which cost 100 guaranies cash, he was charged 116 guaranies. Thus, on top of the 4,000-guarani purchases made by Mr. Jimenez, the businessman charged him an additional 640 guaranies monthly. By the end of March, Mr. Jimenez has been making purchases for 7 months. His total purchases totaled 32,480 guaranies and he had to pay 4,480 guaranies interest on this credit.

How can we calculate the interest rate paid by Mr. Jimenez? He paid 16 percent for the purchases he made in September for a 7-month period. In October, the rate was still the same but the period was 6 months, and so forth. For instance, as of September the credit period was 7 months and 16 (percent) divided by 7 gives a 2.3-percent monthly rate. If this figure is multiplied by 12 months (a year), it will total 27.4 percent annually. As another example, we will cite the purchases made by the end of February.

This period covers 2 months since it runs from February to April. Thus the interest rate (16 percent) divided by 2 gives an 8-percent monthly rate, which multiplied by 12 totals 96 percent annually. Using this procedure to calculate the monthly purchases made by Mr. Jimenez, we estimate that the average annual interest rate in this case is 71 percent.

Inputs on Credit

If Mr. Jimenez also bought fertilizers, insecticides, seeds, etc., in September he paid a difference or surcharge for having bought on credit. The difference will depend largely on the degree of competition existing in the area. In 1976, we found that the average difference in an area where there were both a cooperative and a branch of the National Development Bank selling fertilizer was 11 percent. If he bought 5,000 guaranies worth of inputs in September and 5,000 guaranies worth of inputs in December, the respective credit periods are 7 and 4 months.

We will calculate the interest rate on the basis of a 7-month period as we did earlier. If 11 percent is charged for 7 months, the monthly rate is 1.6 percent, which multiplied by 12 months totals 19 percent annually. The annual interest rate on the basis of a 4-month period is estimated at 33 percent. The average interest rate for inputs is 26 percent.

Summary

When considering the farmer's deals with the businessman, we must include all of his activities. For instance, the procedure followed by the National Development Bank to calculate annual interest rates is sound but not easy. In the case of Mr. Jimenez, he is paying 60 percent annual interest on a 10,000-guarani cash loan, 71 percent annual interest on merchandise worth 28,000 guaranies, and 26 percent on 10,000 guaranies worth of inputs. In sum, the businessman gave the following credit to Mr. Jimenez:

	Amount		Term	Interest
	Guaranies	Percentage	(months)	(percentage)
Cash	10,000	21	4	60.0
Merchandise	28,000	58	7	71.1
Inputs	10,000	21	7	26.0

94

It is possible to note in this chart that he paid the highest interest rate on merchandise first of all because he bought small amounts--because he did not buy adequate amounts at one time. The second reason is that these are not productive inputs; they do not guarantee expeditious recovery as do productive inputs. The lowest interest rates were applied to inputs. The businessman knows that the inputs will allow the farmer to grow better crops which he himself will buy later from the farmer. The businessman also knows that he is thus improving his chances of recovering the loan.

The shortest term was applied to the cash loan. It is usually not in the best interest of the businessman to make a cash loan until making sure that the crops are growing well. By January he can foresee the possibility of a good crop, and he can then make a cash loan accordingly.

The largest amount was earmarked for purchases of merchandise. This is the typical case of a farmer who lacks adequate savings to support his family for the crop year. This item, which accounted for 58 percent of the loan obtained by Mr. Jimenez, limits his flexibility in marketing his crop. He is bound to sell his crop to the businessman who gave him credit in order to pay his debt.

In buying the product, the businessman can also make a deduction on the price paid to the farmer to cover credit services. This deduction, which is generally 1 or 2 guaranies per kilo, should be taken into account in calculating the interest rate. Mr. Jimenez sold 2,000 kilos when the selling price in his hometown was 50 guaranies per kilo. The businessman paid him 49 guaranies per kilo for the first 1,051 kilos to collect the total debt of 51,520 guaranies. The deduction of 1,051 guaranies is part of the interest rate.

We are not stating that the type of deal made by Mr. Jimenez is commonplace. There are many variations which will depend largely on the degree of friendship existing between the businessman and the farmer and on the degree of competition prevailing in the area. What we are saying is that the farmer must be aware of how he is repaying the credit and compare it with the interest rate charged by other sources of credit.

Conclusions

1. The interest rate is not calculated on a yearly basis. The farmer should prorate interest rate figures and compare them with those charged by formal institutions such as the National Development Bank.

2. The interest paid on merchandise and inputs is hidden in the price. The farmer should ask whether buying on credit will be to his advantage or whether it would be better for him to obtain a loan elsewhere and pay cash.

3. When selling his product, the farmer should know the price in force that day and negotiate a fair price in accordance with the other deals. Deductions, which should have a bearing on the interest rate he is paying, could also be made both in price and weight of his product.

96

TRANSLATED FROM SPANISH ORIGINAL

APPENDIX D-2

INTEREST RATES CHARGED BY CREDICOOP CREDIT UNIONS

Coopers & Lybrand
Asuncion, Paraguay

March 1984

A. Introduction

1. Object of the Study

The analysis was performed for the purpose of measuring the adequacy of the current "spread" of financial operations of two previously selected cooperatives, by looking at the performances of the components of the assets and liabilities.

2. Methodology Employed

It was produced by analyzing real data which emerged from 1983 monthly statements of account, which were presented by two cooperatives to CREDICOOP, complementing them with information obtained from the cooperatives by means of verbal consultations. First, the amount of interest earned during 1983 was determined by using a comprehensive proof of nominal interest applied to an average portfolio; considering the different rates, the loans were arranged by type. It had to take place in this form because the bookkeeping of the cooperatives registered the interest on a cash basis.

In a similar manner, the inactive interest accrued during the year was determined considering the different sources of funds and their costs. Later the operating expenses of each cooperative were calculated, expressed as a percentage of the total portfolio. On the basis of existing experience of each cooperative, the index of irrecoverability was taken on the entire portfolio to measure the risk of bad debts. Also taken into account was the existence of other income arising principally from marketing in the cooperatives of commodities and farm implements. With all of these elements being in evidence, the next step was to analyze in each cooperative the structure of the financing and the adequacy of the spread to cover the administrative costs and the risks of bad credit.

3. Selection Cooperatives

The analysis was produced from information provided by the cooperatives Juan E. O'Leary and Coronel Oviedo. These cooperatives generate their resources through credit granted to their associates and by means of income rising from the sale of commodities and farm implements, and the marketing of products. Credit is extended to the rural sector, as well as the urban, where the head office of the cooperative is located. Both cooperatives operated in similar zones but differ fundamentally in size and structure of capitalization.

Below are figures related to these two cooperatives:

	Coronel Oviedo Cooperative	Juan E. O'Leary Cooperative
Number of Members	2,404	152
Total Assets as of 12/31/83 (mil. of G)	178	12
Net Capital (partrimonio neto) (mil. of G)	111	3.3
Average Loan Portfolio (1983) (mil. of G)	141	6.7
Average Financed Passive Liabilities (mil. of G)	53	4.5
Holdings (which did not generate interest) (mil. of G)	14	4.2
Index of Indebtedness	38%	72.5%
Percentage of Portfolio (financed with own capital)	63%	33%
Composition of the Portfolio by Sector		
Rural (farms)	25%	81%
Urban (personal, housing, industry/business, etc.)	75%	19%
Percentage of Portfolio in Moratorium (on hold)	9%	14%

Note: The study was performed as stated above on the basis of verbal data given by employees of the cooperatives and from unaudited figures from statements of account; therefore, one should take this fact into consideration when analyzing the conclusions. We are not effecting an audit to validate the information used; therefore, we are not giving an opinion about it.

Source: The data utilized in the analysis were supplied by Mr. Heriberto Gonzales of the Col. Oviedo Cooperative and by Miss Ana Escobar of the Juan E. O'Leary Cooperative.

B. Analysis of the Active Interest Rates (Assets)

1. Coronel Oviedo Cooperative

Composition of the loan portfolio during the year 1983 (in thousands of guarani):

Purpose	Amount	%	Rate of Interest and Commission Collected
Purchase of Land	7,047	5	24%
Cultivated Crops	9,865	7	24%
Livestock and Poultry	4,228	3	24%
Implements	1,409	1	24%
Work Vehicles	12,684	9	24%
Small Industries	15,502	11	24%
Business (commerce)	46,507	33	24%
Employees and Professionals	21,140	15	24%
Housing	22,548	16	14%
Total	140,930	100%	

As demonstrated above, the cooperative collects 14 percent annual interest on the housing loans, the rate being regulated by the National Savings and Loan Bank for Housing. For the rest of the loans, the rate of interest plus commission is 24 percent annually (12 percent interest plus 12 percent commission).

Determination of the Mix of Interest
(in thousands of guarani)

-- Annual interest produced by the portfolio, normally 24% on 118,382	28,411
-- Annual interest produced by the portfolio of housing loans, 14% on 22,548	3,157
Total annual interest	31,568

Average steady annual rate: $\frac{31,568}{140,930}$ = 22%

2. Juan E. O'Leary Cooperative

Composition of the loan portfolio during the year 1983. (in thousands of guarani)

Purpose	Amount	%	Rate of Interest and Commission Collected
Purchase of Land	67	1	32%
Crops	4,454	66	32%
Livestock and Poultry	270	4	32%
Implements	607	9	32%
Business and Industry	540	8	32%
Personnel	742	11	32%
Other	69	1	32%
Total	6,749	100	

The cooperative collects an annual interest of 12 percent plus a commission of 5 percent, plus 1.25 percent monthly, the total of which equals approximately 38 percent annually (APR).

C. Analysis of Passive Interest Rates

1. Coronel Oviedo Cooperative

The portfolio of loans for 1983 was financed with the following resources:

(in thousands of guarani)

101

Resources	Amount	%	Annual Financial Cost
On Demand Savings Deposits	9,583	7	10.5%
Savings Deposits at Fixed Rate	3,326	2	13.5%
CREDICOOP	15,636	11	18.0%
Bank of Housing	23,114	16	13.0%
National Bank for Development	1,077	1	18.0%
Equity Capital and Other Inert Holdings	88,194	63	-
Total	140,930	100	

Determination of Mix of Interests

Resources	Annual Investment	Rate	Interest
On Demand Savings Deposits	9,538	10.5	1,006.22
Savings Deposits at Fixed Rate	3,326	13.5	449.01
CREDICOOP	15,636	18.0	2,814.48
Bank of Housing	23,114	13.0	3,004.82
National Bank for Development	1,077	18.0	193.86
Total	52,736		7,468.39
Equity Capital (own capital)	88,194		
Total	140,930		7,468.39

Cost of Financing the Portfolio of Loans

Total portfolio: $\frac{7,468.39}{140,930} = 0.053$

Average annual rate: 5.3%

Portfolio financed with outside funds: $\frac{7,468.39}{52,736} = 0.142$

Annual rate: 14.2%

2. Juan E. O'Leary Cooperative

The portfolio of loans for 1983 was financed with the following resources:

Resources	Amount	%	Annual Financial Cost
On Demand Savings Dep.	292	4	10.0%
Fixed Rate Savings Dep.	654	10	13.5%
National Bank for Dev.	583	9	18.0%
CREDICOOP	2,963	44	18.0%
Equity Capital and Other Passives	2,257	33	-
Total	6,749	100	

Determination of Mix of Interest

Resources	Annual Amount	Rate	Interest
Savings on Demand	292	10.0	29.20
Savings at Fixed Rate	654	13.5	88.29
National Bank for Dev.	583	18.0	104.94
CREDICOOP	2,963	18.0	533.34
Subtotal	4,492		755.77
Equity Capital and Other Passives	2,257	-	-
Total	6,749		755.77

Cost of Financing the Portfolio of Loans

Total portfolio: $\frac{755.77}{6,749} = 0.11$

103

Average annual rate: 11%

Portfolio financed with outside funds: $\frac{755.77}{4,492} = 0.17$

Annual rate: 17%

D. Determination of Administrative Expenses

According to monthly (financial) statements for 1983 of the cooperatives analyzed, the administrative expenses including personal expenses, general expenses, stationery and utilities, communications, etc., are as follows:

1. Coronel Oviedo Cooperative

-- Annual administrative expenses: G12,843,545
-- Annual administrative expenses as percentage of the average portfolio:

$$\frac{12,843,545}{140,929,543} = 9\%$$

2. Juan E. O'Leary Cooperative

-- Annual administrative expenses: G1,514,873
-- Annual administrative expenses as percentage of the average portfolio:

$$\frac{1,514,873}{6,749,519} = 22\%$$

E. Determination of Irrecoverable Credits (Bad Debts)

The index of irrecoverable accounts was taken from data furnished by personnel consulted in each cooperative, who based their figures from past experiences.

1. Coronel Oviedo Cooperative: 2%
2. Juan E. O'Leary Cooperative: 5%

F. Determination of Additional Income

These additional incomes which are produced in the cooperative originate basically from marketing of products, sales of commodities and farm implements, various services, and other.

1. Coronel Oviedo Cooperative

Additional income in 1983: G2,169,177

Expressed as percentage of the loan portfolio: $\frac{2,169,177}{140,929,543} = 1.5\%$

2. Juan E. O'Leary Cooperative

Additional income in 1983: G1,027,374

Expressed as percentage of the loan portfolio: $\frac{1,027,374}{6,749,519} = 15\%$

G. Analysis of the Spread and its Sufficiency

	Col. Oviedo Coop	J. E. O'Leary Coop
Average Active Rate	22.0	32.0
Average Passive Rate	(5.3)	(11.0)
Spread	16.7	21.0
Administrative Expenses	(9.0)	(22.0)
Irrecoverables (bad debts)	(2.0)	(5.0)
Subtotal	5.7	(6.0)
Additional Income	1.5	15.0
Total	7.2	9.0

H. Conclusions

1. Col. Oviedo Cooperative

The spread with which the Col. Oviedo Cooperative operates, 16.7 percent, is based on the high participation of their equity capital in the financing of the loan portfolio (63 percent). If the spread of the cooperative were analyzed without considering the contribution of equity capital which does not originate any cost, the relation would be the following:

105

Average active rate:	22.0%
Average passive rate:	14.2%
Spread	7.8%

This spread would be insufficient to absorb the administrative costs plus the risk of bad debts.

2. Juan E. O'Leary Cooperative

In order to maintain a spread which permits coverage of administrative costs, the cooperative must increase the "active" rate to 37 percent. This figure may be too burdensome for agricultural creditors. The cooperative is making up losses on its loan programs through income from sale of commodities and farm implements.

APPENDIX D-3

CHARTS AND TABLES

107

Table D-1. CREDICOOP Share Total and Net Worth ($000)

Year	Urban Coops	Rural Coops	Total Shares	Profit/ Loss	Net Worth	Total Shares Net Worth
1974	888	1,545	2,433	148	6,755	9,336
1975	1,124	2,127	3,251	424	9,804	13,479
1976	1,671	4,763	6,434	91	29,452	35,479
1977	2,637	12,564	15,201	260	55,162	70,623
1978	4,055	22,885	26,940	341	94,681	121,962
1979	6,839	39,030	45,869	1,311	137,574	184,754
1980	11,789	57,622	69,411	861	156,941	227,213
1981	-0-	-0-	91,629	534	180,150	272,313
1982	23,732	77,807	101,539	(4,793)	226,631	323,379
1983	30,336	85,959	116,295	(67,820)	a	a

Source: Annual agency balance sheets.

[a]No data available.

Table D-2. Share Totals--All CREDICOOP Members[a]

Year	Urban Coop Total	Rural Coop Non-farm	Total Non-farm	Rural Coop Farm	Rural Coop Total	Grand Total
1973						
1974	50,547	19,110	69,657	28,068	47,547[b]	97,725
1975	60,121	32,146	92,267	30,586	62,732	122,853
1976	84,529	31,492	116,021	54,077	85,569	170,098
1977	100,210	72,431	172,641	77,351	149,782	249,992
1978	147,806	97,629	245,435	103,901	201,530	349,336
1979	217,125	143,391	360,516	131,492	274,883	492,008
1980	360,321	233,452	593,773	181,340	414,792	775,113
1981	523,577	280,023	803,600	215,973	495,996	1,019,573
1982	702,459	339,555	1,042,014	217,600	557,155	1,259,614
1983[c]	880,684	371,674	1,252,358	239,360	611,034	1,491,718

[a]Methodology: total of farmer shares reported from reports; nonfarmer shares were independently obtained.
[b]There is a difference of 369,000. The figure in the 1975 report does not add up to the total shown of 97,725. The difference is not significant (0.381 of total).
[c]As of October 1983.

Source: CREDICOOP Annual Reports.

108

Table D-3. Cooperative Loans Totals (balance each year)

Year	Total Member Shares: Farm. and Non-farm.	External Financing BNF/Savings and CREDICOOP		Loan Balance Total
1973	16,951	21,423	BNF to Coop	
		246	Savings	
		21,669		35,558
1974[a]	45,547	103,369	BNF	
		296	Savings	
		103,665		135,636
1975	62,732	90,857	BNF	
		551	Savings	
		91,408		127,040
1976	85,569	117,846	BNF/AID	
		1,211		
		119,059		168,572
1977	149,782	166,718	BNF/AID	
		4,478		
		171,196		258,067
1978	201,530	201,942	BNF to Coop	
		87,348	Savings	
		222,034	CREDICOOP	
		511,324		465,515
1979	224,883	199,678	BNF	
		158,722	Savings	
		365,303	CREDICOOP	
		723,703		661,849
1980[b]	414,792	302,380	BNF/Other	
		315,000[c]	Savings	
		405,949	CREDICOOP	
		1,023,329		917,175
1981[d]	495,996	310,365	BNF/Other	
		329,909	Savings	
		474,422	CREDICOOP	
		1,114,696		1,026,572
1982	557,155	316,305	BNF/COLAC, etc.	
		514,343	Savings	
		447,723	CREDICOOP	
		1,278,371		1,060,144
1983	611,034	358,226	BNF/COLAC, etc.	
		606,996	Savings	
		349,297	CREDICOOP	
		1,314,519		929,978

[a] Data obtained from MDR Annual Reports.
[b] COPASAGU, a fairly good sized agricultural coop, obtained a loan from BNF (G284,233).
[c] Urban coops started to attract new savings, especially in Asuncion.
[d] Beginning this year, coops were using other financing sources such as suppliers. These sources and amounts are not reported in the MDR.

Source: Data obtained from Monthly Development Reports (MDR).

Table D-4. Cooperative Agricultural Loans in Rural Coops

Year	Farmer Shares	BNF and CREDICOOP Agri. Loan Balance
1974	28,068	103,369
1975	30,586	90,857
1976	54,077	117,846
1977	77,351	166,718
1978	103,901	423,976
1979	131,492	564,976
1980	181,340	708,329
1981	215,973	784,787
1982	217,600	764,028
1983	239,360	707,523

Notes: 1. We assume that all of BNF and CREDICOOP loans made to rural coops were for agriculture.

2. We are using loan balances taken from the end of each year. Since the agricultural production cycle ends in the second and third months of the year, we have estimated total loans each year. (Twenty percent could be calculated for each figure above.)

Table D-5. CREDICOOP Loan Balances and Accounts Receivable Totals[a]

	Rural Coops			
Year	Urban Coops	Agri.	Nonagri.	Totals
1974	357	4,046	357	4,760
1975	749	8,492	749	9,990
1976	3,550	43,791	3,550	47,341
1977	13,862	157,114	13,862	184,838
1978	18,239	206,715	18,239	243,193
1979	29,262	331,638	29,262	390,162
1980	38,969	441,653	38,969	519,591
1981	44,090	499,695	44,090	587,875
1982	43,261	490,292	43,261	576,814
1983[b]	39,742	450,413	39,742	529,897

[a]Accounts receivable includes accounts receivable, accounts accessible for marketing, and marketing advances. Due to the difficulty in obtaining readily available data at CREDICOOP, the management and financial director estimated that 15% of the totals were directed to urban coop and nonfarmers of rural coops.

[b]As of September 1983.

Table D-6. Reported Delinquency--Aggregate From Affiliate

	Urban Coops		Rural Coops		Total	
Year	Loan Balance	Amount Delinq.	Loan Balance	Amount Delinq.	Loan Balance	Amount Delinq.
1974	50,782	1,431	135,636	14,412	186,418	15,843
1975	60,306	2,837	127,040	37,728	187,346	40,565
1976	86,904	4,498	168,572	27,809	255,476	32,307
1977	140,223	2,497	258,067	24,418	398,290	26,915
1978	208,729	10,349	465,515	62,924	674,244	73,273
1979	241,499	12,283	661,849	60,380	903,348	72,663
1980	410,194	10,671	917,175	66,415	1,327,369	77,086
1981	647,032	18,799	1,026,572	112,261	1,673,604	131,060
1982	977,737	73,142	1,060,144	225,565	2,037,881	214,491

Note: Discrepancy in figures may occur due to inconsistent reporting systems practiced by individual cooperatives.

Table D-7. Delinquency and Recuperation Percentages from Selected Cooperatives

Cooperative	Total Delinquencies June '82 to July '83	Urban Delinquencies June '82 to July '83	Agricultural Delinquencies June '82 to July '83	Agricultural Loan Recuperation-June '82 to July '83	Percentage of Members Who Are Farmers
O'Leary	64.1	55.5	66.9	82.5	80.5
Itacurubi Ltda.	30.9	23.5	61.8	66.8	11.8
Barrenrena	14.1	12.5	19.3	75.3	13.6
Yaguaron	55.0	29.7	83.5	-	52.0
Quiindy	37.7	14.6	47.0	24.5	14.9
La Rosena	29.1	11.4	55.9	38.8	23.0
San Juan Bautista	26.4	19.5	49.9	54.9	18.9
Paraguari	30.0	13.3	81.5	-	21.6
Itacurubiense	45.3	58.9	95.8	56.6	34.7
Coe Pyajnu	90.5	59.3	96.6	33.6	84.2
San Pedro	79.4	32.2	99.1	41.3	47.5
Lima	45.3	-	45.3	50.0	100.0
Santani	56.4	16.0	76.5	55.3	63.2

Notes: 1. Debts are calculated by dividing the total overdue by the balance of loans in June to July 1983. A member is in debt when the total overdue is more than his monthly quota. Extensions are included as debts.

2. Agricultural debts are calculated at the end of the harvest of 1983 (June to July 1983, depending on the date the books are closed). For the cooperatives that grant loans for a short period of time (overdue at the end of harvest), the numbers will appear very high.

3. The recuperation of agricultural loans = the total received divided by the total overdue from the farmers.

Total Debts = + balance of agricultural loans June 1982
+ new loans granted July 1982-June 1983
- total on-time payments (for long-term loans)

Total Recuperated = total overdue (-) the total of the agricultural debts

Source: Peace Corps Study of CREDICOOP, Preliminary Data.

112

Table D-8. CREDICOOP Delinquency, Urban and Rural Totals, 1983

Cooperative	Overdue Accounts	Overdue Accounts 1983	Total Recuperated 1983	Recuperated
Urban	1,719,801	26,432,500	28,152,301	57,329,300
Urban/ Rural	166,504,369	109,901,744	276,106,113	74,584,439
Total	168,224,170	136,334,244	304,558,414	131,913,734

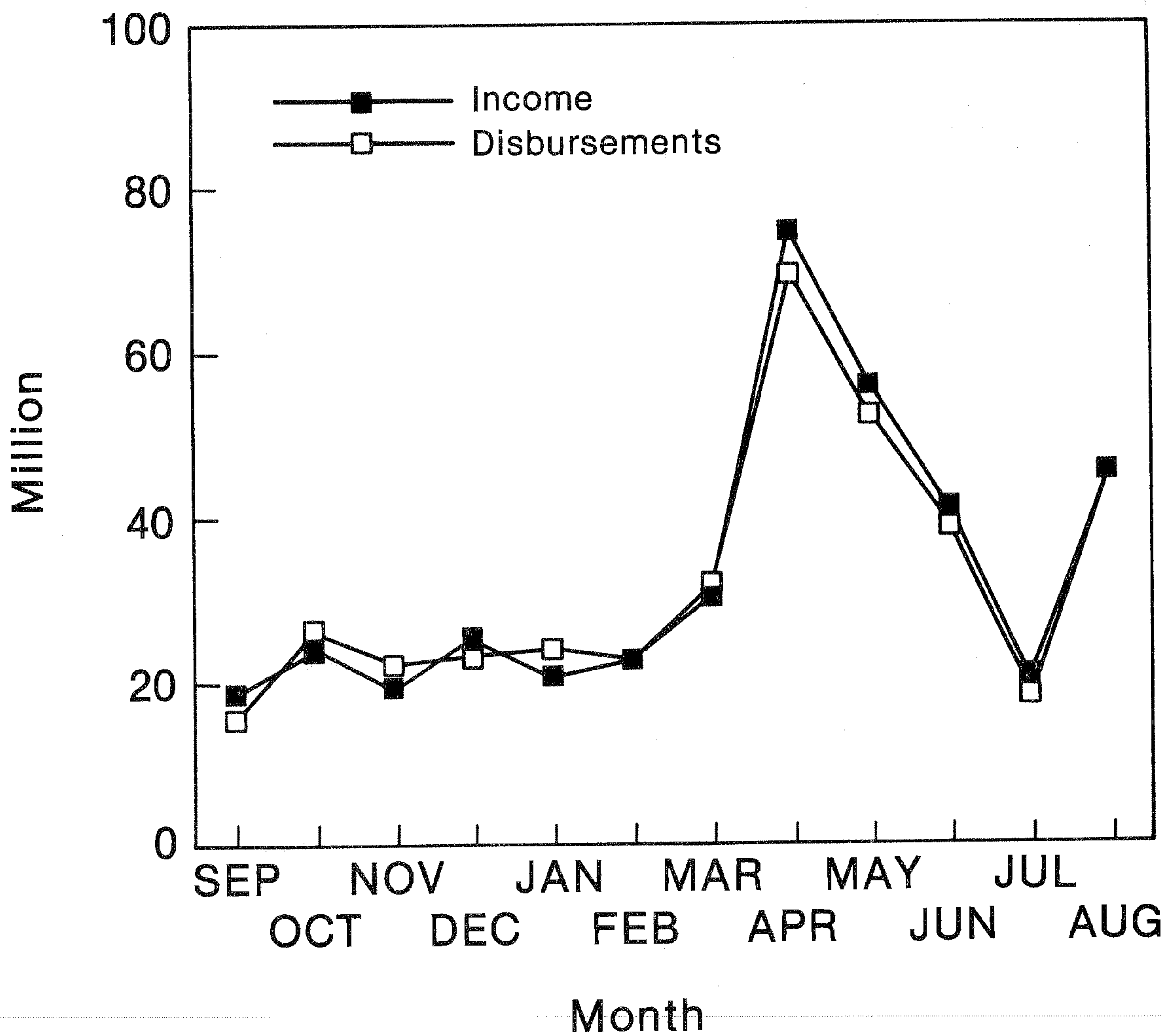
Urban: 203% recuperation
Rural: 27% recuperation

Note: No extensions were granted in 1983 to any loan in order to recuperate in case of a good crop year.

113

Graph C.
Flow of Income and Disbursements (Liquidity Analysis)

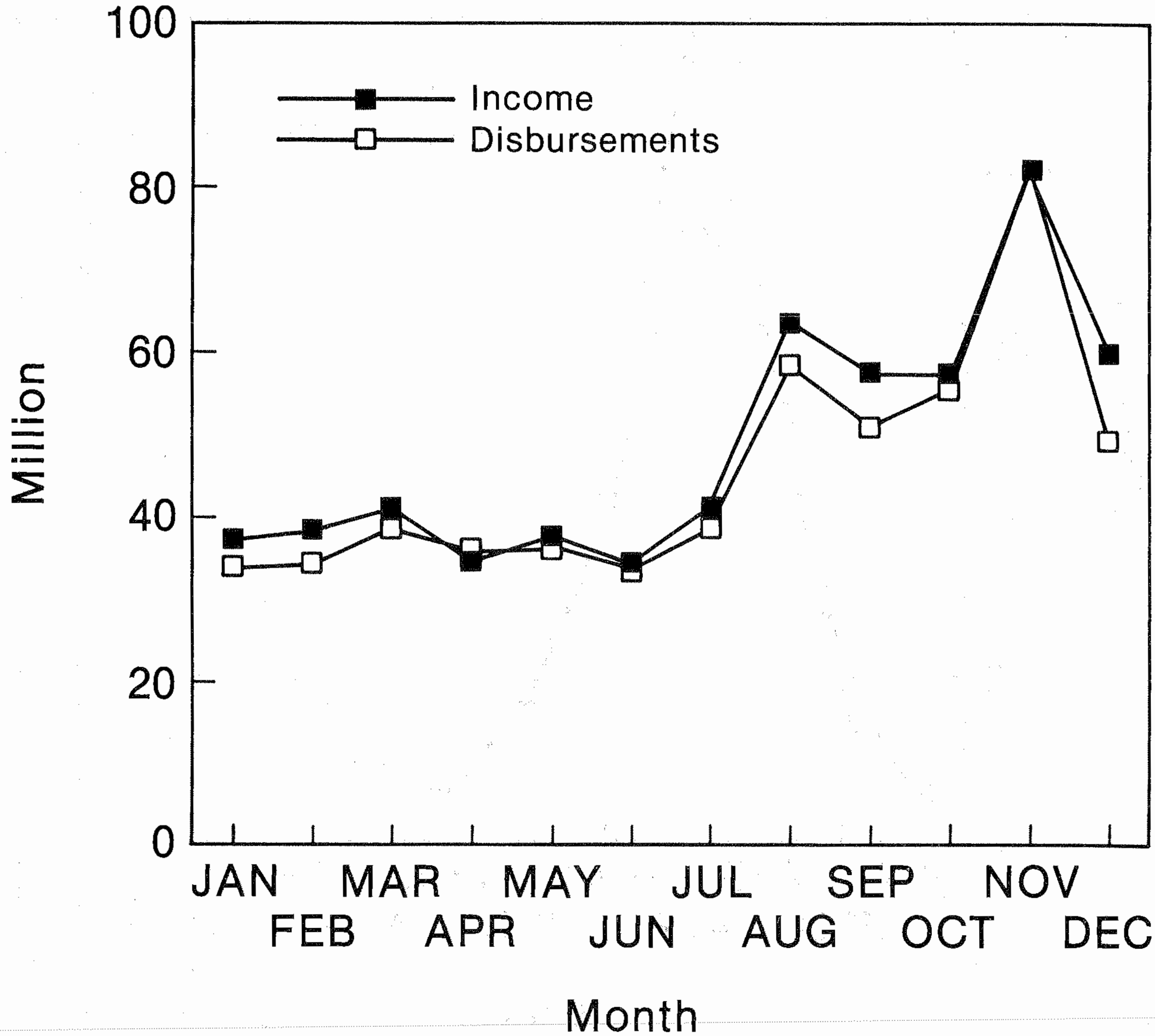
Cooperative Coronel Oviedo



Graph B.

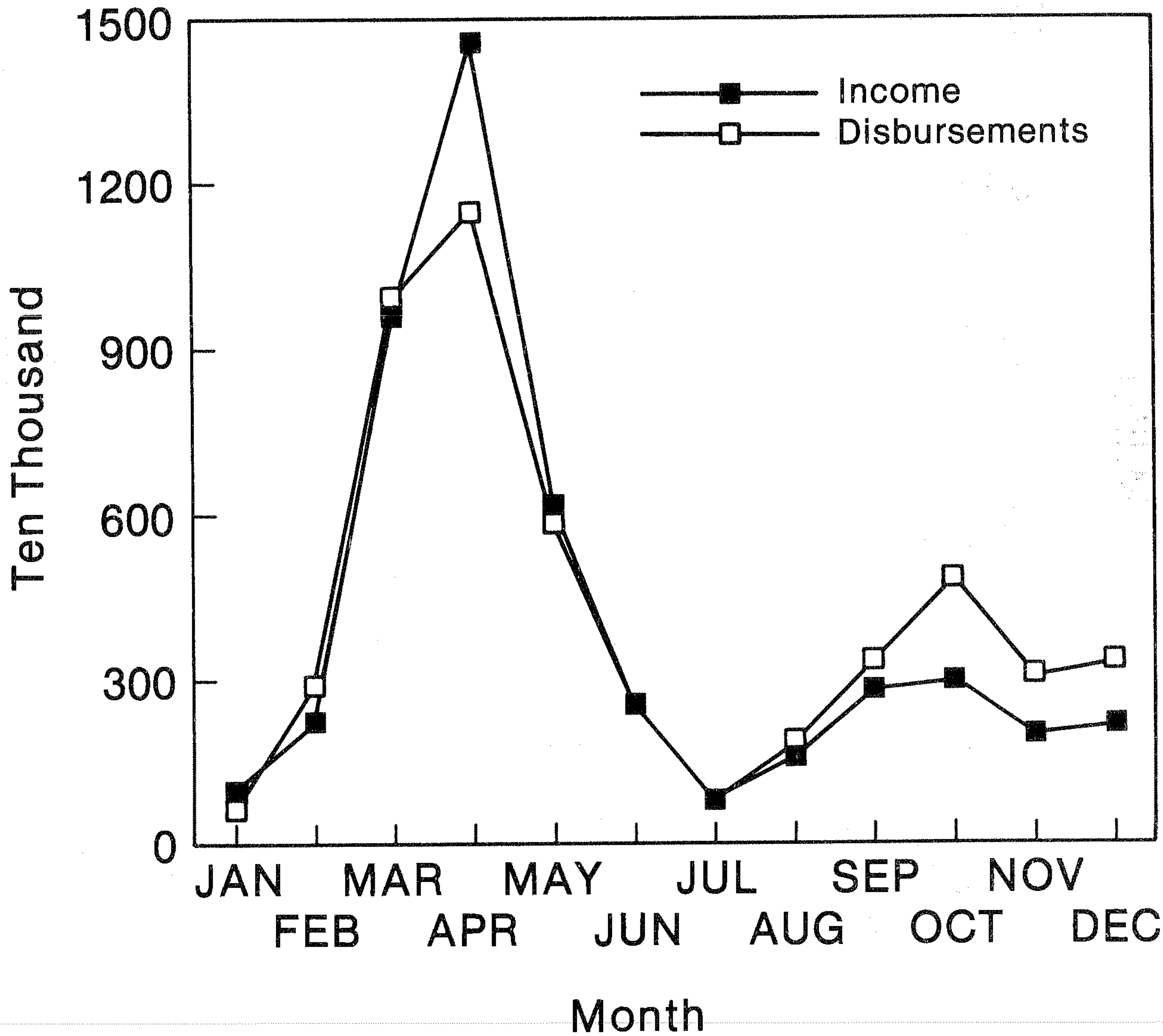
Flow of Income and Disbursements (Liquidity Analysis)

Cooperative San Cristobal

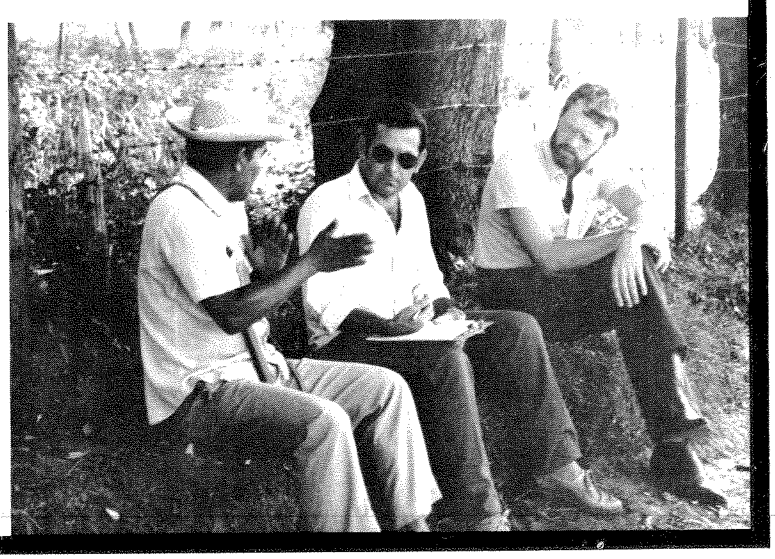


115

Graph A.
Flow of Income and Disbursements (Liquidity Analysis)
Cooperative Juan E. O'Leary



116



Appendix E
Methodology

APPENDIX E

METHODOLOGY

The methodology for this impact evaluation involved four stages:

1. Review of documents and discussion of procedures in Washington, D.C. and Paraguay

2. Extensive interviews with host country and AID Mission officials in Asuncion

3. Field interviews and observations throughout southern Paraguay

4. Analysis of relevant survey materials

The evaluation team consisted of five members: a team leader from AID/Washington, two U.S. consultants with expertise in small business development and development communications, and two Paraguayan consultants with expertise in agronomy, cooperative law, and cooperative economics. All team members were fluent in Spanish, and the Paraguayan agronomist was also fluent in Guarani, the common language of Paraguayan farmers.

During the first week in-country, the evaluation team reviewed documents while discussing methods of survey strategy. In this we were assisted by both USAID and host country officials. During the second week the team carried out field interviews with staff from six rural (farm town) credit unions representing a cross-section of the total and, concurrently, with as many credit union members as possible at each location. In the course of such visits the team split into two groups, one staying at the credit union facility and the other traveling to selected members' workplaces.

Because of our inability to conduct a large number of member interviews in the time allowed, interviewee selection was given careful thought. For the most part this was translated into at least one interview each with a model member, a delinquent but still active member, and a member who had withdrawn from active credit union involvement. In addition, we sought out neighbors of members who had never joined. The idea of this selection was to hear the whole range of perspectives, irrespective of their representative weight.

Although some of the better credit unions were predominantly urban in character (the majority of their members lived within the farm town), we conducted more interviews with rural members. This decision was made because of the relatively

118

greater importance the AID project assigned to small farmer impact. However, it should be noted that no urban member interviewed was far removed from the farm economy; for the most part they were either in the service sector or agribusiness. We saw no evidence of a social division between rural and urban members, and the latter consistently reiterated their belief that the economic health of farmer members was the basis for everyone's well being.

Final analysis of materials began during the third and final week in-country, with all team members participating. Gaps in the data were filled in by sending a two-man Paraguayan team out to review files in a sample of 10 credit unions (including several of those visited) and to fill out a questionnaire prepared by the team. Additional data were also gathered from Asuncion sources. The Paraguayan team members proved invaluable in this as well as all other efforts because of their knowledge of where to find data and how to get things done.

Finally, when the study was thoroughly defined, the team sought assistance from the Asuncion office of Coopers & Lybrand for guidance on balance sheet analysis as well as on methodology for the broader analysis. They provided a valuable check on our work as a result of their extensive experience in auditing local financial institutions including, in 1981, CREDICOOP itself.

A typewritten draft of the impact evaluation was completed in Asuncion and presented to AID, Embassy, CREDICOOP, and Peace Corps officials for review and comment before the team departed Paraguay.

BIBLIOGRAPHY

AID PROJECT PAPERS

Credit Unions (Grant)
October 1978
(562-0101)

Small Farmer Development (Loan)
December 1978
(526-T-027)

Credit Union Stabilization Fund (Grant)
August 1978

Minifundia Crop Intensification (Grant)
August 1979
(526-0118)

PROJECT STUDIES

Cooper, B. and Carvallo, O. Minifundia Crop Intensification. Project Evaluation Summary. Asuncion, Paraguay: USAID, Bureau for Latin America and the Caribbean, June 1982. (Evaluation Period: May 1979-June 1982.)

Credit Union National Association, Inc. Assessment of the Paraguay Credit Union Projects. Vol. I, "Executive Summary." Project Evaluation Summary. Madison, Wisconsin, August 1978. (Evaluation Period: January 1970-August 1978.)

Marion, Peter, J. Plan de Estabilizacion de la Central Cooperativa Nacional, Ltda., CREDICOOP. Asuncion, Paraguay, January 1982.

Miles, H. Credit Union-Small Farmer Development. Project Evaluation Summary. Asuncion, Paraguay: USAID, Bureau for Latin America and the Caribbean, October 1978. (Evaluation Period: July 1974-November 1977.)

Rivarola, Miguel Angel. Intensification de Cultivos en las Zonas de Minifundio. Informe de Evaluacion del Proyeto. Asuncion, Paraguay, January 1982.

White, Sanford W. Credit Unions. Project Appraisal Report. Asuncion, Paraguay: USAID, Bureau for Latin America and the Caribbean. (Evaluation Period: May 1974-June 1975.)

120

OTHER MATERIALS RELATED TO THE LOANS

Centro Paraguayo de Estudios Sociologicos (CPES). Survey of Credit Used: An Economic Profile of Small Farmers. Asuncion, Paraguay, 1970.

Ewart, Ned D. A Descriptive Ethnology of Paraguay. Asuncion, Paraguay: USAID, March 1977.

Fogel, R. and Galeano, R. "Capas Rurales y Cooperativas en el Paraguay," Centro Paraguayo de Estudios Sociologicos. Asuncion, Paraguay, 1978.

Food and Grain Institute. Evaluation of the Market System and Potential for Agricultural Products in Paraguay. Manhattan, Kansas, 1976.

Fretes, Ventre y Asociados. Basic Studies for a Minifundia Crop Intensification Project in the Central Zone of Paraguay. Vol. 2. Washington, D.C.: AID.

Nehman and Zarate. The Interest That a Farmer Pays. Asuncion, Paraguay: Ministry of Agriculture, July 1977.

Reyes, J.A., Associates, Inc. Market Study of Fruits and Vegetables in the Central Zones: A Commodity System Approach. Asuncion, Paraguay: AID, 1970.

Smith, DeFay, et al. Agribusiness Development with Small Farmer Participation: Evaluation of the Paraguay Rural Enterprise Project, June 1981.

Weil, Thomas, et al. Area Handbook for Paraguay. Library of Congress, Washington, D.C., 1972.

121

A.I.D. EVALUATION PUBLICATIONS

The following reports have been issued in the A.I.D. Evaluation Publication Series. Those documents with an identification code (e.g., PN-AAG-585) may be ordered in microfiche and paper copy. Please direct inquiries regarding orders to:

A.I.D. Document and Information
Handling Facility
7222 47th Street, - Suite 100
Chevy Chase, MD 20815
U.S.A.
(301) 951-9648

PUBLICATION LIST BY TOPIC

AGRICULTURE

--Agricultural Research:

Discussion Paper:
No. 13: AID Experience in Agricultural Research: A Review of Project Evaluations (May 1982) PN-AAJ-611

Impact Evaluations:
No. 2: Kitale Maize: The Limits of Success (May 1980) PN-AAH-723
No. 14: Central America: Small Farmer Cropping Systems (December 1980) PN-AAH-977
No. 27: Korean Agricultural Research: The Integration of Research and Extension (January 1982) PN-AAJ-606
No. 30: Guatemala: Development of ICTA and Its Impact on Agricultural Research and Farm Productivity (February 1982) PN-AAJ-178
No. 33: Food Grain Technology: Agricultural Research in Nepal (May 1982) PN-AAJ-614
No. 34: Agricultural Research in Northeastern Thailand (May 1982) PN-AAJ-615
No. 44: West Africa Rice Research and Development (May 1983) PN-AAL-012
No. 48: Tunisia: The Wheat Development Program (October 1983) PN-AAL-022
No. 55: Tanzania Seed Multiplication (January 1985) PN-AAL-042

Program Evaluation Report:
No. 10: Strengthening the Agriculture Research Capacity of The Less Developed Countries: Lessons from AID Experience (September 1983) PN-AAL-020

--Agricultural Services:

Impact Evaluations:
No. 52: Korean Agricultural Services: The Invisible Hand in the Iron Glove. Market and Nonmarket Forces in Korean Rural Development (March 1984) PN-AAL-036

122

Impact Evaluations: - Cont'd

No. 56: U.S. Aid to Paraguay: Assistance to Credicoop's Agricultural Credit Union System (January 1985) PN-AAL-041

CROSS REFERENCE LIST BY SECTOR

EDUCATION

Impact Evaluations:
No. 19: U.S. Aid to Education in Nepal: A 20-Year Beginning (May 1981) PN-AAJ-168
No. 23: Northern Nigeria Teacher Educational Project (Sept. 1981) PN-AAJ-176
No. 25: Thailand: Rural NonFormal Education - The Mobile Trade Training Schools (October 1981) PN-AAJ-171
No. 37: Radio Correspondence Education in Kenya (August 1982) PN-AAJ-620
No. 38: A Low-Cost Alternative For Universal Primary Education in The Philippines (September 1982) PN-AAL-001
No. 46: U.S. Aid to Education in Paraguay: The Rural Education Development Project (June 1983) PN-AAL-017

Program Evaluation Report:
No. 12: AID and EDUCATION: A Sector Report on Lessons Learned (January 1984) PN-AAL-034

Special Study:
No. 5: Korean Elementary - Middle School Pilot Project (October 1981) PN-AAJ-169

ENERGY

--Rural Electrification:

Discussion Paper:
No. 3: Rural Electrification: Linkages and Justifications (April 1979) PN-AAG-671

Impact Evaluations:
No. 15: The Philippines: Rural Electrification (December 1980) PN-AAH-975
No. 16: Bolivia: Rural Electrification (December 1980) PN-AAH-978
No. 21: Ecuador: Rural Electrification (June 1981) PN-AAH-979
No. 22: The Product is Progress: Rural Electrification in Costa Rica (October 1981) PN-AAJ-175

Program Evaluation Report:
No. 11: Power to the People: Rural Electrification Sector Summary Report (December 1983) PN-AAL-027

--Fuelwood

Special Study:
No. 1: The Socio-Economic Context of Fuelwood Use in Small Rural Communities (August 1980) PN-AAH-747

CROSS REFERENCE LIST BY SECTOR

FOOD AID

Discussion Papers
No. 15: Food Aid and Development: The Impact and Effectiveness of Bilateral PL 480 Title I-Type Assistance (December 1982) PN-AAL-003
No. 19: A Comparative Analysis of Five PL 480 Title I Impact Evaluation Studies (December 1983) PN-AAL-030

Impact Evaluations:
No. 8: Morocco: Food Aid and Nutrition Education (August 1980) PN-AAH-851
No. 39: Sri Lanka: The Impact Of PL 480 Title I Food Assistance PN-AAJ-623
No. 45: PL 480 Title I: The Egyptian Case (June 1983) PN-AAL-015
No. 47: The Impact of PL 480 Title I in Peru: Food Aid as an Effective Development Resource (October 1983) PN-AAL-021
No. 51: Jamaica: The Impact and Effectiveness of the PL 480 Title I Program (February 1984) PN-AAL-035

Program Evaluation Report:
No. 6: PL 480 Title II: A Study of the Impact of A Food Assistance Program in the Philippines (August 1982) PN-AAJ-622

HEALTH/NUTRITION

Discussion Papers:
No. 1: Reaching the Rural Poor: Indigenous Health Practitioners Are There Already (March 1979) PN-AAG-685
No. 10: A Review of Issues in Nutrition Program Evaluation (July 1981) PN-AAJ-174

Impact Evaluations:
No. 9: Senegal: The Sine Saloum Rural Health Care Project (October 1980) PN-AAJ-008
No. 36: Korea Health Demonstration Project (July 1982) PN-AAJ-621

Special Studies:
No. 8: Toward A Health Project Evaluation Framework (June 1982) PN-AAJ-619
No. 20: Prospects For Primary Health Care In Africa: Another Look At The Sine Saloum Rural Health Project In Senegal (April 1984) PN-AAL-037

INSTITUTION BUILDING

Discussion Paper:

No. 11: Effective Institution Building: A Guide for Project Designers and Project Managers Based on Lessons Learned From the AID Portfolio (March 1982) PN-AAJ-611

INTEGRATED RURAL DEVELOPMENT

Discussion Paper:

No. 21: The Development Potential of New Lands Settlement in the Tropics and Subtropics: A Global State-of-the-Art Evaluation With Specific Emphasis on Policy Implications (September 1984) PN-AAL-039

Impact Evaluations:

No. 28: Philippines: Bicol Integrated Area Development (January 1982) PN-AAJ-179

No. 43: Egypt: The Egyptian American Rural Improvement Service, A Point Four Project, 1952-63 (April 1983) PN-AAL-011

No. 49: HAITI: Hacho Rural Community Development (November 1983) PN-AAL-025

No. 53: Area Development in Liberia: Toward Integration and Participation (July 1984) PN-AAL-038

No. 57: Bolivia Integrated Rural Development in a Colonization Setting (January 1985) PN-AAL-043

IRRIGATION

Discussion Papers:

No. 9: The Impact of Irrigation on Development: Issues for a Comprehensive Evaluation Study (October 1980) PN-AAJ-208

Impact Evaluations:

No. 4: Philippine Small Scale Irrigation (May 1980) PN-AAH-749

No. 12: Korean Irrigation (December 1980) PN-AAH-975

No. 29: Sederhana: Indonesia Small-Scale Irrigation (February 1982) PN-AAJ-608

No. 31: Sudan: The Rahad Irrigation Project (March 1982) PN-AAJ-610

No. 35: The On-Farm Water Management Project in Pakistan (June 1982) PN-AAJ-617

No. 42: Bangladesh Small-Scale Irrigation (April 1983) PN-AAL-010

No. 43: Egypt: The Egyptian American Rural Improvement Service, A Point Four Project, 1952-63 (April 1983) PN-AAL-011

No. 50: On-Farm Water Management In Aegean Turkey, 1968-1974 (December 1983) PN-AAL-029

No. 54: PERU: Improved Water and Land Use in the Sierra, (December 1984) PN-AAL-040

IRRIGATION (con't)

Program Evaluation Report:
No. 8: Irrigation And AID's Experience: A Consideration Based On Evaluations (August 1983) PN-AAL-019

Special Studies:
No. 7: The Vicos Experiment: A Study Of The Impacts Of The Cornell-Peru Project In A Highland Community (April 1982) PN-AAJ-616
No. 18: The Helmand Valley Project In Afghanistan (December 1983) PN-AAL-028

LIVESTOCK DEVELOPMENT

Discussion Paper:
No. 6: The Sociology of Pastoralism and African Livestock Development (May 1979) PN-AAG-922

Program Evaluation Report:
No. 4: The Workshop on Pastoralism and African Livestock Development (June 1980) PN-AAH-238

LOCAL GOVERNMENT

Discussion Paper
No. 17: AID Assistance To Local Government: Experience And Issues (November 1983) PN-AAL-026

Special Study:
No. 17: Local Government Trends and Performance: Assessment of AID's Involvement in Latin America November 1983 (PN-AAL-023)

POPULATION/FAMILY PLANNING

Discussion Paper:
No. 5: Study of Family Planning Program Effectiveness (April 1979) PN-AAG-672

Program Evaluation Reports:
No. 1: Family Planning Program Effectiveness: Report of a Workshop (December 1979)
No. 2: A.I.D.'s Role in Indonesian Family Planning: A Case Study with General Lessons for Foreign Assistance (December 1979) PN-AAH-425
No. 3: Third Evaluation of the Thailand National Family Planning Program (February 1980) PN-AAH-006

PRIVATE SECTOR

Discussion Papers:

No. 14: Private Sector: Ideas and Opportunities: A Review of Basic Concepts and Selected Experience (June 1982) PN-AAJ-618

No. 16: The Private Sector, The Public Sector, And Donor Assistance In Economic Development: An Interpretive Essay (March 1983) PN-AAL-007

No. 18: Free Zones In Developing Countries: Expanding Opportunities for the Private Sector (November 1983) PN-AAL-024

No. 20: A Comparative Analysis of Policies and Other Factors Which Affect the Role of the Private Sector in Economic Development (December 1983) PN-AAL-031

Impact Evaluation:

No. 41: Impact Evaluation of Housing Guaranty Programs In Panama (March 1983) PN-AAL-008

Special Studies:

No. 4: The Social Impact of Agribusiness: A Case Study of ALCOSA in Guatemala (July 1981) PN-AAJ-172

No. 6: The Economic Development of Korea: Sui Generis or Generic? (January 1982) PN-AAJ-177

No. 9: Private Sector: Costa Rica (March 1983) PN-AAL-005

No. 10: Private Sector: The Tortoise Walk: Public Policy And Private Activity In The Economic Development of Cameroon (March 1983) PN-AAL-004

No. 11: The Private Sector And The Economic Development Of Malawi (March 1983) PN-AAL-006

No. 12: Ventures In The Informal Sector, And How They Worked Out In Brazil (March 1983) PN-AAL-009

No. 14: The Private Sector: The Regulation Of Rural Markets In Africa (June 1983) PN-AAL-014

No. 15: The Private Sector: Ethnicity, Individual Initiative, And Economic Growth In An African Plural Society: The Bamileke of Cameroon (June 1983) PN-AAL-016

No. 16: Private Sector Evaluation: The Dominican Republic (June 1983) PN-AAL-018

No. 19: Capitalizing Workers: The Impact of Employee Stock Ownership Plans in Selected Developing Countries (January 1984) PN-AAL-033

PRIVATE VOLUNTARY ORGANIZATIONS

Discussion Paper:

No. 12: Turning Private Voluntary Organizations Into Development Agencies; Questions for Evaluation (April 1982) PN-AAJ-612

PRIVATE VOLUNTARY ORGANIZATIONS (con't)

Special Study:
No. 12: Ventures In the Informal Sector, And How They Worked Out In Brazil (March 1983) PN-AAL-009

PROGRAM DESIGN AND & EVALUATION METHODOLOGY

Reports:
No. 1: Manager's Guide to Data Collection (November 1979) PN-AAH-434
No. 2: Selection and Justification Procedures for Rural Roads Improvement Projects (January 1984) PN-AAL-032

ROADS

Discussion Papers:
No. 2: New Directions Rural Roads (March 1979) PN-AGG-670
No. 7: Socio-Economic and Environmental Impacts of Low-Volume Rural Roads -- A Review of the Literature (Febrauary 1980) PN-AAJ-135

Impact Evaluations:
No. 1: Colombia: Small Farmer Market Access (December 1979) PN-AAH-768
No. 6: Impact of Rural Roads in Liberia (June 1980) PN-AAH-750
No. 7: Effectiveness and Impact of the CARE/Sierra Leone Rural Penetration Roads Projects (June 1980) PN-AAH-751
No. 11: Jamaica Feeder Roads: An Evaluation (November 1980) PN-AAJ-199
No. 13: Rural Roads in Thailand (December 1980) PN-AAH-970
No. 17: Honduras Rural Roads: Old Directions and New (January 1981) PN-AAH-971
No. 18: Philippines Rural Roads I and II (March 1981) PN-AAH-973
No. 26: Kenya: Rural Roads (January 1982) PN-AAH-972

Program Evaluation Report:
No. 5: Rural Roads Evaluation Summary Report (March 1982) PN-AAJ-607

SMALL-SCALE ENTERPRISE

Impact Evaluation:
No. 40: Assisting Small Business In Francophone Africa -- The Entente Fund African Enterprises Program (December 1982) PN-AAL-002

SMALL-SCALE ENTERPRISE (con't)

Special Study:
No. 13: The Evaluation of Small Enterprise Programs And Projects: Issues in Business And Community Development (June 1983) PN-AAL-013

WATER

Discussion Paper:
No. 4: Policy Directions for Rural Water Supply in Developing Countries (April 1979) PN-AAG-691

Impact Evaluations:
No. 3: The Potable Water Project in Rural Thailand (May 1980) PN-AAH-850
No. 5: Kenya Rural Water Supply: Program, Progress, Prospects (June 1980) PN-AAH-724
No. 10: Tunisia: CARE Water Projects (October 1980) PN-AAJ-207
No. 20: Korean Potable Water System Project: Lessons from Experience (May 1981) PN-AAJ-170
No. 24: Peru: CARE OPG Water Health Services Project (October 1981) PN-AAJ-176
No. 32: Panama: Rural Water (May 1982) PN-AAJ-609

Program Evaluation Report:
No. 7: Community Water Supply in Developing Countries: Lessons from Experience (September 1982) PN-AAJ-624

Special Studies:
No. 2: Water Supply and Diarrhea: Guatemala Revisited (August 1980) PN-AAH-747
No. 3: Rural Water Projects in Tanzania: Technical, Social, and Administrative Issues (November 1980) PN-AAH-974

WOMEN IN DEVELOPMENT

Discussion Paper:
No. 8: Assessing the Impact of Development Projects on Women (May 1980) PN-AAJ-725