

UNCLASSIFIED

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PD-AAB-322-B1

DEPARTMENT OF STATE  
AGENCY FOR INTERNATIONAL DEVELOPMENT  
Washington, D.C. 20523

PROJECT PAPER

PARAGUAY

CREDIT UNION

Project Number: 526-0101

LA/DR: 78-5

UNCLASSIFIED

JAN 11 1979

ACTION MEMORANDUM FOR THE ASSISTANT ADMINISTRATOR (LA)

FROM: LA/DR, Marshall D. Brown, Acting

**Problem:** To approve an increase of \$625,000 in grant funds and a three-year extension of the Paraguay Credit Unions Grant Project.

Discussion: The PP for the Credit Unions grant project was approved in December 1974 to provide technical assistance and training and to cover some of the operating expenses of the CREDICOOP confederation of credit unions. At the same time, \$4.7 million in loan funds was authorized to the two central cooperatives, CREDICOOP and UNIPACO (\$3.0 million to CREDICOOP and \$1.7 million to UNIPACO), as seed capital under the Small Farmer Development loan (526-T-027). This loan project was revised, however, after UNIPACO, a central marketing cooperative, had to withdraw from the project due to internal management problems. The revised loan agreement was signed in December 1976 for \$3.0 million in loan funds to CREDICOOP.

The purpose of this grant project is to enable the CREDICOOP system of cooperatives to be financially self-sufficient while providing credit, technical assistance, and marketing services to small farmers in rural member cooperatives. The additional \$625,000 (to be incrementally funded with \$306,000 obligated in FY 1978) will provide \$246,000 for consultant services, \$135,000 for commodities, \$52,000 for training, \$162,000 for CREDICOOP's operating expenses and \$30,000 for contingency costs. Commodities are needed to support CREDICOOP's expanding marketing activities, training will be provided to cooperatives' directors and their staffs in cooperative administration, and salaries and certain operating costs will be financed on a declining scale over the life of project. The host country contribution will finance 60% of total project costs over the next three fiscal years which exceeds the counterpart requirements of Section 110(a) of the FAA.

As anticipated in the revised loan agreement, an extension and an increase in grant funds is needed because of the two-year delay in disbursing the seed capital loan under the Small Farmer Development Project and the need to establish a marketing capability within CREDICOOP to compensate for the withdrawal of UNIPACO from the project. This grant would extend funding by three years through FY 80 and increase by \$625,000 the on-going grant project. Cumulative obligations to date total \$1.303 million (\$451,000 for consultant services, \$160,000 for commodities, \$20,000 for participant training and \$672,000 for operating and other expenses).

AID grant funds (and loan funds from the Small Farmer Development Project) are restricted to CREDICOOP activities involving only the rural cooperatives, those cooperatives which lend for agricultural production. Project benefits are directed toward small farmer members of cooperatives through the provision of a range of services aimed at relieving production and marketing constraints.

The project appears on page 249 of the FY 78 Congressional Presentation at a level of \$306,000 in FY 78. Therefore, no Advice of Program Change is required.

The DAEC reviewed the Credit Unions grant project on November 10, 1977, and approved it pending submission of additional information described below:

1. The annual growth rates in CREDICOOP's revenue projections were re-examined and revised in light of additional information. Explanation of the projections and the assumptions made in arriving at these projections have been included in the PP.
2. A budget for commodities to be purchased by AID grant funds has been included as an annex.
3. A budget for the training program has been included as an annex to the PP.

With these additions and modifications to the PP, we consider the project ready for authorization.

Recommendation: That you approve the extension and increase of funds for the Paraguay Credit Unions Grant Project by signing the attached Project Authorization and Request for Allotment of Funds (PAF) form, thus authorizing the Mission to negotiate and sign a Project Agreement.

Attachments: 1. PAF  
2. Project Paper

AGENCY FOR INTERNATIONAL DEVELOPMENT  
**PROJECT AUTHORIZATION AND REQUEST  
 FOR ALLOTMENT OF FUNDS PART I**

1. TRANSACTION CODE

A

A ADD  
 C CHANGE  
 D DELETE

PAF

2. DOCUMENT CODE

5

3. COUNTRY/ENTITY

Paraguay

4. DOCUMENT REVISION NUMBER

4

5. PROJECT NUMBER (7 digits)

526-0101

6. BUREAU/OFFICE

A SYMBOL  
 LA

B CODE  
 05

7. PROJECT TITLE (Maximum 40 characters)

Credit Unions

8. PROJECT APPROVAL DECISION

A

A APPROVED  
 D DISAPPROVED  
 DE DEAUTHORIZED

9. EST. PERIOD OF IMPLEMENTATION

YRS  1  2  3

QTRS

10. APPROVED BUDGET AID APPROPRIATED FUNDS \$000

A. APPROPRIATION	B. PRIMARY PURPOSE CODE	PRIMARY TECH. CODE		E. 1ST FY <sup>78</sup>		H. 2ND FY <sup>79</sup>		K. 3RD FY <sup>80</sup>	
		C. GRANT	D. LOAN	F. GRANT	G. LOAN	I. GRANT	J. LOAN	L. GRANT	M. LOAN
(1) FN	224			306		149		70	
(2)									
(3)									
(4)									
TOTALS				306		149		70	

A. APPROPRIATION	N. 4TH FY		O. 5TH FY		LIFE OF PROJECT		PROJECT FUNDING AUTHORIZED	A. GRANT	B. LOAN
	P. GRANT	Q. LOAN	R. GRANT	S. LOAN	T. GRANT	U. LOAN			
(1) FN									
(2)									
(3)									
(4)									
TOTALS									

12. INITIAL PROJECT FUNDING ALLOTMENT REQUESTED \$000

A. APPROPRIATION	B. ALLOTMENT REQUEST NO. <u>2</u>	
	C. GRANT	D. LOAN
(1) FN	306	
(2)		
(3)		
(4)		
TOTALS		

13. FUNDS REQUESTED FOR ALLOTMENT

PROJECT NAME: ENTER ENR EM XXXX FGD

SIGNATURE

*Barbara Baker*

DATE

*January 26, 1978*

14. SOURCE ORIGIN OF GOODS AND SERVICES

000

341

LOCAL

OTHER

15. FOR AMENDMENTS, NATURE OF CHANGE PROPOSED

FOR PPC/PIAS USE ONLY	16. AUTHORIZING OFFICE SYMBOL	17. ACTION DATE	18. ACTION REFERENCE (Optional)	ACTION REFERENCE DATE
		MM DD YY		MM CD YY

**DEPARTMENT OF STATE**  
**AGENCY FOR INTERNATIONAL DEVELOPMENT**  
WASHINGTON, D. C. 20523

**ASSISTANT  
ADMINISTRATOR**

**PROJECT AUTHORIZATION AND REQUEST FOR ALLOTMENT OF FUNDS**

**PART II**

<b>Name of Country:</b>	<b>PARAGUAY</b>
<b>Name of Project:</b>	<b>Credit Unions</b>
<b>Project Number :</b>	<b>526-0101</b>

Pursuant to Part I, Chapter 1, Section 103 of the Foreign Assistance Act of 1961, as amended, I hereby authorize an additional Grant to the Central Cooperativa Nacional Ltda. ("CREDICOOP"), the Central Credit Cooperative of Paraguay, of not to exceed Three Hundred Six Thousand United States dollars (\$306,000) (the "Authorized Amount") to help in financing certain foreign exchange and local currency costs of goods and services required for a project which will assist CREDICOOP in becoming financially self-sufficient while providing credit, technical assistance and marketing services to small farmers in rural cooperatives. The project will finance commodities in support of CREDICOOP's marketing activities, consultants, training, and operating expenses ("Project"). Three Hundred Six Thousand United States Dollars of the AID financing herein authorized and approved for the Project will be obligated when the Project Agreement is executed.

I approve the total level of AID appropriated funding planned for the Project of not to exceed Six Hundred Twenty-five Thousand United States Dollars (\$625,000) Grant funding including the funding authorized above, during the period FY 1978 through FY 1981. I approve further increments during the period of Grant funding of up to \$319,000 subject to the availability of funds in accordance with AID allotment procedures.

I hereby authorize the initiation of negotiation and execution of the Project Agreement by the officer to whom such authority has been delegated in accordance with AID regulations and Delegations of Authority subject to the following essential terms and covenants and major conditions together with such other terms and conditions as A. I. D. may deem appropriate:

A. Source and Origin of Goods and Services

Except for Ocean Shipping, goods and services financed by A.I.D. under the Project shall have their source and origin in the United States, or in Paraguay, except as A.I.D. may otherwise agree in writing. Ocean Shipping financed under the Grant shall be procured in the United States.

B. Except as A.I.D. may otherwise agree in writing CREDICOOP shall covenant that it will contribute at least the equivalent of \$861,000 to the activities financed during the life of the Project.

*J. J. ...*  
Assistant Administrator  
Latin America Bureau

*Jan 11 1978*  
Date

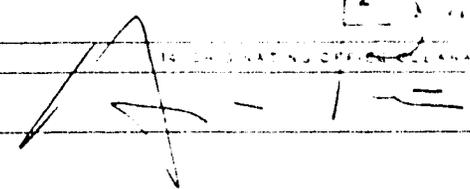
Clearance:

LA/SA, DRogers *[Signature]* Date \_\_\_\_\_  
LA/DR, KKelly *[Signature]* Date *12/1*  
LA/DR, CWeinberg *[Signature]* Date \_\_\_\_\_

GC/LA, JLKessler: lb: 12/1/77

**I. SUMMARY AND RECOMMENDATIONS**

**A. Revised PP and PID Facesheets**

AGENCY FOR INTERNATIONAL DEVELOPMENT <b>PROJECT PAPER FACESHEET</b>		1. TRANSACTION CODE <b>C</b> A. ADD C. CHANGE D. DELETE	PP
		2. DOCUMENT CODE <b>3</b>	
3. COUNTRY/ENTITY <b>Paraguay</b>		4. DOCUMENT REVISION NUMBER <b>4</b>	
5. PROJECT NUMBER (7 digits) <b>526-0101</b>	6. BUREAU OFFICE A. SYMBOL <b>LA</b> B. CODE <b>05</b>	7. PROJECT TITLE (Maximum 40 characters) <b>Credit Unions</b>	
8. ESTIMATED FY OF PROJECT COMPLETION <b>81</b>		9. ESTIMATED DATE OF DISTRIBUTION A. INITIAL FY <b>69</b> QUARTER <input type="checkbox"/> B. FINAL FY <b>80</b> MONTH <input type="checkbox"/>	
10. ESTIMATION OF TOTAL PROJECT COSTS			
<b>Three year extension</b>			
A. FUNDING SOURCE	FY 81	FY 82	TOTAL
AID APPROPRIATED TOTAL	343	282	625
GRANTS	343	282	625
LOAN			
OTHER			
HOST COUNTRY		861	861
OTHER COUNTRIES			2,561
TOTALS	343	1,143	1,486
			974
			3,515
			4,489
11. ESTIMATION OF TOTAL PROJECT COSTS			
A. APPROPRIATION	FY 81	FY 82	TOTAL
FN	224		224
			306
TOTALS			306
	79	80	
A. APPROPRIATION	FY 81	FY 82	TOTAL
FN	249	70	319
			1,928
TOTALS	249	70	319
			1,928
12. DATA CHANGE INDICATOR (A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z) OR IS OR IN PAPER FACESHEET DATA BLOCK (Y) OR YES ATTACH CHANGED PID FACESHEET			
14. DISTRIBUTING OFFICE (CLEARANCE)		15. DATE DOCUMENT RECEIVED (MM DD YY) OR FOR AID DOCUMENTS DATE OF DISTRIBUTION	
SIGNATURE 		DATE SIGNED	
TITLE <b>Mission Director, USAID/Paraguay</b>		MM DD YY <b>10 20 77</b>	

## PARAGUAY/CREDIT UNIONS

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## B. Recommendation

USAID/Paraguay recommends that grant assistance to CREDICOOP under Project 526-0101 be increased by \$625,000, to carry the project through FY 81 when CREDICOOP will be able to generate income in excess of its operating costs. Cumulative obligations to date have been \$1,303,000. The project is an essential part of the Small Farmer Development Program, which includes \$ 3 million Loan 526-T-027.

## C. Description of the Project

The project is part of a USAID effort to provide small farmers the wherewithal to relieve major constraints which prevent them from increasing their income. Specifically the proposed grant will enable CREDICOOP by 1981: (i) to generate revenues in excess of costs, (ii) to provide the services its rural cooperatives require to deliver credit, technical assistance, and marketing services to 14,460 small farmers, and (iii) to be able to continue to increase the number of rural cooperatives and small farmer members in the CREDICOOP system.

CREDICOOP came into existence in 1973 as a culmination of A.I.D. assistance since FY 1970 to the Paraguayan credit union movement. CREDICOOP has a full-time staff of 24, which assists member cooperatives with management training, organization, and promotion, works to anticipate, prevent, and solve problems, and administers lending, marketing, and technical assistance programs. Rural member cooperatives have approximately 400 unpaid volunteers who organize and direct cooperative activities. Some 100 persons are in salaried managerial positions in the rural cooperatives and receive regular training from CREDICOOP in management, bookkeeping, promotion, and loan recuperation. The small farmer members, through the exercise of their votes, shape cooperative policy and elect their fellow members to positions of responsibility in the cooperative system.

CREDICOOP's major activities under the project are: 1) providing reasonably priced credit to small farmers; 2) providing technical assistance to small farmers; 3) marketing small farmer production; 4) capitalizing small farmer borrowers; 5) assisting existing rural cooperatives to serve better their members and to attract new members; and 6) forming new rural cooperatives. These activities are designed to have a major impact in eliminating the constraints now hindering small farmers in Paraguay from reaching their income potential.

The four major inputs of the project are consultant services, commodities, training, and budget support. Budget support is required to fund, on a declining scale, salaries and certain operating expenses of CREDICOOP. Commodities are needed to support CREDICOOP's expanding marketing activities. Training will provide short courses in cooperative administration to directors and staffs of rural cooperatives and some limited third country training. Services of consultants are needed to provide guidance to the cooperative system until it matures.

From these inputs five outputs are expected: 1) trained staffs at CREDICOOP and member cooperatives; 2) standardized procedures for accounting, capitalization, and lending; 3) profitable marketing operations; 4) profitable lending operations; and 5) plans for future operations of benefit to small farmers. (See Annex I, Logical Framework Matrix, for quantitative indicators of the magnitude of each output.) Based on projections of CREDICOOP's capitalization from the A.I.D. loan and on experience to date from the project, it is expected that the purpose will be achieved: CREDICOOP will generate revenue in excess of its costs while providing the full range of services required by its member cooperatives.

At the end of the project, the following conditions are expected to exist (see the Logical Framework Matrix for detailed numerical targets):

- 1) financially sound cooperatives and cooperative central;
- 2) substantial increases in associated rural cooperatives and farmer members;
- 3) rural cooperatives lending \$7,000,000 to small farmers in 1980 for agricultural production; and
- 4) CREDICOOP marketing \$7,000,000 worth of crops for its members.

#### D. Summary Findings

Analyses of past experience with the project and of data provided by surveys reasonably demonstrate that:

1. Small farmers are the direct beneficiaries of the project.
2. The credit union cooperative, because of many activities performed by volunteers, is the only formal private entity existing in Paraguay that can feasibly deliver those services to small farmers needed to eliminate the major constraints to increasing their income (i.e., lack of reasonably priced credit, lack of technical assistance, and lack of marketing services). Other formal private financial institutions in Paraguay have not, for example, been able to come up with a system to deliver credit and technical assistance to small farmers at a profit.
3. Small farmers' demand for services of credit union cooperatives is sufficient to enable the cooperatives to cover the costs of providing the services.
4. Credit cooperatives are able to find satisfactory management and can, with capital of \$50,000, generate sufficient revenues to cover costs of providing credit, technical assistance, and marketing services to 300 small farm members.
5. Credit cooperatives are causing minimal social disruption because the existing patrón of small farmers, generally the merchant, is being replaced by a more efficient patrón, the cooperative, at a

time when the present patrón can increase his income from other activities and is willing to be replaced.

6. Credit cooperatives are operating successfully in Paraguay and receive a stimulus from the special tax advantages cooperatives receive.
7. CREDICOOP can by 1981, without further subsidies, provide the financial, technical, and marketing services needed by its cooperatives to serve 14,460 small farmers.
8. The project to date has been making satisfactory progress in achieving its objectives.

#### E. Project Issues

The major issues relate to the need to increase grant funding to CREDICOOP:

1. Why is additional financial support needed?
2. What assurance is there that CREDICOOP will not need an additional grant at the end of 1980 if this increase is approved?

An increase of grant support is required for two reasons: First, the seed capital loan provided to CREDICOOP began disbursing in December 1976 through an A.I.D. initiated delay instead of early 1975, as assumed in the previous PROP. Second, the untimely demise of a companion marketing organization, UNIPACO, required CREDICOOP to establish a marketing capability not anticipated in the PROP.

Loan 027 originally contained \$4.7 million, \$3.0 million for CREDICOOP and \$1.7 million for UNIPACO. After the loan was authorized, however, it was discovered that UNIPACO's inefficient management was destroying its finances and reputation and that the loan project was no longer feasible as originally planned. A number of months were lost in rewriting and renegotiating the loan to remove UNIPACO as a party to the project, and CREDICOOP did not gain access to A.I.D. loan funds until late December 1976. Because the loan produces most of CREDICOOP's income, achievement of purpose has moved further into the future. Progress toward other objectives such as membership increases, savings generation, and the number of cooperatives formed has been slower too since these variables are related directly or indirectly to loan disbursements.

Though undertaken to fill the gap left by UNIPACO, the marketing activity has produced substantial benefits to the CREDICOOP system. It has provided higher returns to small farmers and improved loan collections. CREDICOOP's unexpected role in marketing, however, has brought about a need for marketing facilities and equipment which cannot be financed with loan funds.

Increased funding for the grant project is necessary, therefore, to achieve the goal of the Small Farmer Development Program: increase small farmer income by relieving the principal constraints facing small farmers. Such increase is also necessary to protect the A.I.D. loan and to comply with A.I.D.'s commitment in the Loan Agreement to provide advisors and grant funding to CREDICOOP until the loan is disbursed.

It is reasonable to expect the project purpose to be achieved by 1981. An analysis of financial projections is contained in Section III.B., Financial Analysis and Plan; the projections, which are based upon experience to date, indicate that CREDICOOP by 1981 will be generating the revenues required to cover the costs of relieving the aforementioned constraints for 14,460 small farmers.

F. Project Team

This PP was prepared by Henry L. Miles, Capital Development Officer, and Michael H. Hirsh, Assistant Capital Development Officer, both of USAID/Paraguay, assisted by the following:

David L. Peacock, Rural Development Officer, USAID  
Larry K. Laird, International Development Intern, USAID  
Lauryn C. Drengler, Controller, USAID  
Ralph E. Holben, Economist, USAID  
George D. Wohanka, CUNA consultant to CREDICOOP  
Richard G. Leigh, CUNA consultant to CREDICOOP  
John H. Clary, former Assistant Program Officer, USAID  
Jack D. Rosholt, PASA advisor, IAGS to USAID  
Elsa Bello de Martinez, USAID secretary

It was reviewed by a project committee consisting of the following:

Paul A. Montavon, Assistant Director, USAID  
Miguel Angel Rivarola, General Manager, CREDICOOP  
William W. Rhodes, Program Officer, USAID  
Bernard H. Masters, Assistant Program Officer, USAID  
and Messrs. Miles, Hirsh, Peacock, Laird, Drengler, Holben, Wohanka, Leigh, and Rosholt. W. Bruce Gair, Regional Legal Advisor, reviewed the draft authorization.

The PP was reviewed and approved by Mr. Abe M. Peña, Mission Director, USAID/Paraguay.

II. BACKGROUND AND DETAILED DESCRIPTION

A. Background and Rationale

1. Role of Project in USAID Strategy

Development of cooperatives is an essential element of USAID/Paraguay's sector strategy of providing assistance to small scale farm families in the eastern region of the country, to enable them to increase their incomes from agricultural activities through addressing a number of the most serious constraints which hinder them from improving their farm incomes. The purpose of this grant, and of the Small Farmer Development Program of which the grant is an essential part, is to give the CREDICOOP system of credit cooperatives the capacity to provide, without further assistance, adequate credit, technical assistance, and marketing services to small farmers (14,460 by 1981 and increasing thereafter).

2. Constraints of the Small Farm Sector

The USAID/Paraguay Small Farmer Subsector Assessment identified nine constraints directly affecting small farmer income. These constraints were ranked by priority level as follows (1 = highest priority, 2 = next highest priority, 3 = medium priority):

	<u>Noncolony Areas</u>		<u>Colony Areas</u>
	0-5 has.	5-20 has.	0 - 20 has.
Inefficient Marketing System	3	1	1
Restricted Export Market	2	-	-
Inadequate Credit Services	2	2	2
Lack of Land Saving Technologies	1	3	3
Lack of Labor Saving Technologies	-	1	1
Lack of Agroindustry	1	3	3
Poor Roads	2	2	2
Lack of Land Titles	3	3	-
Lack of Farmer Organization	-	-	3

In addition, the assessment ranked four traditional farm constraints in the same way:

Land	1	-	-
Labor	-	1	1
Capital	2	2	2
Market	1	1	1

The assessment details the extent of the constraints, for example:

a. Credit is crucial to farmers of 5-20 hectares to purchase labor; otherwise production is limited to what the family can harvest, which

is usually about six hectares. Credit is important to all small farmers to finance inputs, take advantage of improved technologies (e.g., draft animals, sprayers), and purchase land.

b. Farmers with 0-5 hectares need land-saving technologies (e.g., higher value crops), and farmers with 5-20 hectares need labor-saving technologies (e.g., appropriate machinery).

c. Farmers with 0-5 hectares need to be able to market perishable high value commodities. All farmers need to be able to market traditional crops (corn, rice, soybeans, cotton). They need access to storage and drying facilities in production zones, better marketing coordination, and adequate financial arrangements.

d. Farmers with less than five hectares are definitely constrained by the size of their farms. Many desire to purchase more land.

### 3. Attempts Other than the Small Farmer Development Program to Address the Constraints

There are various GOP agencies which are charged with administering programs addressing individual constraint areas (e.g., road committee system, land reform agency, extension service). These agencies are generally isolated in their approach and limited in their coverage. There are two other GOP institutions, however, which are charged with directly serving the small farmer and which provide him with credit and other services.

The first is Crédito Agrícola de Rehabilitación (CAH). CAH came into being with the technical assistance of an A.I.D. predecessor agency in 1943. The Central Bank provided CAH with lending capital. CAH was charged with the responsibility of providing agricultural production credit to farmers unable to obtain it from formal sources. To carry out this charge CAH made short term loans to small farmers for crop production and longer term loans for machinery, livestock improvement, and land purchase. It also managed pools of machinery for rental to small farm clients. CAH sustained heavy losses, and by 1959-60 its lending operations had become minimal. In 1969 the GOP decided to revitalize CAH, appointed a capable administrator as its director, and assured him support for whatever action necessary to improve operations. He acquired a new lease on life for CAH by convincing the Central Bank to write off its outstanding debts. He later purged CAH of incompetent employees and instituted a policy of working with small farmer groups rather than individuals. In the process, the recuperation rate has improved significantly. CAH is now providing credit to about 6,000 small farmers.

The second formal source of assistance for small farmers is the committee program of the National Development Bank (NDB). The NDB itself was founded in 1961 through the GOP's own initiative and financing. The committee program was initiated in 1963 with IDB financing. Under this program groups of five to 15 small farmers obtain one loan for the group, and all members are

jointly responsible for repaying the loan. This program is working satisfactorily but serves only about 1,000 small farmers.

The above are the only two formal sources of credit and associated assistance for small farmers in Paraguay other than the cooperative movement. As explained in the following subsection, USAID has concentrated during the past several years on the cooperative system because of its presumed ability to address the constraints, its potentially better coverage, and A.I.D.'s general preference for the private sector. Nonetheless, USAID/Paraguay and TA/RD plan to undertake a study jointly of the entire rural financial sector, including the activities and the policies of the three formal institutions. The results of that study will provide information which may lead to a future project in which CREDICOOP, CAH, HDB and perhaps others would provide credit to small farmers.

#### 4. A.I.D. Strategy to Address the Constraints

USAID's strategy in the agricultural sector is to address identified constraints, address them as directly as possible, and work through the most effective institutions. The Small Farmer Development Program addresses the constraints of inadequate credit services, inefficient market system (including restricted export markets), lack of land and labor saving technologies (as far as dissemination is concerned), and lack of farmer organization. The proposed FY 1978 Small Farmer Sector Project will address the scarcity of appropriate technologies. The proposed FY 1979 Market Planning and Technical Assistance Project will attempt to increase further the marketing opportunities for the small farmer. The proposed FY 1979 Minifundia Crop Intensification Project will identify technologies and markets to enable the smallest farmers to produce higher value crops. The proposed FY 1978 Rural Roads Loan addresses the problems of inadequate farm to market roads. The already approved Rural Enterprises Loan and the Productive Credit Guaranty Project emphasize the development of agroindustries. An FY 1979 PID was presented for a project to address the lack of land titles, building on the on-going Cadastral Survey and Tax Improvement Project. The proposed FY 1978 Market Town Development Project strives to provide infrastructure for the other activities, coordination among all the involved institutions, and planning in rural areas.

As indicated in the following subsection, the Small Farmer Development Program evolved out of assistance USAID was providing the cooperative system. It became obvious that the cooperative system was an institution which could most effectively address a number of the constraints and do it through mobilization of private resources.

#### 5. History of the Small Farmer Development Program

a. Initiation of the Credit Union Grant Project - Assistance to the credit union cooperative movement in Paraguay began in late 1968 when USAID requested the Credit Union National Association (CUNA) to perform a

feasibility study for development of a program to improve the situation of the country's small farmers. Based on this feasibility study and CUNA's experience with similar small farmer projects in other Latin American countries, the Credit Unions Project was developed and work was begun under it with the arrival of the first CUNA advisor in March 1970. At that time a phased action plan was worked out by CUNA and USAID to provide a framework for the project's activities. This plan, described in some detail in the last PROP amendment of May 1974, is summarized as follows:

1) The first phase was to form a nucleus of rural credit union cooperatives around which the program could be built. After attracting farmers to become cooperative members and obtaining initial paid-in capital, loan services were to be initiated using members' savings and loans from the National Development Bank. Technical assistance was to be provided small farmer borrowers by extension agents under agreements with the Ministry of Agriculture (MinAg). Marketing services for small farmer crops were to be provided by UNIPACO. Advisory consulting and training were to be given to develop a trained staff to manage the cooperatives and a future central organization.

2) The second phase was to establish the national central credit union. CREDICOOP was formed by a constitutional assembly in October 1973, with all 16 chartered credit unions in existence at that time electing to affiliate. CREDICOOP received its charter from the GOP in May 1974.

3) The third phase was to prepare CREDICOOP to deliver the services to small farmers without further technical or financial assistance. This phase is ongoing.

b. Development of the Small Farmer Development Program - The Small Farmer Development Program emerged in 1974 when USAID, having identified certain of the constraints facing the small farmer, was searching for a mechanism through which to address these constraints, particularly credit, marketing, and technical assistance. The early operations of CREDICOOP demonstrated that it could deliver credit and technical assistance to small farmers feasibly. A.I.D. decided to make CREDICOOP a focal point of the program. The program was to consist of the following elements:

1) A \$3 million A.I.D. loan would be made available to CREDICOOP for making agricultural production credit subloans.

2) A \$1.7 million loan would be made available to UNIPACO to purchase the infrastructure necessary to provide marketing services to the small farmer members of CREDICOOP's credit cooperatives.

3) The A.I.D. funds would be channeled through the NDB so as to provide a GOP guaranty to the A.I.D. loan, and the NDB would agree to provide a seasoned loan officer to CREDICOOP to assist the cooperatives in preparing their loan requests.

4) MinAg agreed to provide services of extension agents to the cooperatives and to provide a senior supervisory extension agent to CREDICOOP to coordinate the technical assistance given to the cooperatives' field assistants and to small farmers.

5) A.I.D. agreed (in the Loan Agreement) to continue the Credit Union Grant Project until the loan was disbursed.

Shortly after the Loan Agreement was signed in 1975, A.I.D. decided to drop UNIPACO's participation in the program and have the marketing services performed by CREDICOOP, though this would mean a delay in disbursements. CREDICOOP set up a marketing department and rechartered itself as a multipurpose cooperative central. CREDICOOP's taking over the marketing function has proven to be of benefit both to the farmers and to CREDICOOP, which uses the marketing operation to collect subloans.

The Small Farmer Development Program is progressing well. In the nine months from December, 1976, through August, 1977, the loan disbursed almost half its amount: (\$1,436,370 out of \$ 3 million), and CREDICOOP's loan recuperation rate has been satisfactory. CREDICOOP marketed \$1,794,000 worth of products in the first eight months of CY 1977 and was able to obtain maximum prices through volume sales. The cooperatives are now promoting new members in groups, thus reducing the costs of serving them. The cooperatives are using small farmer committees as a means to disseminate technical information, to decide credit worthiness of borrowers, and to encourage loan collections. Rural cooperative members have captured over \$800,000 in share capital and \$34,000 in interest paying savings accounts.

CREDICOOP has instituted a number of innovations of benefit to cooperative members, including the animal-drawn sprayer campaign, the family cow project, marketing of shawls and ponchos, marketing of fish, establishment of a monetary readjustment factor on savings and loans, and establishment of a land financing system for the smallest farmers. These and other accomplishments of the program are detailed in Section III.B.2. below.

Three outside teams evaluated various aspects of CREDICOOP during 1976. An evaluation of CREDICOOP's training program, conducted in October 1976 by Latin American Development Associates, concluded: "We believe that the training program is fully adequate to enable CREDICOOP to progress at the projected rate. Considering that CREDICOOP is only three years old and the oldest credit union five years old, the progress of the system compares favorably with older credit union movements in other Latin American countries".

An evaluation, completed in January 1976 by two contractors (Messrs. Arroyo and Miller) and Mr. Robert Allen of A.I.D., to determine the proper channeling of the A.I.D. loan assistance, concluded "It is the conclusion of the team that after weighing all information available,

written and verbal, the USAID should continue with the Loan Agreement to provide financial assistance to CREDICOOP as it was originally planned. The UNIPACO part of the deal should be withdrawn....CREDICOOP, as broker or agent, can take care of the marketing, while minimizing risk and cost."

A 1976 study by GAMCO of Atlanta, Georgia, which, as part of the development of USAID's Rural Enterprises Project, surveyed 62 cooperatives in Paraguay, two thirds of which were not part of the CREDICOOP system, concluded, "The general opinion of the survey team was that only one third of the cooperatives interviewed appear to have competent administration and leadership.....The most scarce resource in the cooperative movement in Paraguay today is capable, trustworthy leadership.... In practically all cases CREDICOOP is a major factor in the successful development and progress of their cooperatives."

#### 6. Rationale for Continuing Grant Assistance

Based on the experience of Small Farmer Development Program and the general condition of the agricultural sector, USAID concludes that the additional grant funding is justified for the following reasons:

a. The large majority of Paraguay's small farmers are not receiving adequate credit, technical assistance, and marketing services because (1) private institutions, other than rural credit cooperatives working with CREDICOOP, have not found it profitable and (2) the public sector does not have adequate resources.

b. The Program is furnishing such services to small farmers effectively. While the A.I.D. loan supplies the cooperative system with lending capital, establishing the means for generating sufficient revenues to cover CREDICOOP's costs, grant support must continue (1) to pay part of CREDICOOP's operating costs until self-generated revenues are sufficient, (2) to pay for supplies which otherwise would not be obtainable, and (3) to pay for advisory services to guide CREDICOOP in the administration of the loan and grant funds.

c. A.I.D. has committed itself in the Loan Agreement to provide this grant support, and the program is predicated on this commitment. Section 1.02 and Annex I of the amended Agreement state that the technical assistance to strengthen CREDICOOP and its member cooperatives during the disbursement period of the loan will be grant financed by A.I.D.

#### 7. Grantee's Proposal

The grantee, CREDICOOP, has submitted a proposal for \$700,000 (Annex III). The \$75,000 cut is the net result of reducing the person months of technical assistance and increasing payments for operating expenses: compare Annex III with Section II.B.5.

**B. Detailed Description**

1. Sector Goal - The sector goal is to increase rural family income from agricultural activities. As a means of addressing three of the major identified constraints impeding increased agricultural income among small farmers, USAID has developed The Small Farmer Development Program, of which the project is an integral part.

2. Project Purpose - The project purpose is to enable CREDICOOP to generate income in excess of costs while providing the full range of services required by its member cooperatives. Provision of supervised credit, marketing, and technical services to small farmers by CREDICOOP should contribute toward achievement of the project goal.

3. End of Project Status - The indicators of achievement by the end of the project, with interim targets, are as follows (US\$000 except as noted):

	Base	Projected			
	<u>June 77</u>	<u>June 78</u>	<u>June 79</u>	<u>June 80</u>	<u>June 81</u>
<b>a. <u>Financial Strength</u></b>					
(1) CREDICOOP annual net profit (loss)	(104)	(70)	(46)	(12)	41
(2) Rural cooperative share capital	820	900	990	1,228	1,619
(3) Coop members' savings in CREDICOOP	75	106	185	308	500
<b>b. <u>Membership</u></b>					
(1) Rural cooperatives	26	27	30	34	38
(2) Farmer members <sup>1/</sup>	4,378	7,150	9,175	11,600	14,460
<b>c. <u>Agricultural Credit</u></b>					
(1) Annual CREDICOOP loan value	1,400	1,465	2,000	3,000	3,530
(2) Borrowers with:					
5 hectares	240	366	540	756	1,080
5 to 20 hectares	1,360	2,074	3,060	4,284	6,120
over 20 hectares	400	610	900	1,260	1,800
(3) Hectares of crops financed	8,245	12,505	19,800	34,310	44,100
(4) Lending losses 1% or less.					

<sup>1/</sup> See Annex V for underlying assumptions

d. Marketing

CREDICOOP's volume of crops marketed	1,200	1,400	2,300	4,100	7,000
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4. Project Outputs - Expected project outputs for the following three FYs, with minimum magnitude targets by the end of the project, are as follows:

a. Trained Staff and Leadership

- (1) CREDICOOP will have 28 staff members with a minimum of two years of on the job training.
- (2) 30 rural cooperatives will have managers with at least 50 hours each of specialized management training.
- (3) 100 cooperative board members will each have at least 20 hours of training in cooperative promotion and management.
- (4) A continuing training capability will exist in CREDICOOP.

b. Standardized Procedures in Accounting, Capitalization, and Credit

- (1) 30 rural cooperatives will be using the standard accounting system recommended by CREDICOOP.
- (2) All rural cooperatives will be complying with the CREDICOOP requirement to purchase share capital in CREDICOOP in the amount of five percent of each productive loan received and two and one-half percent of each marketing advance received; and all members will be required to purchase share capital in their cooperatives in the amount of 10 percent of each production loan received.
- (3) 30 rural cooperatives will be using written credit procedures based upon the CREDICOOP model.

c. Marketing Operations

- (1) CREDICOOP's marketing department will be staffed by at least four employees.
- (2) CREDICOOP will have two storage facilities with dryers and will have adequate vehicles and equipment to provide marketing services to 14,400 small farmers in the volume indicated under End of Project Status.

d. Credit Operations

CREDICOOP will generate enough income from lending operations to cover the costs of providing credit and technical assistance to cooperatives,

including a collection effort which will achieve the delinquency objectives listed in End of Project Status.

e. Plans for Future Operations of Benefit to Small Farmers

At least one feasibility study by outside consultants to determine the advisability, profitability, and best location for a cotton gin and/or other agroindustrial investments.

5. Project Inputs - Planned project inputs over the following three FYs are as follows (US\$000):

	<u>FY 1978</u>	<u>FY 1979</u>	<u>FY 1980</u>	<u>Total</u>
<b>a. <u>A.I.D. Grant</u></b>				
(1) Contracting Services	56	135	55	246
(2) Marketing Facilities & Equip.	85	50	-	135
(3) CREDICOOP Operating Expenses	70	46	12	128
(4) Training	22	15	15	52
Contingency	25	25	14	64
Total	<u>258</u>	<u>271</u>	<u>96</u>	<u>625</u>
<b>b. <u>Counterpart Funds</u></b>				
(1) Contracting Services	10	10	5	25
(2) Marketing Facilities & Equip.	40	58	96	194
(3) CREDICOOP Operating Expenses	132	196	289	617
(4) Training	8	8	9	25
Total	<u>190</u>	<u>272</u>	<u>399</u>	<u>861</u>

A.I.D. grant assistance to date compares with the new inputs as follows (US\$000):

	<u>FY 1970-77</u>	<u>FY 1978-80</u>	<u>Total</u>
(1) Contracting Services (Fx)	451	246	697
(2) Commodities (Fx)	160	50	210
(3) Participant Training (Fx)	20	26	46
(4) Oper. Exp. and Other Lc Costs	672	303	975
Total	<u>1,303</u>	<u>625</u>	<u>1,928</u>

Other inputs to the total Small Farmer Development Program consist of the \$3 million A.I.D. loan (48% disbursed as of August 31, 1977), 40 technician years of Peace Corps volunteers, and a total counterpart contribution of \$5,537,000. The sources of the counterpart are as follows (US\$000):

(1) MinAg and NDB Personnel Assigned	170
(2) Export Tax Benefits	381
(3) NDB Loan Funds	1,100
(4) NDB Administrative Costs	60

(5) Rural Cooperatives Share Capital	1,619
(6) Rural Cooperatives Operating Expenses	1,569
(7) Rural Cooperatives Savings to CREDICOOP	500
(8) Volunteer Time Donated - Rural Coops.	<u>138</u>
	5,537

As indicated above, \$861,000 of this will be directly supporting the proposed grant over the next three FYs and therefore can be considered the project counterpart. An additional \$2,120,175 of this is considered counterpart for the A.I.D. loan (see Capital Assistance Paper for Loan 526-T-027).

6. Crucial Assumptions - Crucial assumptions for project success are that (a) world market prices for Paraguay's agricultural exports fluctuate no more than they have in recent years, (b) crop selection and hedging will enable small farmers to modify the effects of price fluctuations to manageable levels, (c) the GOP does not mount a massive program of subsidized agricultural credit, (d) CREDICOOP will be able to increase charges for its services commensurate with increased operating costs should such costs rise more rapidly than projected, (e) the majority of CREDICOOP and cooperative personnel will remain in the positions for which they were trained or in other positions in the cooperative system, (f) member cooperatives will continue to comply with CREDICOOP policies, (g) A.I.D. loan funds are fully disbursed and used as planned, (h) the MinAg and the NDB will continue the support presently provided, (i) the NDB continues to view CREDICOOP and its member cooperatives as creditworthy, (j) GOP tax incentives for cooperatives will continue at least through 1980, and (k) cooperative members continue at least their present rate of savings.

7. Premises and Linkages - The basic premise critical to the success of the project is that small farmers desire to increase and could increase their production profitably but are constrained from doing so by a lack of inputs, which reasonably priced credit could provide, and by a lack of technical assistance and dependable marketing services. The grant funding to CREDICOOP will enable it to continue to establish and to provide technical assistance to cooperatives which deliver credit, technical assistance, and dependable marketing services to small farmers.

Providing credit and technical assistance on reasonable terms to small farmers operating under the conditions premised above enables them to purchase new inputs, which increase productivity, and to increase purchases of previously purchased inputs, such as hired labor at harvest time. Providing them with marketing services facilitates collection of the credit provided and enables small farmers to receive bonuses available only through volume marketing. Provided such services, the small farmer has an incentive to expand his production to the limit of his management capacity. As each small farmer achieves increased production and returns, he will be stimulated to increase his production further and to increase his savings, and his neighbors will be motivated to join the cooperative. This will increase the capital available to the cooperative and to CREDICOOP, increase the demand for their services, and increase the flow of revenues to the cooperative and CREDICOOP,

all of which will contribute to achieving the project purpose and the project outputs. As the small farmer uses the services of the cooperative system, he will bring about the realization of the project goal: increase his income.

The small farmer will join a cooperative because it can provide him services not available elsewhere on more favorable terms. As cooperatives provide these services to small farmers, they concomitantly produce revenues for themselves and CREDICOOP. Hence as the small farmer's demand for credit, technical assistance, and marketing services increases, the incomes of his cooperative and of CREDICOOP increase. CREDICOOP responds to the needs of small farmers because they are the ultimate users of its services and the sources of its income; CREDICOOP cannot exist without them. CREDICOOP therefore, is self-motivated to establish cooperatives to satisfy small farmers' needs. Each cooperative itself has a do or die incentive to generate revenues in excess of its costs, which can be achieved by making customers out of the small farmers located within a reasonable distance from the cooperative office. All elements of the system therefore have incentives to participate in an efficient, effective manner.

#### 8. Description of Key Elements of the CREDICOOP System

(a) Becoming a member of a cooperative. Rural cooperatives are currently promoting new members in specific locations and by means of group meetings. Nonetheless any farmer within the area of influence of a cooperative may become a member by filling out the appropriate application forms and by being approved by the cooperative's board of directors. The minimum savings deposit (share capital purchase) required to become a member varies according to the bylaws of individual cooperatives, but the average required is ₤ 3,000 (\$23.81). It may be paid within 10 months of joining.

(b) Credit: If a farmer desires credit, he fills out an application with the help of his cooperative's field assistant. The application outlines a plan for the use of credit and the projected net return from the investment. A loan committee, whose members include local farmers, reviews and approves the application. The credit costs 12% interest plus a service charge ranging from two to 6%. The borrower is also required to place 10% of the loan in his share savings account. These charges and the compensating balance make the actual annual cost of the loan from 22 to 26%. In comparison, the cost of CAH, commercial bank, and NDB credit ranges from 9 to 22 percent. Informal credit costs about 30% for a seven month crop cycle, or about 52% per year. Hence credit provided by CREDICOOP is attractive to small farmers who have no other source of formal credit while, at the same time, it is quite unattractive to larger farmers in good financial condition who can borrow from banks at lower interest rates. Economic forces therefore insure that this project will not be invaded and the resources monopolized by the large farmers.

(c) Extension. The cooperative member receives priority attention from MinAg extension agents under a signed contract between the Ministry and CREDICOOP. In addition, members receive visits from cooperative field assistants, of whom there is at least one per cooperative.

(d) Marketing. In the past two crop years, CREDICOOP has marketed more than \$1.6 million of crops at prices favorable to small farmers. The farmers have received higher returns than they otherwise would have through cash bonuses for volume sales. The marketing role is also proving to be important for improving loan recuperation, and for increasing the earnings of CREDICOOP. In only two years, a considerable amount of marketing experience has been gained and marketing assistance and facilities developed. Eight cooperatives own warehouses, 12 rent space, and the remainder use extra office space for temporary storage of crops. All the cooperatives supply bags for crops to their members, a service not always provided by other purchasers. 18 cooperatives loan operating capital to farmers to facilitate harvest, and 17 cooperatives provide transportation from the farm to the warehouse.

(e) Capital and savings. A unique benefit offered by credit union cooperative membership is capitalization of the small farmer. Public sources and other private sources of credit do nothing to generate small farmer savings, while CREDICOOP requires a deposit for membership (purchase of shares) plus forced savings of 10% of each loan. Some cooperatives are also experimenting with interest bearing savings accounts. As of January 1977 the average small farmer member had \$90 in total capital and savings in his cooperative. The figure is impressive considering that annual per capita income among rural members is less than \$291 and that most cooperatives are new institutions, formed within the last three to five years. It is not likely that any savings among small farmers would have been generated were it not for the cooperative system.

(f) Promotion and Growth. Although urban cooperatives play a role in expanding CREDICOOP's base of support, providing professional talent, and making funds available for lending to rural cooperatives, the project, because of the Congressional Mandate and because CREDICOOP sees the small farmer as its priority client, concentrates on rural cooperatives. Most rural cooperatives are now of sufficient financial and organizational strength to expand their services and membership. Promotional activities to increase membership in existing and in new rural cooperatives will be an important part of project activities over the next three years. It is estimated that farmer membership in rural cooperatives can be increased from the present 4,378 to 15,100 by the end of the project largely by growth of membership in existing cooperatives. Almost without exception, large numbers of small farmers are available as potential members in areas in which cooperatives are located. Planned membership growth will be based upon rational expansion of services to members who live near each other and near the cooperative, as opposed to attempting to serve isolated farmers. Affiliation of existing non-member cooperatives and pre-cooperatives is also contemplated. The rate of membership growth is projected to range from 27% in 1977 down to 20% in 1980. This is a conservative projection in view of the low initial base, absolute potential, and the actual growth in other credit cooperative movements in South America.

### III. PROJECT ANALYSES

#### A. Technical Analysis and Environmental Assessment

This section examines the constraints to increasing small farmer income (based on pp. 453-477 of the Small Farmer Subsector Assessment of August 1976), relates these constraints to efforts undertaken by CREDICOOP and member credit union cooperatives to assist small farmers, and provides a relatively detailed description of how such efforts are implemented.

##### 1. Constraints to Increased Small Farmer Income

The majority of the producers of agricultural crops in Paraguay are relatively small farmers. For analytical purposes these small farmers can be divided into three subgroups: (a) those with land holdings which are inadequate to absorb available family labor, (b) those located in traditional farming areas whose land holdings exceed the area that can be cultivated by family labor, and (c) colonists who resemble group (b) but must cope with land clearing as well as cultivation. All three types of small farmers share a common economic environment which may be characterized by:

a) A very small domestic market and consequent dependence upon export markets as the major outlet for increased production.

b) A lack of improved technologies suitable to small farmers, and generally low levels of productivity per farm worker and per hectare.

c) Limited diffusion of technological alternatives which may offer opportunity for increased resource productivity.

d) Few small farmers served by formal credit sources.

The following is a more specific analysis of the situation and constraints faced by each of the three types of small farmers.

##### a. Farms with Unutilized Family Labor (0-5 Hectares)

Survey data indicate that farms of less than five hectares tend to utilize nearly all of their land for crops but do not utilize all their available family labor. Such farm families appear to be net suppliers of labor to the larger farms in their area. This relative abundance of family labor suggests that to increase farm income these farmers need to (1) acquire access to more land or (2) intensify production on existing land holdings.

If technology and cropping patterns remain relatively unchanged, land is the most limiting constraint to increased income among these farmers. With increased land they could clearly increase their production and income until family labor limited further expansion of land cultivated (roughly six hectares). Since there is little difference between the crops produced on the smallest farms and larger farms, and since there is no evidence to suggest that technologies employed vary with farm size, one

would expect any expansion of cultivated area to be accomplished using relatively fixed combinations of land, labor, and capital. Consequently, these farmers could farm up to about six hectares of land with their family labor and probably a modest increase in capital. Cultivating more than six hectares would require more capital in the form of credit to purchase labor and capital inputs.

If farm size is taken as fixed among this group of farmers, the intensification of production would require shifting from production of traditional field crops (cotton, tobacco, corn, manioc, soybeans, peanuts) to either more labor intensive horticultural crops or multicropping systems. Either would involve seeking expanded markets for nontraditional crops. The domestic market is small, with consequent extreme price variations, and is the most limiting constraint to more intensive production. This implies the need to develop markets for nontraditional exports and the agroindustry to produce them. Development of agroindustry requires the installation of infrastructure and the organization of producers to supply products suitable for the export market. A closely related requirement is the development of appropriate technology for more intensive production. Current research in horticultural crops in Paraguay is limited to varietal testing; the institutions involved in research have not yet undertaken the development of production packages suitable for small producers. Research on multicropping schemes is virtually nonexistent.

As the marketing and technology constraints are lifted, lack of capital will quickly become the most serious constraint. This is particularly true as fruit and vegetable crops enter the production pattern, because these commodities require much larger investments of capital than traditional field crops.

The current situation of farmers with less than five hectares can be described as follows. They typically devote 1.5 to two hectares to crops for home consumption (corn, manioc, beans) and utilize nearly all of their remaining land for traditional field crops (cotton, tobacco, and occasionally soybeans). Even though these crops are cultivated in a labor intensive manner, available family labor is not fully utilized. (Survey data suggest that less than one-half of available family labor may be utilized on farms of this size.) They can increase their incomes somewhat by applying improved technology to their commercial crops using additional cash inputs, and appear to do and have done so, but major increases in income are constrained by inadequate land for traditional crops or by inadequate markets for nontraditional crops. The risks associated with the markets for non-traditional crops mitigate against intensification of production.

According to data from both the 1973 and 1976 surveys, a small percentage of farmers of this size category use credit and nearly all of these obtain credit from local businessmen (almaceneros), who typically buy farm products and sell a limited line of food items and dry goods. The lack of loans from formal credit institutions is confirmed by statistics indicating that loans from these sources were given to only 12,300 small farmers (of all sizes) in 1976 (and this number may involve some double-counting).

USAID has identified the lack of an efficient credit delivery system to provide small loans to large numbers of farmers, as a major obstacle to increasing the coverage of credit services from formal credit sources. The local almaceneros utilize their own capital for lending to farmers. Although these businessmen probably have some capacity to expand credit to their clients, it is unlikely that major increases in credit can be achieved through informal credit sources. Clearly, there are no examples of modern agriculture built upon informal credit sources.

The almaceneros do appear to have excellent knowledge of the creditworthiness of their borrowers and provide timely loans, characteristics which formal credit institutions sometimes find difficult to match. They make loans to farmers who market crops through them and will make crop loans only for commodities for which they, in turn, have a good market. Almaceneros, for example, find lending for cotton attractive because the cotton gins advance them funds for purchasing the crop, but find wheat unattractive because they have to wait several months for payment from the mills. Consequently, the range of commodities for which almaceneros are prepared to give production loans is limited. Furthermore, the financial structure of the almaceneros' business suggests that they would not be a likely source of credit for medium term investments (machinery, livestock, farm improvements) or for land purchases. This is of utmost importance because the Small Farmer Subsector Assessment (pp.269-270) indicates that the greatest demand for credit among the smallest farmers is for purchasing land and work animals. This has been largely confirmed by CREDICOOP's experience.

To summarize, therefore, the credit situation faced by this group of farmers, few have access to or use credit, and most of these farmers obtain their loans from informal credit sources. The informal credit sources, while reasonably responsive to short-term family consumption needs and financing for certain crops, do not provide a structure suitable to meet the developmental needs (as indicated above) of this group of farmers. Based upon its own capital resources, the informal system is ill-prepared to provide the quantities of credit required to enable these farmers to increase their production of traditional crops or to enter the production of non-traditional crops.

With respect to the available technology and the technical assistance afforded this group of farmers, the generalizations cited above apply to this specific group. Very few of Paraguay's small farmers receive technical assistance, and this assistance is further plagued by a lack of generation of new technology specifically oriented toward small farms. Thus, the potential impact of technological change is limited by the number of farmers reached by extension services and the quality of information extended.

Small farmers typically market traditional crops (cotton, tobacco, soybeans) through local almaceneros. The competitiveness of these almaceneros appears to vary with location and the quantity of production.

The marketing operations of these buyers appear to be rather simple, accumulating sufficient quantities of product to constitute a truck load and forwarding the product on to the next point in the marketing channel. They normally have limited storage capacity and no facilities for treating the product (drying or cleaning). Although additional evidence is needed, it seems that local level storage could contribute to improving the efficiency and performance of the marketing system. The best organized marketing channels are, as might be expected, for major export crops: cotton, tobacco, and soybeans. Marketing channels for corn, rice, and wheat (all domestically consumed) are poorly organized and are not dynamic in developing new market opportunities and relating them back to the farmer. The organization of the marketing channels for perishables is even worse, as indicated by extreme variations in prices. Organization of marketing channels is beyond the scope of the local buyers, whose operations are too small to exert influence over the market. In short, it can reasonably be asserted that expanded production of traditional crops and, especially, nontraditional crops will require improvements in organization and coordination of the various marketing channels. (It should be emphasized that each crop requires different handling and different actions to improve the organization and efficiency of the marketing channel for that commodity.)

b. Small Farms With Unutilized Land (5-20 Hectares)

One of the important findings of the Small Farmer Subsector Assessment was that a strong correlation between size of farm and income exists only in the case of very small farms (0 to 5 hectares). Beyond five hectares, farmers tend to use a smaller proportion of their land for crops as landholdings increase. As an example, farms of under five hectares averaged 3.6 hectares in size with 3.0 hectares (83%) cultivated, farms from five to nine hectares averaged 5.5 hectares with 3.9 (60%) cultivated, and farms from 10 to 19 hectares averaged 12.7 with 5.3 hectares (41%) cultivated. Although the underutilization of land resources might be attributed to other factors such as poor quality land, the lack of family labor appears to be the major constraint faced by these farmers.

There appears to be a limit to the amount of land that can be cultivated using family labor given present technologies, approximately six hectares. Furthermore, the low productivity of agricultural labor using existing technologies suggests that farmers will not regularly hire additional labor at the going wage. Though small farms of all sizes do hire some labor for critical periods such as harvest, the amount utilized per hectare of cultivated land is approximately the same across all farm sizes, tending to support the above thesis. Farmers typically use family labor, a stock resource, in operations where the marginal return is below the going wage rate (a phenomenon which is true of developed countries as well, including the U.S.). In short, this implies that family labor, not labor in general, is the constraint to increased crop production for this size farm in its relatively static technological environment.

The technological environment tends to be static in Paraguay. Only cotton appears to have enjoyed any important increases in production from improved technology (and these technologies are of the land-saving, increased yield, as opposed to the labor-saving type). Most production is undertaken by labor intensive methods, utilizing persons or oxen as a source of power. There are few available technological alternatives between the traditional combinations of hand labor and rudimentary oxen drawn equipment and large-scale tractor technology. Thus farms over a wide range (0 to 20 hectares) do not vary in technologies employed and vary surprisingly little in incomes generated. Clearly farms of five to 20 hectares need new cropping systems and appropriate mechanical technology to utilize better family labor and to take advantage of the land resources available to them.

Again, once the most immediate constraint (in this case family labor, which could be alleviated with new technology) is addressed, other constraints appear. The marketing system, essentially the same as for the smallest farmers described above, could be expected to become a major impediment to expanded production. Since this group of farmers could expand income and production by cultivating extensive grains and field crops, improvements in the traditional marketing system would be relatively more important than development of agroindustry and export markets.

As the limitations imposed by lack of appropriate technology and present marketing systems are alleviated, additional capital will be required to expand production. Both yield increasing and labor-saving technologies normally require increased cash inputs. Farmers will require both increased short-term and investment credit to expand their operations.

Both 1973 and 1976 data indicate that only about one-third of farms of this size use credit, and like the smallest farmers, the most important credit source is the almaceneros. (Although the NDB increases in importance as a credit source for these farmers, it is a minor supplier according to preliminary 1976 data.) Furthermore, it is not surprising that farmers in the 1973 sample corresponding roughly to this size category would most frequently select "cultivate more land", "hire labor", and "buy implements" as uses they would make if there were sufficient amounts of credit available. Interestingly enough, purchase of land also ranks high among potential credit uses. One might suspect that this response is related to obtaining clear ownership of landholdings that are presently utilized by these farmers under other tenure arrangements.

Since the characteristics of the almacenero as a source of credit have been covered in detail, he will not be discussed further here. The situation with respect to technical assistance and marketing is roughly the same as the zero to five hectare farms. The important conclusion to draw from this discussion is that these farmers differ from the smallest farmers only in the amount of land they have; technology, credit sources, and marketing are nearly the same.

c. Colonists

Although USAID does not have data specifically related to colonists, some general observations should be made. Most colonists, at least in colonies sponsored by the Agrarian Reform Institute (IBR), are given plots of approximately 20 hectares. These colonists have constraints similar to those of farmers of 5 to 20 hectares in traditional farming areas. However, the quality of their land is generally better than in traditional farming areas, and problems related to chemically and physically deteriorated soils and weed infestations are less critical. But other problems are intensified. Labor is less plentiful in colony areas, and family labor must be diverted from cultivation of crops to clearing of land or high costs must be incurred to clear it (between \$400 and \$500 per hectare). Even though adequate land is available, putting it into production is slow. These new colony areas may lack even the traditional credit and marketing infrastructure afforded by the almacenero system described above. These conditions unaltered might result in colonization areas becoming minifundias. There is some evidence that colonists unable to use all of their landholdings have already subdivided them among relatives. Therefore, as with farms of five to 20 hectares in traditional areas, these farmers need technologies which allow them to farm their available land utilizing family labor. They also need marketing and credit infrastructure to facilitate their development.

2. Constraints Addressed by Credit Union Cooperatives

The purpose of this subsection is to relate the activities undertaken by credit cooperatives of CREDICOOP to the constraints faced by Paraguayan small farmers.

One USAID project cannot be charged with overcoming all the constraints to increasing small farmer income. Nevertheless, it is important to understand the role credit cooperatives are assuming and could assume in attacking the identified constraints. The significance of the credit cooperative movement is that it is evolving a system for delivering services needed by small farmers. Beginning with credit for crop production, the movement in recent years has expanded its services to include credit for animal drawn machinery, marketing of members' production, provision of technical assistance, and specialized programs (such as fish and handicraft marketing) to meet the particular needs of various cooperatives. It is important to note that the cooperatives, with the support of CREDICOOP, have demonstrated the flexibility to serve identified needs of small farmers and have increased their capacity to address those constraints which it is prudent and economic for cooperatives to tackle.

Chart I, which summarizes the constraints described above and describes the role the credit cooperative system can play in alleviating them, will serve as a guide for this discussion. Part A of Chart I examines farms from zero to five hectares which face basic land, market, and capital constraints mentioned earlier.

CHART I Basic Constraints to Increased Small Farm Income, Present and Possible CREDICOOP/Credit Union Activities, and Other A.I.D. Projects Addressing these Constraints

PART A For Farms 0 - 5 Hectares

Basic Constraints		Actions Required	CREDICOOP/Credit Union Programs		Other A.I.D. Programs (Through Proposed FY 79)
Resource	Explanation		CREDICOOP	Cooperative	
LAND	Size of farm is most limiting constraint given present markets	<ol style="list-style-type: none"> <li>Expand farm size</li> <li>Increase production of labor intensive crops or crop combinations</li> </ol>	<ol style="list-style-type: none"> <li>Develop land financing program &amp; provision of funds to member coops for this purpose</li> <li> <ol style="list-style-type: none"> <li>Train field staff in improved crop combinations</li> <li>Maintain liaison with nat'l research entities and awareness of tech. developments</li> </ol> </li> </ol>	<ol style="list-style-type: none"> <li>Land purchase loans to farmer members</li> <li> <ol style="list-style-type: none"> <li>Hold discussions with farmer members to analyze tech. alternatives</li> <li>Pilot demonstration plots</li> <li>Maintain contact through CREDICOOP &amp; MinAg on new tech. developments</li> </ol> </li> </ol>	<ol style="list-style-type: none"> <li>FY 78 Small Farmer Sector Loan</li> <li>FY 79 Crop Intensification Project</li> </ol>
LABOR	Underutilized resource (Farms of this size are net sellers of labor)	Alter other factors of production in order to use it more fully			- 25 -
CAPITAL	Becomes limiting with change in land or markets	Improve credit services	<ol style="list-style-type: none"> <li>Loans to coops</li> <li>Orient coop leaders re lending policy towards more intensive production</li> <li>Teach investment plan methodology</li> <li>Assist coops develop internal capitalization strategy</li> </ol>	<ol style="list-style-type: none"> <li>Loans to members</li> <li>Promote member awareness that loans are available for these objectives</li> <li>Assist borrowers develop investment plan</li> <li>Promote membership, capital investment, and savings</li> </ol>	
MARKET	Present markets are most limiting if size of farm cannot be altered	<ol style="list-style-type: none"> <li>Stimulate agroindustry</li> <li>Develop export markets for labor intensive crops</li> </ol>	<ol style="list-style-type: none"> <li> <ol style="list-style-type: none"> <li>Analyze market potential</li> <li>Develop marketing chain (example: efforts in fish &amp; handicrafts)</li> </ol> </li> <li>Develop further export capability (CREDICOOP has experience in exporting cotton and soybeans)</li> </ol>	<ol style="list-style-type: none"> <li>Provide community level coordination</li> <li> <ol style="list-style-type: none"> <li>Fulfill governmental regulations to qualify members crops for exporting</li> <li>Assist members to meet export standards and requirements</li> </ol> </li> </ol>	Rural Enterprises Loan FY 79 Crop Intensification Project

**PART B For Farms 5 - 20 Hectares**

Basic Constraints		Actions Required	CREDICOOP/Credit Union Programs		Other A.I.D. Programs (Through Proposed FY 79)
Resource	Explanation		CREDICOOP	Cooperative	
LAND	Underutilized resource (The percentage of land used in crops decreases rapidly with increased farm size)	Alter other factors of production			
LABOR	Appears to be most limiting constraint given present technology	<ol style="list-style-type: none"> <li>Creation of new technology</li> <li>Diffusion of new technology to large numbers of small farmers</li> </ol>	<ol style="list-style-type: none"> <li>(Outside the scope of cooperative projects)</li> <li> <ol style="list-style-type: none"> <li>Promotion of intermediate mechanical technology</li> <li>Coop staff training coordinated with Min Ag personnel</li> </ol> </li> </ol>	<ol style="list-style-type: none"> <li> <ol style="list-style-type: none"> <li>Demonstrations with member groups</li> <li>Local coordination with MinAg extension Agents</li> </ol> </li> </ol>	<p>FY 78 Small Farmer Sector Loan</p> <p>FY 78 Small Farmer Sector Loan</p>
CAPITAL	Becomes limiting with changes in technology	Improve credit services	<ol style="list-style-type: none"> <li>Loans to coops for implementing technology changes</li> <li>Operating capital loans to coops</li> </ol>	<ol style="list-style-type: none"> <li>Loans to farmers for implementing technology changes</li> <li>Operational loans to farmers to hire additional labor</li> </ol>	- 26 -
MARKET	Highly limiting	<ol style="list-style-type: none"> <li>Improve efficiency and coordination of marketing systems</li> <li>Improve rural roads</li> </ol>	<ol style="list-style-type: none"> <li> <ol style="list-style-type: none"> <li>CREDICOOP marketing (vertically coordinated through exportation). Instruct coops on local marketing coordination</li> <li>Planning regional physical facilities and financing coop facilities</li> </ol> </li> <li>(Outside the scope of Cooperatives projects)</li> </ol>	<ol style="list-style-type: none"> <li> <ol style="list-style-type: none"> <li>Farmer to coop marketing system</li> <li>local storage facilities</li> </ol> </li> </ol>	<p>FY 79 Marketing Technical Assistance</p> <p>FY 78 Rural Roads Loan</p>

Land is an abundant resource in Paraguay. Much of Paraguay's potentially arable land is still untouched. Concentrations of small farms exist in the central zone surrounding Asunción, not because land is limited but because historically Asunción was the major market, and poorly developed transportation infrastructure limited the distance that farms could be located from the market. Thus today the majority of Paraguay's smallest farms are located in this area. The GOP has pursued a policy of colonization to reduce the population pressure upon the central zone. Although this policy has its merits, not all small farmers can be or will want to be relocated. To overcome the land constraint for those who remain behind, farmers could purchase additional land or produce labor intensive crops.

It may appear strange to suggest financing land purchases in a minifundia area, but migration to colony areas is evidently reducing pressure on much land in the central zone. This permits the purchase of land released by farmers migrating to colony zones. CREDICOOP is about to begin a pilot land financing program, which is expected to attack the land constraint faced by the smallest farmers. To USAID's knowledge there is presently no formal program for financing land in Paraguay. Should the CREDICOOP program be successful, CREDICOOP and its member credit cooperatives would be relieving the most critical constraint faced by the smallest farmers among its membership.

The alternative strategy of intensifying crop production on existing land will demand some actions which are outside of the scope of the cooperative system, but the cooperatives can initiate certain local activities required to facilitate implementing such a strategy. In a sense, existing cooperative lending to farmer members, in an environment in which few farmers use credit and the use of cash inputs is limited, is an effort to pursue intensification of production. As other activities outside of the scope of this project begin to bear results, the already existing cooperatives can provide credit and other services to help assure their effectiveness. As an example, the new technologies for cropping combinations expected from the Small Farmer Sector loan and the market opportunities and horticultural crop packages to be evolved through the planned Crop Intensification Project can have an impact upon local populations of small farmers through activities of the existing credit cooperatives. Technology generation and export market analysis are outside of the scope of credit cooperatives, but the following complementary actions are reasonable undertakings for the cooperatives and for CREDICOOP:

Cooperatives:

- a) Credit for labor intensive crops.
- b) Diffusion of new technologies.
- c) Organization of farmer members as suppliers of specific commodities for which a sound market has been established.

- d) Development of small cooperative agroindustrial projects for processing of labor intensive crops.

**CREDICOOP:**

- a) Assisting cooperatives in designing credit and technical assistance programs for intensive crops (an extension of present activities).
- b) Assisting cooperatives in analyzing the feasibility of specific local projects for intensive crop production and agroindustry.
- c) Assisting cooperatives in organizing for export markets.

These critical efforts are logical extensions of current CREDICOOP/credit cooperative activities as new opportunities emerge to serve the needs of members in various localities.

Because of their common characteristics, farms of five to 20 hectares in traditional areas and colony farms have been aggregated as one group in Part B of Chart I. As noted, the generation of new technology needed by this group of farmers is outside the scope of a cooperative project. Nonetheless, CREDICOOP has recognized the need for labor-saving mechanical technology of appropriate scale and has financed such investments when they have appeared feasible. Particularly interesting have been CREDICOOP's efforts to distribute an ox drawn sprayer. In this case CREDICOOP financed the construction of 40 such sprayers by making an advance payment of one-half of their cost to the manufacturer. Purchase of these sprayers was later financed for cooperative members. In addition, CREDICOOP published an illustrated brochure discussing the use, maintenance, and financing of these sprayers and provided sprayers to cooperatives on a consignment basis so that their field assistants could demonstrate them to farmer members. All of these actions contributed substantially to the acceptance of this technology. In addition to sprayers, individual cooperatives have been distributing seeders, plows, and other equipment during the past year.

With the experience now being gained, the cooperatives will be prepared to provide technical assistance and needed inputs as new technologies emerge. CREDICOOP's working arrangements with the Ministry of Agriculture, and specifically with the Extension Service (SEAG), are invaluable linkages between the entities charged with technology creation and small farmers. Furthermore, each rural cooperative has an agricultural field assistant, who offers the members a much closer contact with technical assistance than can be afforded by SEAG agents who are responsible to much larger numbers of farmers. Finally, CREDICOOP has obtained experience in distribution of new seed varieties and other inputs through the credit cooperatives. In short, the system is in place to diffuse technologies and distribute the inputs necessary to make new technologies a reality among farmer members.

With respect to the provision of credit services, which are presently in short supply for small farmers and become even more critical with technological change, the credit cooperatives have in place a workable delivery system. This system has many of the positive characteristics of the informal system described above, but fewer limitations. Like the almaceneros, the cooperatives have good information about the creditworthiness of the loan applicants. When most cooperatives were small, the credit committees, which make the final decision on loans, would personally know the applicants who were essentially their neighbors. As the cooperatives have become larger, a new system of neighborhood groups is being evolved to maintain this intimate knowledge of the borrower as a component of the decision making process. These groups are an important source of information about the individual borrower and the problems associated with geographically dispersed membership in providing services to members. Also the agricultural field assistant is likely to know the individual borrower, and his input is important to the final loan decision. This approach provides the credit committee of the larger cooperatives with information based upon first hand knowledge of the borrower.

The cooperatives, taking advantage of the voluntary work of their members, have developed a system of providing small loans to a large number of farmers without having over-burdensome administrative costs. By working with their members to plan for crop production needs well in advance, the cooperatives are able to deliver loans on a timely basis. This means that they have already in place a low-cost and timely credit delivery system.

Chart II compares the roles of credit cooperatives with the almaceneros in regard to several characteristics. It should be noted that the cooperative system can respond to development needs that almaceneros cannot. Whereas the almaceneros lend only for crops for which they already have market arrangements, the cooperatives, with the support of CREDICOOP, can lend for alternative commodities when the production of such commodities can be demonstrated as economically viable. In fact, CREDICOOP is in a position to develop marketing arrangements for crops which appear to represent economic opportunities for their farmer members and assist member cooperatives with marketing these products. Further, the cooperatives are prepared to provide multiyear loans for investments in machinery, livestock, farm improvements, and purchase of land, which almaceneros would not because they are not prepared to tie up their own capital for long periods of time. Neither are almaceneros in the position to promote improved technology among borrowers. While almaceneros often have one form or another of supervising clients to assure that crops are properly cared for, they do not provide technical assistance as such, nor do they have the direct linkages to sources of information about new technologies as does the credit cooperative system. Finally, the cooperatives are in the position to expand substantially credit to farmer members. Member savings as well as increases in capital shares required of members are being promoted as a means of expanding lendable funds of the cooperative. The present A.I.D. loan will expand the resources of CREDICOOP. Additional capital for small farmer loans could be channelled through CREDICOOP in the future.

CHART II

COMPARISON OF CREDIT UNION COOPERATIVES WITH ALMACENEROS

<u>Characteristics</u>	<u>Cooperatives</u>	<u>Almacenero</u>
1. Knowledge of borrowers' creditworthiness	Good: credit committee consisting of neighbors makes loan decisions	Good: <u>almaceneros</u> know their <u>clients</u> very well
2. Timeliness of credit for crops	Good: cooperatives organize credit plans in advance and have excellent record of timely delivery of credit	Good: <u>almaceneros</u> make their decisions rapidly, no bureaucratic slowdowns
3. Interest charges for loans	24%	Unknown: estimates vary from 0 to 100+%
4. Cost of providing services	Modes due to considerable volunteer participation in administering the cooperatives	Cost of loan administration not separated from other business activities
5. Can provide small loans to large number of farmers	Yes, limited only by the number of members	Yes, limited by number of clients <u>almacenero</u> can handle
6. Flexibility to provide loans for family consumption	Limited flexibility in early state of development	Highly flexible to lend for immediate family needs
7. Flexibility in financing wide range of crops	Highly flexible, can lend for any economically feasible production activity	Restricted generally to the crops marketed by the <u>almacenero</u>
8. Flexibility in financing medium term investments such as machinery, livestock, and improvements	Currently financing these activities	Would not provide multiyear loans; ties up own capital for too long a period
9. Flexibility to lend for land purchase	Beginning pilot project to lend for land purchase	None
10. Provides technical assistance with loans	Yes, closely coordinated with public sector extension service	Limited, via loan supervision

<u>Characteristics</u>	<u>Cooperatives</u>	<u>Almacenero</u>
11. Farmers benefit from capitalization	Directly, as members of the cooperative	Only indirectly, as <u>almaceneros'</u> expanded capital is used for financing farmers
12. Ability rapidly to expand credit available	Can respond using own capital, A.I.D. loan funds, and loans from other sources	Limited by expansion of own capital
13. Borrowers' ability to influence lender policy and service	Yes, direct and through elected officials	Contingent on personal and economic relationships

As noted in the description of constraints, the problems of marketing appear to be related to lack of organization of marketing channels.<sup>1/</sup> CREDICOOP and member cooperatives have pursued improvements in marketing in a prudent manner. Marketing efforts in development programs tend to stress physical facilities and underestimate the importance of market coordination and marketing arrangements. In contrast CREDICOOP has emphasized negotiating contracts with processors (e.g., cotton gins) and exporters for specific quantities of production, coordinating the marketing activities of member cooperatives to achieve volume operations, and arranging operations to take advantage of export tax reductions offered cooperatives by Paraguayan law. This experience has been highly useful in building CREDICOOP's capacity to act as a broker for its member cooperatives, which can then be followed by the installation of appropriate physical facilities to improve the handling of products and increase the efficiency of the marketing channels for commodities produced by their members.

### 3. How CREDICOOP Facilitates Member Cooperative Activities

One of the most overlooked contributions of a central cooperative organization is its capacity to assist member cooperatives in overcoming serious inherent weaknesses found in early stages of development. The following is an illustrative list, by no means complete, of common problems encountered by small and growing rural cooperatives:

- a) Lack of managerial capacity at the cooperative.

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<sup>1/</sup> Lack of bags for cotton, resulting in prolonged on-farm storage in inadequate facilities (e.g., farmers' houses) and long delays in unloading at the gins (up to seven days) are symptomatic of market organization problems encountered in perhaps the best organized of the various marketing channels.

- b) Lack of volume and slow capitalization.
- c) Lack of negotiating power.
- d) Vulnerability to misuse and embezzlement of funds.

The lack of managerial capacity is almost a given among small rural cooperatives. To overcome this difficulty, CREDICOOP provides training and technical assistance in administration and management of cooperative affairs (see specific services below). The lack of volume and slow initial capitalization is a problem of both management and size. Efficiencies in providing services are related to volume, as are earnings and capitalization of the cooperative. Without sufficient volume, cooperatives have difficulty meeting costs; and without sufficient internal capital, small cooperatives have problems overcoming minor financial set-backs caused by either factors external to the cooperative or poor decision making on the part of its management. A central can assist a cooperative through the growing phase by helping it develop management tools for problem identification such as loan delinquency and appropriate expansion and capitalization strategies and by helping it avoid management decisions which imply serious risks to a small and poorly capitalized institution. For example, a common tendency of an inexperienced cooperative is to over-borrow from external capital sources, thus multiplying the risks on its internal capital. In such a case it only takes a relatively small percentage of bad loan decisions to wipe out existing reserves and members' equity.

The volume of a number of small cooperatives combined may provide an opportunity for efficiencies and capitalization which are not available to an individual cooperative. It will certainly provide an opportunity to exert some negotiating power that is not possible to achieve on an individual basis. As an example, CREDICOOP, with the combined volumes of its member cooperatives, was able to negotiate an advantageous contract with a gin for sale of members' cotton, that would have been impossible for an individual cooperative to achieve. Small individual cooperatives do not typically have sufficient volumes of products to sell or sufficient requirements for inputs to be able to negotiate with buyers or sellers from a position of strength, nor do they have the business contacts and entrepreneurial capacity to undertake such negotiations. Consequently, as individual units they operate at a disadvantage to larger entities in the economic environment. Finally, small cooperatives with poorly kept books, underpaid and unskilled managers, and lack of appropriate formal controls are vulnerable to misuse of funds and embezzlement. CREDICOOP provides a bonding service for employees and officers of member cooperatives and assists member cooperatives in establishing systems of sound accounting and record keeping, credit policy control, and budgetary control. CREDICOOP also provides auditing services. These forms of assistance help small and growing cooperatives to avoid the pitfalls of misuse of funds.

As touched upon above, an important contribution of a central is the entrepreneurial capacity that it can offer its member cooperatives. The central can acquire a staff with a high level of business management capability, contacts in the business community, and market knowledge.

Assistance from such individuals is invaluable to member cooperatives whose decision-makers are at the stage of learning how to operate a business. The central can bring to individual cooperatives the business skills, organizational capability, and business contacts they lack. Often, assistance from the experienced personnel of the central can help cooperatives identify problems before they become debilitating, develop creative solutions to such problems, examine the feasibility of alternatives to providing needed services, and facilitate the development of programs through their business contacts in the central city. In short, a central such as CREDICOOP can bring the benefits of sophisticated management to member cooperatives which would otherwise not have access to such skills.

Finally, below are summarized the specific services CREDICOOP provides its member cooperatives, to overcome the constraints explained above.

a) Credit

CREDICOOP loans provide financing to member cooperatives for initial administrative operations, agricultural production, marketing, mini-industrial and handicraft production, infrastructure acquisitions, and consumer finance. Initial administrative loans help a cooperative confront the need to develop an early minimum operation system. These one-shot start up loans at five percent interest maturing in five years facilitate improved management at the early, critical stage of development. Agricultural loans are for the production of crops, poultry, fish, and other products and can be used to pay for seed, fertilizer, insecticide, hired labor, draft animals, veterinarian services, tools, machinery, and improvements of farm installations. The inherent complement to these loans is marketing finance to enable farmers to meet harvest costs and to receive partial advances on production turned over to their cooperatives. CREDICOOP infrastructure loans to cooperatives are concentrated mainly in temporary storage facilities for members' crops and for agricultural input inventories.

b) Agricultural Technical Assistance

CREDICOOP's agricultural technical assistance service to its member cooperatives is implemented via a formal agreement with the Ministry of Agriculture. A professional agronomist, assigned full time to CREDICOOP by MinAg, develops and supervises technical programs on a national, cooperative, and member level. He provides technical orientation to the CREDICOOP staff, and he serves as a resource person for improving agricultural practices in response to needs uncovered by CREDICOOP's field staff. As a MinAg supervising extension agent, he can create close coordination between the MinAg (SEAG) extension agents and nearby cooperative personnel and membership. He is directly responsible for training the cooperatives' own field assistants, whose duties include advising the cooperatives' members on completing their agricultural investment plans and loan applications. Actively participating in CREDICOOP's planning and evaluation functions, this technician serves as a valuable link between MinAg and CREDICOOP. As a result the two institutions have a greater understanding of each other's efforts and experience improved

coordination between the two programs. His work in the field with both cooperatives and their members also provides CREDICOOP an additional dimension of independent feedback on program effectiveness.

c) Management Technical Assistance

CREDICOOP recognizes effective cooperative management as the critical "survival objective" of the cooperative system. To that end it has developed a multifaceted delivery system for cooperative management technical assistance. Field consultants conduct workshops with cooperative leaders at the cooperative site on a continual basis. Regional and national inter-cooperative seminars are held throughout the year. Each member cooperative's balance sheet, profit and loss statement, delinquency index, and growth statistics are analyzed monthly by senior CREDICOOP personnel and by a National Development Bank liaison officer attached to CREDICOOP. The auditing department of CREDICOOP performs periodic audits on all cooperatives of over a certain minimum asset level and conducts seminars for cooperative supervisory committees. Accounting technicians teach bookkeeping and reconstruct records when the need arises.

The performance of each member cooperative is evaluated formally twice a year, using a two phase methodology. The CREDICOOP field worker conducts a joint, on-site evaluation with the leadership of each cooperative. Subsequently, the field worker presents these results plus his own assessment to a session of the entire CREDICOOP technical team. The cooperative's needs and problem areas are defined and prioritized by the team, resulting in a proposed technical assistance work plan. If the cooperative agrees, CREDICOOP then moves to implement the plan with the particular cooperative's leadership.

Cooperative management technical assistance is generally concentrated in the following areas:

- 1) delinquency control
- 2) credit analysis
- 3) records system
- 4) administrative policies
- 5) credit policy control
- 6) accounting
- 7) collection procedures
- 8) budgetary control
- 9) growth forecasting
- 10) member education and promotion
- 11) risk management
- 12) crop marketing
- 13) internal control
- 14) management by objectives
- 15) capital development

d) Marketing

CREDICOOP's marketing service to its member cooperatives is based on a system of contracts, financing, and advisory services; it purposely excludes taking physical possession of produce. This policy enables the cooperatives and CREDICOOP to perform those functions best suited to each. The cooperative, familiar with its locality, provides storage space and safeguards the product until it is picked up by the purchaser. Both of these functions can be performed more efficiently by the cooperative. Improper safeguarding of the product can lead to undue "shrinkage" losses.

A combination of "shrinkage" and bad management caused USAID/Paraguay to withdraw assistance from UNIPACO, the cooperative marketing organization mentioned in subsection II.A.5. UNIPACO, which had operated successfully as a representative for a number of cooperatives, decided to change its operation and take possession of the product. It did so but was unable to control the situation. The resulting loss left it in such a poor financial situation that A.I.D. support had to be terminated. Such losses are much less likely to occur when the product is transferred directly from seller to buyer as in the CREDICOOP system.

The policy pursued by CREDICOOP enables it to take full advantage of its administrative and legal capabilities and to minimize its need for facilities. CREDICOOP represents the cooperatives in negotiating sales contracts; it also drafts the contracts and keeps in constant communication with market prices and buyers. Cotton for example, presents an opportunity for CREDICOOP to negotiate a single export contract covering the total production of the cooperatives and taking full advantage of price bonuses for volume. In the case of soybeans, the volatile market necessitates closing sales on a daily basis as the cooperatives take delivery from their members. Since farmers are reluctant to turn their crops in unless their cooperatives give them a firm price, CREDICOOP's strategy is to keep the cooperatives informed on current, firm bids and to close sales without venturing into price speculation.

Marketing supplies such as cotton bags are purchased in volume and financed for the cooperatives. Operating capital for the cooperatives' marketing expenses, including personnel, storage facilities, and capital advances to farmers as crops are turned over, are for the most part financed by CREDICOOP. Farmers receive a more timely settlement of their crop sales via CREDICOOP's financing resources and via CREDICOOP's management of the global sales contracts.

As much as possible, influence is brought to bear on what is grown by adjustments in CREDICOOP's financing policy for marketing. For example, the difficult to market "CICA 4" rice is no longer being financed, whereas buyers are lined up to hedge risks for recommended new crops such as different corn varieties to improve marketability.

CREDICOOP's field consultants and management seminars give detailed instruction to the cooperatives on planning, implementing, and controlling the member-to-cooperative and cooperative-to-buyer marketing system. Operating capital, personnel, supplies, and storage facilities are studied and programmed to each cooperative's volume forecast per crop. Potential crop handling problems such as humidity and insect infestation are reviewed as well as weigh-in and classification control. The cooperatives are instructed on accounting procedures for their marketing system and on the necessary documents for meeting government export regulations.

e) Farm Implements and Inputs

CREDICOOP purchases, finances, and distributes farm implements and inputs, facilitated by cooperative planning and coordination. Members submit orders to their cooperatives, which in turn submit the total membership request to CREDICOOP. The global order is then negotiated, taking advantage of volume and CREDICOOP's financial standing. Items purchased include:

- 1) Animal-drawn implements, such as No. 10 & 12 plows, cultivators, planter-fertilizer spreaders, seeders, jab planters, and disk and spike harrows.
- 2) Manual implements, such as sprayers, machetes, rakes, and powersaws.
- 3) Powered implements, such as tractors with planter-fertilizer spreaders, grain harvesters, threshers, grain and forage choppers, and tractor mounted sprayers.
- 4) Inputs such as insecticides, fungicides, fertilizers, seed, herbicides, and bags for seed cotton and grain.

The financing follows the previously described CREDICOOP-to-cooperative and cooperative-to-farmer member channel.

4. Environmental Examination

Based on the Initial Environmental Examination, a threshold decision recommending a negative determination was approved on August 25, 1977.

## B. Social Analysis

### 1. The Target Group

Because of the goal of the overall program of increasing the productivity and income of small Paraguayan farmers, the grant project has and will continue to have as its focus the small farmer and rural cooperatives. As mentioned in Section II.B.8.(b) above, loans from cooperatives are inherently unattractive to large scale farmers.

Rural target group identification in Paraguay must be made within the whole unique, agro-economic context of the country. Paraguayan agriculture is distinctive and atypical of agricultural practices elsewhere in Latin America. Paraguayan agriculture is uncommon in that most of its farming population has small holdings (under twenty hectares) upon which extensive field crops are cultivated in an intensive manner, i.e., with large inputs of human and animal energy. Corn, cotton, and soybeans are three of the four principal crops grown throughout Paraguay (the other being manioc), and they are all field crops which normally yield highest profits when cultivated in an extensive manner. Nevertheless, the 204,740 Paraguayan farmers 1/, having access to an average of 9.35 hectares each, persist in using labor intensive techniques to wrest a meager livelihood from the cultivation of the aforementioned crops. Economic returns to small farmers in Paraguay remain low, generally below the \$291 per capita income (1977 prices 2/) specified by A.I.D., because small farm productivity is low. GOP programs to upgrade the technological and capital generating capabilities of small farms meet with limited success because the programs are too small and are generally poorly financed.

The typical Paraguayan small farmer remains caught in a precarious economic situation. The majority do not have full ownership of the land they farm. They are entirely at the mercy of the international market, and the prices of their cash crops (principally soy, corn, and cotton) fluctuate tremendously because of rapidly changing supply and demand. In many ways small farmers in Paraguay resemble the medieval farmers of Western Europe. That is, most small farmers use (a) fixed-mouldboard ploughs and high-ridged open fields, (b) a complex system of crop rotation, and (c) oxen-haulage. Family labor is the key to the effective interaction of these

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1/ Data from 1976 Small Farmer Sector Survey

2/ Figure calculated to equate \$150 in 1969 prices.

various economic inputs. The small farmer must keep his farm harmoniously balanced with proper inputs of cash outlay, labor, animal power, and other factors in order to survive. For that reason the farmer remains in a high risk situation, unable to make adequate adjustments to ever-changing world market conditions. That risk is especially high for the particular crops produced in Paraguay.

The risky situation in which Paraguayan farmers work causes them to remain within the poor majority target group. The following criteria summarize the principal characteristics used by USAID/Paraguay to distinguish poor from nonpoor farm families in Paraguay: average annual income per household (net-farm and off-farm income including on-farm consumption) of less than \$1,746 <sup>1/</sup>, low access to potable water, electricity, and other services, high infant mortality (figure is 84.2 deaths under 1 year per 1000 births for all of Paraguay, and estimated to be well over 100 for the rural target group), high birth rate (over 40 per 1000), and limited access to transportation. Farm families in the target group normally have access to less than 20 hectares of land (whether owned, rented, or otherwise obtained).

The principal question addressed in this social soundness analysis is whether the CREDICOOP project is indeed reaching the rural target group described above. To determine this, USAID undertook three studies of cooperative membership, to establish per capita income and other characteristics of cooperative members. Two of the studies generated new data. Statistical methodologies used were relatively simple and straightforward, as Tables 1 and 2 indicate. USAID made the selection of particular cooperatives and particular members for study on a purely arbitrary and/or random basis. In one study, USAID personnel reviewed 1,482 recent or current CREDICOOP loan records for 13 different rural cooperatives; in the other, USAID made an in-depth study of the memberships of two cooperatives, La Barrereña Ltda. and Itacurubí Ltda. <sup>2/</sup> For the third study, USAID analyzed recently generated data from the 1976 Small Farmer Survey. Those data are summarized in Tables 3 and 4. Table 3 provides a profile of typical small farmers in Eastern Paraguay who are not cooperative members. Table 4 compares data collected about those who are cooperative members, although not necessarily of CREDICOOP cooperatives, with data of nonmembers in the same geographic locales. It is reasonable to assume that data collected for the whole cooperative group are generally applicable to CREDICOOP members because the latter make up a substantial share of the country's total cooperative membership.

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<sup>1/</sup> \$291 per capita income times six persons per household. The \$291 figure is in 1977 prices, reflecting per capita income in 1969 prices of \$150.

<sup>2/</sup> These two cooperatives are thought to be representative of cooperatives in the minifundia zone of the country, a belt encompassing all but two of the rural cooperatives (see map, Annex II). The other two have almost exclusively colonist members, whose income characteristics are thought generally to resemble farmers in the minifundia zone (see Section III.A.).

All three studies clearly indicate that CREDICOOP has succeeded in reaching the rural poor majority target group. Table 1 indicates the per capita incomes of members in two cooperatives (based on analysis of cooperative loan records for 1977):

TABLE 1

Cooperative	La Barrereña Ltda.	Itacurubí Ltda.
Families surveyed	45	54
Persons per average family	5.66	6.20
Unadjusted gross per capita income	\$141.79	\$240.19
<u>1/</u> Less: per capita farm expenses	<u>21.26</u>	<u>36.02</u>
Net per capita income subtotal	120.53	204.17
<u>2/</u> Plus: on-farm consumption	<u>48.20</u>	<u>81.66</u>
Total adjusted per capita net income	\$168.73	\$285.83

1/ Net expenses are calculated on the same basis as used in the Small Farmer Sector Assessment, that is at 15.22% of total farm gross income. The percentage is low because Paraguayan farmers make few technological or cash inputs. Family labor is not counted in these statistics; if it were, per capita income would be even lower.

2/ On-farm consumption is calculated on the same basis as used in the Small Farmer Sector Assessment, that is at 34.42% of total farm gross income.

The data in Table 1 clearly demonstrate that most of the sampled members of the surveyed cooperatives fall within the target group eligible for A.I.D. assistance. Likewise, subjective assessments of these sample members confirm that they have little or no access to utility services or good transportation and that they generally cultivate only a small amount of land. The average amount of land cultivated for cash crops (according to loan records) in the Itacurubí cooperative is only 4.25 hectares and the average amount cultivated in La Barrereña is only 3.94 hectares. Approximately four of the 99 families in the two cooperatives do not meet the target group criteria and at least one of them "graduated" out of the group after receiving assistance from the cooperative system for four years. The data in Table 2 confirm that throughout the cooperative system the farmers served are small. Of 1,482 borrower farmers surveyed in 13 rural cooperatives, the average credit received for all uses combined (inputs, implements, animals, etc.) was only \$268. Of the 12 cooperatives financing crop production, the average amount of land on which cash crop production was financed was only 2.6 hectares and 22.5% of the farmers owned none of the land they cultivated.

Tables 3 and 4, in addition to providing a useful profile of the Paraguayan farmer by size strata, demonstrate that there are no significant differences between member and nonmember farm families in such measurements as

TABLE 2

STATISTICS ABOUT LOANS MADE BY RURAL COOPERATIVESRandomly selected for 1976-77 and 1977-78 crop years

Name of Cooperative	No. of Loans Surveyed	Average Value of Loans	Average Size Cultivated <u>1/</u>	Number of Borrowers Owning No land
Acahay Ltda.	32	\$214	- <u>2/</u>	3
Carmesín Ltda.	211	607	6.9	27
Coronel Bogado Ltda.	298	190	0.5	64
Juan E. O'Leary Ltda.	15	44	2.2	0
Coronel Oviedo Ltda.	91	195	2.0	6
La Barreruela Ltda.	54	386	3.0	11
La Rosaña Ltda.	100	183	2.8	20
Promoción Ltda.	92	238	2.5	11
San Juan Bautista Ltda.	125	191	3.9	48
Santani Ltda.	109	136	1.4	46
San Pedro de Ycañ- Mandyyó Ltda.	24	410	2.5	3
Ypané Ltda.	30	211	3.2	26
Yuty Ltda.	301	239	1.7	69
<b>TOTAL/AVERAGE</b>	<b>1,482</b>	<b>\$268</b>	<b>2.6</b>	<b>334</b>

1/ Cultivations against which loans borrowed.

2/ Loan for implements only, no acreage involved. These farmers are excluded from final average.

TABLE 3

Non-Coop Members

SMALL FARMER SURVEY, 1976 DATA

Profile of the Producer & Family, Per Strata<sup>1/</sup>

(Farmers in Eastern Paraguay with 50 ha. or less)

Size in hectares Strata or Group No.	0-4.9 hs. 1	5-9.9 hs. 2	10-20.9 hs. 3	21-50.9 hs. 4
Total producers (%)	82,714 (40.4%)	35,042 (12.12%)	71,997 (35.17%)	14,987 (7.32%)
Total fem. producers	19,032	3,370	4,622	1,043
Total male producers	63,682	31,672	67,375	13,944
Average age producers	44.91	45.83	45.10	48.97
Aver. age fem. producers	49.62	45.67	51.70	60.33
Aver. age male producers	42.58	45.84	44.65	48.12
Aver. No. people per farm	4.65	5.66	5.75	6.80
Over 64	1.26	1.18	1.02	1.10
No. of fem. 12-64	1.92	1.75	1.78	2.16
No. of male 12-64	1.68	1.89	1.97	2.25
Children Less than 12 yrs.	2.60	3.22	3.50	3.60
Aver. No. years schooling fem. producers	1.49	1.95	2.47	2.22
Aver. No. years schooling male producers	2.99	2.76	2.74	3.04
Schooling total producers	2.65	2.69	2.72	2.99
Aver. size farm in has.	2.08	6.83	14.25	31.85
Aver. value of farm & improvements \$	676..	1,672.	2,333.	5,100.

<sup>1/</sup> 204,740 Total Producers

TABLE 4

**Small Farmer Survey - Eastern Paraguay 1975/76**  
**Profile of Producers and their Families in 6**  
**Districts with Cooperatives.\***

Farm, Producer and Family characteristics	Land Size Strata							
	0-4.9 ha.		5-9.9 ha.		10-20.9 ha.		21-50.9 ha.	
	M	N. M.	M	N. M.	M	N. M.	M	N. M.
Total Producers Interviewed	18	17	27	31	45	59	48	37
Female Producers	1	3	1	3	4	1	2	-
Male Producers	17	14	26	28	41	58	46	37
Average Age Producers	46	56	48	49	48	49	46	52
Average Age Female Producers	50	66	65	54	57	54	61	-
Average Age Male Producers	46	58	47	48	47	49	45	52
D E Average # of people/farm	6.18 (17)	5.80 (15)	5.78 (27)	4.97 (30)	5.67 (43)	6.56 (57)	7.73 (48)	6.08 (36)
P E Over 64	2.00 (2)	1.00 (1)	1.40 (5)	1.00 (4)	1.50 (6)	1.00 (9)	1.20 (5)	1.00 (6)
N D Females 12-64	2.19 (16)	2.15 (13)	1.95 (22)	1.84 (25)	1.88 (40)	2.25 (55)	2.31 (48)	1.85 (34)
E N Males 12-64	2.10 (10)	2.00 (12)	1.71 (21)	1.67 (18)	2.10 (30)	2.41 (34)	2.34 (38)	2.07 (29)
T S Children under 12	3.00 (15)	3.09 (11)	3.04 (23)	3.29 (21)	3.13 (31)	3.31 (48)	3.67 (45)	3.21 (28)
Average Years Schooling Producers	5.89	3.24	3.26	3.06	4.58	4.14	4.42	3.81
Average Years Schooling Female Producers	3.00	2.00	0	3.33	4.50	2.00	1.50	-
Average Years Schooling Male Producer	6.06	3.50	3.38	3.04	4.59	4.17	4.54	3.81
Average Size of Farm hts.	3.15	2.70	6.73	6.33	14.47	14.48	32.53	31.54
Average Value of Farm and Improvements G.	213,780	124,710	234,370	147,740	767,020	1,087,000	1,939,600	2,687,640
Average Value of Farm and Improvements \$(G. 130.5)	1634	955	1795	1132	5877	8329	14,862	20,595
Average Distance from Rd. kmi.	0.23	0.05	0.18	0.27	0.06	0.08	0.00	0.20

\* Based on a replication of the AID/CPES Survey of 1972/73 in Loretto, Itacurubí de la Cordillera, Coronel Oviedo, Villarrica, Pto. Stroessner, San José. A subsample of 297 farmers (145 members and 152 non-members) selected from 1000 in the AID/CPES survey. M = member N. M. = non member

age of family head, number of family members, years of schooling, average size of farm, and value of farm. This indicates that CREDICOOP cooperatives are indeed serving typical small farm families, and thus can be accepted as valid vehicles through which to establish a program of addressing constraints which affect small farmers in general. Income data from the Small Farmer Survey were not available at the time of this writing.

It should be pointed out that though the principal target group is farm families, the rural cooperatives also contain some 3,696 non-farmer members. These nonfarmer members reflect the various occupations existing in rural areas and in the market towns which serve them. They consist of owners or workers in small industries (e.g., tanning hides, carpentry, shoemaking), owners or workers in commercial establishments (e.g., farm supply stores), rural teachers, minor civil servants, farm laborers, and professionals. Many of these people also produce some crops. A person may work in a store and also farm two or three hectares part time with his family. A rural teacher may teach one shift and also tend a small plot of land with a garden and several dairy cows. (CREDICOOP normally counts as "farmers" only heads of households who devote full time to agriculture.)

A teacher working two shifts earns ₡14,000 (\$107.28) a month. A teacher working one shift earns half as much but is able to take another job. Virtually all other nonfarmer members earn less than this. Regularly employed workers earn about \$70 a month. Farm workers earn less. Cooperative managers have consistently told USAID personnel that the income of the principal breadwinner of nonfarm member families averages no greater than ₡12,000 a month. Assuming that the ₡12,000 average monthly income is correct, that total family income is one-third greater, and that there are 5 1/2 persons per nonfarm family, average yearly per capita income would be \$267.50, below the \$291 target group limit.

To confirm this, USAID surveyed 118 nonfarm member families at La Barrereña cooperative and 48 at Itacurubí. These towns were believed to be representative of the two ends of the income spectrum, the town where La Barrereña is located (Eusebio Ayala) having some well developed agroindustry, whereas the town where Itacurubí is located (Itacurubí de la Cordillera) has a more primitive economy. The per capita incomes from the survey turned out to be \$242.48 and \$171.90 respectively. These rural nonfarm members, who receive benefits from their rural cooperatives in the form of both productive and consumption type credit, can be considered secondary beneficiaries of the project.

CREDICOOP also has 13 affiliated urban cooperatives with 5,536 members. The distinction between rural and urban cooperatives is not entirely clearcut, since a number of urban cooperatives are located in small communities and have members not unlike many of those in rural cooperatives. The difference lies in that every rural cooperative gives agricultural loans, has a field assistant, and is committed to serve directly the small farmer, whereas the urban cooperatives normally do not give agricultural production loans.

The Small Farmer Development Program generally does not touch the members of the urban cooperatives. A.I.D. loan funds are made available only to the rural cooperatives. Grant funds are also restricted to CREDICOOP activities which involve the rural cooperatives. Nevertheless, since these members receive some indirect benefits from the project (through general A.I.D. support to CREDICOOP) and on occasion direct benefits (such as the fish project discussed below), they need mention as a distant third group of beneficiaries.

Seven of the urban cooperatives are in Asunción. Two of these are composed of professionals and one of teachers. The other four are located in working class neighborhoods, and most of their members fall into the income range of the target group. Of the six cooperatives located in the interior of the country, two, with 509 members, are composed of teachers, whose incomes place them on the border of the target group depending on family size and other sources of income. The other four cooperatives have a membership of 2,247 not unlike the nonfarmer members of the rural cooperatives. Three are located in towns with fewer than 5,000 inhabitants. Their members are workers in agroindustry, public employees, teachers, small businesspeople, and the like. The fourth is located in Pilar (population 12,500), Paraguay's textile center, located 382 kilometers from Asunción in the southwest corner of the country. Most of the 1,663 members are low paid textile workers, but members also include fishermen and some farmers. A high proportion of the members of these four cooperatives have income characteristics which would place them in the target group, as do at least half of the total urban membership.

In summary, the primary target group, receiving the great majority of the direct project benefits, fits almost in its entirety into the USAID-defined sector target group, which conforms with A.I.D. target group eligibility criteria. The secondary target group, receiving the rest of the direct benefits, also fits almost in its entirety into the A.I.D. eligible group. The tertiary group, receiving a small amount of indirect benefits, has perhaps a small majority of its membership in the A.I.D. eligible group.

## 2. Benefits to Target Group

By providing the necessary support to CREDICOOP until such time as self-generated income is greater than operating costs, the project will enable the following direct benefits to reach the target group:

a. Credit. Small farmers generally deal with informal lenders who charge a rate of interest averaging 52%. The true rate of interest from the cooperatives, allowing for all commissions and compensating balances, averages approximately 24%. Cooperative members can also borrow at these rates for other productive ventures or for personal type expenses.

b. Marketing Services. CREDICOOP's marketing program provides direct benefits to the small farmer. Approximately six percent higher prices can be obtained when crops are marketed in volume. Furthermore, CREDICOOP

can obtain an additional one percent as quality bonuses for products of assured quality. In addition, exported products marketed through CREDICOOP can take advantage of the GOP's export tax exemption. The minimum tax exemption is five percent.

c. Technical Assistance. The MinAg's extension service has limited coverage of small farmers throughout Paraguay, and it is unlikely that such assistance would reach any given small farmer. Cooperative members, however, because of agreements between CREDICOOP and the MinAg, are covered by the extension services. In addition, each farmer is visited regularly by the field assistant of his cooperative. When technology being introduced involves use of pieces of equipment (e.g., sprayers) not generally available in the area, the cooperative provides such equipment on credit and at an attractive price.

d. Savings. There is no method at present in the Paraguayan countryside to capture savings and put them to work. The CREDICOOP system, in addition to capturing savings through share capital, has begun to offer interest bearing savings accounts at approximately half the rural cooperatives. These pay rates of interest as high as those available in Asunción (about 8-9%). CREDICOOP has begun to apply a monetary readjustment factor to both savings and credit, which will partially protect both the member's savings and his capital invested in the cooperative in case inflation becomes a major concern in Paraguay.

e. Other Income Producing Opportunities. CREDICOOP makes a special effort to assist the neediest cooperative members to increase their incomes through improvement of the conditions under which they earn their livelihoods. For example, several poor farmer families in one cooperative earn part of their income through the production of ponchos and shawls. In the past, the families sold their summer production to middlemen at only one-half the normal winter price. CREDICOOP has found that it can cover its marketing expenses paying the higher winter price year around. It sells the ponchos and shawls to stores and through other cooperatives, whose members benefit because they pay less than normal retail prices.

Another example involves the urban cooperative in Pilar, where there are 18 small fisherman members. These people had no freezing facilities and therefore were at a bargaining disadvantage. Fish were shipped unfrozen to Asunción with the risk of total loss due to road closure or high temperatures. To solve the problem, the cooperative, with CREDICOOP technical assistance, financed, and the fishermen built, a freezer facility which can freeze 1,500 kilos of fish and can store the fish during periods when the road is closed. CREDICOOP sells the fish to restaurants, supermarkets, and other buyers. Special insulated bags are used to ship the fish, in contrast to open burlap bags used by other shippers. During the first three months of this activity, 13,480 kilos of fish were marketed for \$15,460. The fishermen receive more for the fish, CREDICOOP receives enough to pay for its marketing expenses, and the cooperative receives enough to amortize the cost of the freezer.

f. **Attacking Other Constraints.** CREDICOOP, as part of its commitment to serving the small farmer, is actively seeking ways to solve the various constraints which impede the farmers' production and earnings. For example, in addition to lack of production credit, marketing services, and technical assistance, land is a traditional constraint to production. Land in Paraguay is plentiful compared with most countries and there is little difficulty in one's obtaining access to some. But land with clear title is a different matter. It is estimated that less than half of Paraguay's small farmers have clear title to their land. The rest rent, share-crop, are squatters, have provisional titles to colony land, or have some similar arrangement. This is an obvious constraint to development as there is no incentive to make permanent improvements on unowned land. CREDICOOP is almost ready to launch a pilot program to finance land with clear title for the smallest farmers.

Another example of a way in which CREDICOOP is serving its small farmer clients is the family cow project. Some of the smallest farm families have no cow. When they do, the cow is usually of poor breed and in poor condition. There is also a demand for a family cow among poor townspersons. Under the project, a family gets a loan for an improved breed of cow and gets technical advice and services of an improved bull or of artificial insemination. The family can pay off the loan with the sale of the calves and has the benefit of a regular, low-cost supply of milk. The project is in its pilot phase and 40 families in two cooperatives are participating.

g. **Job Opportunities.** CREDICOOP and the cooperatives employ over 100 people full-time. In the rural cooperatives there are always at least three employees: a manager, a secretary, and a field assistant. In almost all cases these are local people. They receive considerable training from CREDICOOP. In addition, they gain local prestige and, through the press, national recognition. Also, employees at CREDICOOP are usually drawn from the cooperative movement.

h. **Education and Experience.** Being a member of a cooperative provides a number of intangible benefits for the target group member. Through CREDICOOP's education program he learns the theory of cooperativism. By being active in the cooperative he becomes exposed, perhaps for the first time, to the principles of accounting and administration. He is able to be a direct participant in a number of important decisions which directly affect him. Through various of his cooperative's activities, he learns the value of coordinating and cooperating with others. By borrowing and saving in his cooperative, he learns how to use money responsibly. In short, he becomes much better equipped to participate in his developing society.

Experience demonstrates that the project fits within the sociocultural context of Paraguay. The use of cooperatives as a developmental institution coincides with local values and beliefs. Fifty years of successful experience of the Mennonite cooperatives in Paraguay and the strong

cooperative movement in Argentina have given Paraguayans a favorable attitude toward cooperatives. A number of cooperatives including credit unions existed in Paraguay before the initiation of the A.I.D. project, making the formation of CREDICOOP considerably easier than might otherwise have been the case. Most of CREDICOOP's rural cooperatives have had to adopt a policy of limiting growth, generally promoting new members only in defined areas, which spread in a controlled fashion each year.

Because CREDICOOP is competing with and replacing money lenders and buyers of agricultural products, one might expect a negative reaction to the project from those who experience or fear displacement. This has not happened. Most money lenders in rural Paraguay are small businessmen who usually have about 60% of their capital in small farmer agricultural loans and the remainder in their stores as inventory and credit. These businessmen appear to welcome CREDICOOP's entry into agricultural production credit because their capital is free for investment in the operation of their stores, where it yields a higher return. As for buyers of agricultural products, agricultural production in Paraguay is increasing at a rate sufficient to provide adequate business for all, including CREDICOOP. Buyers still have as much business as their warehouses and capital can handle.

The patrón/peón relationship observed in other countries exists in Paraguay. The cooperative and its management, generally consisting of townspeople, become the small farmer's patrón, replacing money lenders and buyers of agricultural products. The differences are that the new patrón provides him services which otherwise would be beyond his reach, the relationship with his new patrón does not involve conscious exploitation, and he is able to participate in decisions pertinent to him. With the opening of a dialogue between townspeople and farmers through the cooperative, each begins to have a greater understanding of the others' situation, problems, and potentials. Based on CREDICOOP's experience and the evaluations conducted to date, these interactions and changes in relationships appear to be proceeding in a positive way with no negative sociocultural effects noted.

There has been considerable cooperation between the urban and the rural cooperatives. Urban cooperative managers have visited rural cooperatives to provide administrative assistance. Two urban cooperative members are providing their small dairy farms as a training center for the family cow project. An urban cooperative with excess liquidity lent CREDICOOP \$7,700 to be used specifically for marketing small farmer crops. The fact that CREDICOOP has urban cooperative affiliates helps to level out its program over the year. Likewise, the fact that rural cooperatives have nonfarmer members helps to maintain a permanent existence and to keep them functioning during slack periods in agriculture.

The project has had a noticeable positive impact on the role of women in development in Paraguay, with women assuming positions of leadership heretofore rarely achieved. Two of CREDICOOP's five directors and both of its alternate directors are women. The president of CREDICOOP is a woman

who originally joined a rural credit cooperative when she was a school teacher in a small town. She remained active in the cooperative movement even after being elected a senator and moving to Asunción. Six of CREDICOOP's full-time staff of 24 are women, including a top professional who is one of the field workers (responsible for nine cooperatives) as well as being in charge of CREDICOOP's insurance program. At the cooperative level, nine cooperatives are or have been managed by women, and women are or have been presidents of eight.

A final social benefit of the project is the spread effect to nonmembers. That farmers learn from other farmers is noted in the Small Farmer Subsector Assessment and has been demonstrated by USAID's Rural Non-formal Education Project. Spread effects should occur not only in the introduction of improved technology, but in the establishment of groups as a vehicle to solve community problems.

In summary, the project provides substantial direct benefits to the target group. Given the outputs of the project to date and those projected for the future, it can be stated that the project directly and predominately benefits the target group, which itself consists of the most needy in the interior of the country where the poorest Paraguayans live.

### C. Financial Analysis and Plan

#### 1. Financial Analysis of CREDICOOP

The fundamental objective of this financial analysis is to substantiate the projection that CREDICOOP will need no financial assistance after mid-1981. CREDICOOP's net operating profit/loss over the years is projected as follows:

(US\$000)

	<u>Revenues</u>	<u>Expenses</u>	<u>Operating Profit</u>
Actual CY 1974	4.7	101.2	(96.5)
Actual CY 1975	15.6	109.5	(93.9)
Actual CY 1976	22.2	148.1	(125.9)
Actual PY ending 6/30/77 <sup>1/</sup>	74.9	179.0	(104.1)
Projected PY ending 6/30/78	142.0	212.3	(70.3)
Projected PY ending 6/30/79	205.7	252.0	(46.3)
Projected PY ending 6/30/80	294.1	305.9	(11.8)
Projected PY ending 6/30/81	370.4	329.8	40.6

<sup>1/</sup> CREDICOOP has begun to make its financial projections on a July to June project year (PY) basis to correspond more accurately with the Paraguayan crop year. It is considering switching formally to the new basis this year.

Table 5 gives a breakdown of CREDICOOP's budget by category on an actual basis from January 1974 through June 1977 and on a projected basis through June 1981.

The following subsections discuss various elements which bear on CREDICOOP's changing financial status over time. The discussion also covers these same elements for individual cooperatives which must become financially strong for the project to succeed.

a. Interest Rates

CREDICOOP charges member cooperatives an annual interest rate of 10% and a commission of one-half of one percent. CREDICOOP through the life of this project will pay interest of two percent and a commission of one percent on the \$3 million A.I.D. loan funds. The spread, 7 1/2 percent, constitutes the main source of CREDICOOP's income. This spread should be producing sufficient revenues by 1981 to cover operating costs.

Each member cooperative charges a stated annual rate of interest. The stated rate differs from cooperative to cooperative, varying from a low of 14 to a high of 18%. (The effective annual rate of interest, taking into account share capital needed to obtain the loan, average about 24%.) The cooperatives receiving A.I.D. loan funds at the 10 1/2% annual cost mentioned above are left with spreads varying from 3 1/2 to 7 1/2%. CREDICOOP encourages each cooperative to charge an interest rate that is adequate to produce sufficient funds to pay operating expenses and to build up reserves compatible with its lending volume.

b. Delinquency Policy

CREDICOOP lends to member cooperatives which have an acceptable collection record. This generally means that a cooperative must be collecting 90% of its loans. This rate is computed by dividing the total value of loans with delinquent payments by the value of the total loans made during a crop cycle, which provides an approximate recuperation rate. Loans which are delinquent for proven, legitimate reasons receive special consideration when a cooperative's collection record is being evaluated.

CREDICOOP uses two other ratios to evaluate the status of its loan portfolio: the standard U.S. delinquency rate and a recuperation rate. The standard rate (total value of loans with delinquent payments divided by total loans outstanding) is used with caution, taking into consideration that its applicability is limited by the normal cyclical fluctuations in agricultural lending. The recuperation rate (ratio of loan payments received to loan payments due) has proven to be a useful tool when applied to specific crop cycles. CREDICOOP's recuperation ratio reported in June 1977 showed that 99% of the payments due had been paid. This is an indicator of the effective, pragmatic collection policy CREDICOOP has developed.

TABLE 5  
CREDICOOP ACTUAL AND PROJECTED INCOME: 31 DEC 74-30 JUNE 1981

(US\$)

REVENUES GENERATED	ACTUAL 12 Mos.			ACTUAL vs. PROJECTED		ESTIMATED 12 Mos.			
	Dec 1974	Dec 1975	Dec 1976	June 1977		June 1978	June 1979	June 1980	June 1981
Annual Dues	3,949	4,456	5,038	7,919	7,000	12,728	15,277	18,424	22,407
Audit and Education Services	728	2,359	3,641	3,906	4,400	5,000	5,600	6,200	6,800
Interest from Loans	-	2,910	5,150	41,009	43,750	121,950	179,007	262,766	341,233
Interest on Deposits	-	5,884	8,392	5,233	3,240	2,299	5,807	6,717	(2)
Other Income				16,799 <sup>(1)</sup>					
Total	4,677	15,609	22,221	74,866	58,390	141,977	205,691	294,107	370,440
<u>OPERATING EXPENSES</u>									
Interest Expense (AID)	-	-	-	8,302 <sup>(3)</sup>	5,000	43,950	63,000	90,000	90,000
Interest Expense (Other)	-	1,784	4,994	13,705	4,190	- <sup>(4)</sup>	-	-	22,865
Bad Debts	-	-	-	-	5,000	14,650	20,000	30,000	35,300
Personnel/Operating Costs <sup>(5)</sup>	101,225	107,739	143,114	157,024	154,700	153,670	169,037	185,941	204,535
Total Operating Expenses	101,225	109,523	148,108	179,031	168,890	212,270	252,037	305,941	329,835
Profit and Loss	(96,548)	(93,914)	(125,887)	(104,165)	(110,500)	(70,293)	(46,346)	(11,834)	40,605
						Period of A.I.D. Funding			

Note: Projections change to project year basis because CREDICOOP plans to change from calendar year to better reflect the agricultural cycle.

- (1) \$16,799 is for interest charges on accounts receivables and is considered to be a nonrecurring revenue.
- (2) No interest on deposits because all funds are used as loans,
- (3) Interest may be subject to further reduction per procedure outlined by Marino J. Marin, Controller's Office. See Annex VI for assumptions underlying the financial projections.
- (4) Use of AID loan as now permitted will eliminate any significant interest payment to others.
- (5) 7b includes \$15,000 for special education program.

The first cooperatives organized were encouraged to lend members ten times the total value of share capital deposits. The lender, the NDB, which was under pressure to channel more funds to small farmers, supplied the cooperatives with about as much credit as they wanted. The net result was a serious delinquency problem in practically every one of these cooperatives.

To complicate matters, these new cooperatives were not even aware of their delinquency problems. The measure of delinquency taught to their managers, value of payments overdue divided by value of total loans made, hid the magnitude of the problem. It did not take into account at an early moment that the entire loan, not just the payment due, could end up being delinquent. The magnitude of the delinquency was uncovered by the new credit advisor who arrived in 1974. The suspected root cause of the problem was the excessive leverage recommended in the original Credit Unions Project design.

The cooperatives, encouraged by CREDICOOP, have put increasing emphasis on collecting loans. In 1974 CREDICOOP introduced the following measures: (1) no member cooperative can receive production loans greater than three times its share capital; (2) delinquency calculation must take into account the total loan, not just the portion that is in arrears; (3) legal collection procedures will be enforced, using lawyers contracted through CREDICOOP; (4) a simplified delinquency report format will be used, to stimulate the recording and reporting of delinquent accounts to CREDICOOP and (5) coordination between the National Development Bank and CREDICOOP will take place to improve the quality of loans being made. In late 1975, marketing also became a key instrument in loan collections. These measures, while not eliminating all of the delinquency problems incurred prior to 1974, have shown positive results. Of the 13 cooperatives cut off from credit in 1974 when the delinquency problem was uncovered, seven have resumed normal borrowing operations. No new cooperatives have fallen into a delinquency situation warranting a cut off.

#### c. Bad Debt Policies

CREDICOOP, at the end of each fiscal year, allocates an amount equal to 1% of the highest monthly loan balance recorded during the year into a special reserve for bad debts. At present this reserve fund has some \$140,000, or somewhat over eight percent of lending volume. With the rapid growth in lending volume expected over the next two years as the A.I.D. loan disburses, the reserve, though continually growing in absolute amounts, will diminish in percent of lending levels before it begins to grow again. In order to build the reserve up toward an ideal level of 20% (which is the level the U.S. credit union system generally maintains when there is no share insurance), two measures will be undertaken. First, CREDICOOP, which has at past annual meetings recommended to its members that no dividends be paid, will continue to make this recommendation as long as A.I.D. budget support funds are being received under this project. Secondly, USAID has agreed that should CREDICOOP do better in its current account than

the projections anticipate, A.I.D. will still pay to CREDICOOP the agreed upon amounts of budget support from this project over each of the next three years. The differences between revenues, including the grant funds, and expenses would be used to build up the bad debt reserve. In order to protect A.I.D. donated money from being used as dividends, the Board of Directors of CREDICOOP will covenant in the project agreement not to reduce the bad debt reserve below the level existing at the end of this project for any reason other than actual charges for bad loans until the outstanding balance of the A.I.D. loan is equal to the reserve.

The cooperatives, like CREDICOOP, also build up reserves to cover losses by allocating one percent of the highest monthly loan balance to bad debts reserves. <sup>1/</sup> Another measure to prepare cooperatives to pay potential losses is CREDICOOP's recommendation that bad loans be written-off quicker. The quicker write-off has the effect of retaining some funds that otherwise would be paid out in dividends.

d. Term of Loans

CREDICOOP is aware of the problems that can result from making long and medium term loans with short term capital. (This problem does exist in a few cooperatives that use short term bank loans to make longer term loans to their members.) CREDICOOP's technical assistance to its member cooperatives, including consultants, accounting advisors, insurance advisors, and auditors, is designed to educate cooperative management regarding this potential problem.

e. Inflation

CREDICOOP's projection of revenues and expenses shown above was made in 1976 during a period of relative price stability. The official index of consumption prices rose by 6.4% during 1975 and 4.5% during 1976. This same index rose by 6.6% during the first half of 1977, equivalent to an annual rate of 13.6%. The principal cause was an unprecedented 37% expansion in the money supply during the first six months of the year, caused by a large balance of payments surplus.

Paraguay has been remarkably successful in combatting inflation, and was successful in controlling the impact of worldwide inflation resulting from the petroleum crisis. In the past 12 years, only two years had double digit inflation (1973 at 12.8% and 1974 at 25.2%). Eight of the years had inflation of 5.0% or below. Consequently there is good reason to believe that the Central Bank will take timely measures to check inflation should the rate of the first half of 1977 continue. Indeed, in July the money supply showed a small decline, and the cost of living declined 1.2% in the two months of July and August.

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<sup>1/</sup> It should be noted that Paraguayan law does not contemplate bad debt reserves for cooperatives. This concept was introduced by CREDICOOP.

To protect the real value of its own and its members' capital from inflation, CREDICOOP recently adopted a limited monetary correction feature to be applied to loans, share capital, and savings. CREDICOOP uses the formula of the local Savings and Loan System, to calculate adjustments and will increase outstanding loans by one, three, and eight percent respectively when the index moves up by five, 10, and 15 percent. The increased revenue is to be allocated to CREDICOOP's various elements of capital.

As to CREDICOOP's current account, the projections allow for a compound rate of increase of 7.6% per year to allow for inflation and a limited growth in staff. If inflation should bring about a greater increase in costs, CREDICOOP would have to find a way to raise income to avoid incurring larger deficits than projected. The management of CREDICOOP has assured USAID that it would recommend that its Board take necessary measures to increase income, including raising the rate of interest, if necessary to prevent annual deficits from being larger than those projected.

f. Marketing income

CREDICOOP performs the following services in marketing the crops of members of affiliated cooperatives:

(1) Administration: CREDICOOP negotiates sales contracts, collects funds due the cooperatives, and makes logistical arrangements.

(2) Credit: CREDICOOP advances funds to cooperatives for crops being purchased from members. In some cases CREDICOOP assumes accounts receivable from export firms.

(3) Bags: CREDICOOP purchases bags in quantity and sells them to cooperatives at low prices.

(4) Technical Assistance: CREDICOOP provides advice to cooperatives on storage, testing, drying, and fumigating.

CREDICOOP covers the cost of these services by charging a fee on the quantity of crops sold. Though the fee is low enough to enable the farmers to get a higher monetary return for their crops than by marketing through other channels, it is high enough to more than cover costs. CREDICOOP uses marketing revenues in excess of costs to purchase facilities and equipment required to maintain adequately and expand its marketing services to small farmers. These investments are anticipated to total \$335,000 from June, 1977, through June, 1980. To date projections of marketing volume have been achieved (\$1.2 million in the year ending June, 1977). Volume is expected to reach \$7.0 million during the year ending June, 1981.

g. Other Income

Some 84% of CREDICOOP's other projected income is interest income generated from relending the \$3 million A.I.D. loan and its own capital funds. (Other funds lent under the Small Farmer Development Program go from the NDB directly to the cooperatives. Though CREDICOOP is instrumental in arranging such credit and in determining which cooperatives should or should not receive credit, it receives no return from these loans.) Much of CREDICOOP's income, therefore, depends on the timely disbursement of the A.I.D. loan. The income projections are based on a conservative estimate of disbursements, with the final disbursement in December, 1980. Actual disbursements have occurred faster than contemplated, and it seems likely that the loan will be disbursed on or before schedule without compromising sound lending practices.

h. Operating Expenses

CREDICOOP's operating expenses, other than interest expenses, have been projected as rising 10% per year on a noncompounded basis, or 7.6% on a compounded basis. As discussed earlier, this is considered adequate to compensate for inflation and the modest expansion of staff contemplated. CREDICOOP is aware of the options required should it fail to keep expenses as projected: increase its effective interest rates, reduce its services, decapitalize itself, or a combination of the above. USAID concludes, however, that with the support from this project, CREDICOOP should be able by 1981 to generate income in excess of its costs.

i. Member Cooperatives

As of this writing, income and expense figures for 25 of the 26 rural cooperatives are available for the year ending June 30, 1977 (or in some cases, the latest fiscal year ending on an earlier date). These cooperatives had operating income of \$256,310 and operating expenses of \$239,135. Projected amounts had been \$189,710 and \$261,811 respectively. Though the actual results show a gain instead of a projected loss, it should be noted that certain member cooperatives did not include expected write offs on old bad loans, which will have to be absorbed sooner or later. Had those been taken this year as expected, results would have been closer to projected figures, i.e., less favorable.

The operating expenses of the rural member cooperatives have been projected as rising five percent per year on a noncompounded basis. This projected increase in operating expenses is considered reasonable because, unlike CREDICOOP, the rural member cooperatives have approximately 400 unpaid volunteers who organize and direct cooperative activities. If inflation becomes a major factor, the cooperatives will have to increase interest rates and implement the monetary readjustment policy of CREDICOOP.

The capacity to generate revenues greater than expenses, a prerequisite for a successful cooperative, is mainly a function of the amount

of share capital the cooperative can secure, the cooperative's lending volume, and the interest rate it charges. In general, the cooperatives are securing more share capital, lending more money and charging an average rate of interest one point higher than projected. Therefore, CREDICOOP is confident that the rural member cooperatives can write off the bad loans remaining from the pre-1974 period (see Subsection b. above) and still generate a profit of \$55,500 by June, 1980.

A case history of a successful cooperative is presented in the chart on the next page. This cooperative is considered typical of the 20 healthy cooperatives borrowing funds from CREDICOOP. (The other six are still suffering from serious delinquency from the pre-1974 period. CREDICOOP is working with them on collection and other reforms, but is not and will not lend to them for crop production until they show sustained progress in collecting delinquent loan payments. Seven cooperatives have already graduated from the "problem" to the "healthy" category.)

## 2. Project Financial Plan

The total financing estimated to carry out the project is shown in the following table:

### Summary Cost Estimate and Financial Plan (US\$000)

	A.I.D.			CREDICOOP	Total
	<u>Fx.</u>	<u>Lc.</u>	<u>Total</u>	<u>Lc.</u>	
Contracting Services	246	-	246	25	271
Marketing Facilities & Equip.	50	85	135	194	329
CREDICOOP Operating Exp.	-	127	127	617	744
Training	26	26	52	25	77
Contingency	21	43	64	-	64
Total	343	282	625	661	1,486

A.I.D. financing on an accrued expenditure basis by project year is as follows, broken into foreign exchange and local currency financing. (The figures differ from those of the facesheet, which is on an obligation basis by A.I.D. fiscal year.)

	PY 1978		PY 1979		PY 1980	
	<u>Fx.</u>	<u>Lc.</u>	<u>Fx.</u>	<u>Lc.</u>	<u>Fx.</u>	<u>Lc.</u>
Contracting Services	56	-	135	-	55	-
Marketing Facilities & Equip.	35	50	15	35	-	-
CREDICOOP Operating Exp.	-	70	-	46	-	12

CREDIT UNION BREAKEVEN CASE HISTORY

San Juan Bautista Ltda. (US\$)

Yr. Ended	Number Members	Total Loans \$	Ag Loans \$	Share Capital \$	Total Income \$	Loans Income \$	Market Income \$	Market. Expen. \$ *	Total Salaries \$	Finan. Cost \$	Rent \$	Vehicles for Field Asst. \$	Profit or Loss \$
5/73	87	-	-	1,000	127	-	-	-	-	-	-	-	-
74	130	6,056	4,135	3,905	508	175	-	-	302	79	32	124	(159)
75	220	42,532	36,968	14,190	1,516	1,516	-	-	1,524	714	79	171	(1,968)
76	257	52,103	31,500	26,270	9,031	6,341	1,857	1,056	1,254	2,412	111	219	1,753
77	363	108,444	74,174	45,556	18,683	10,183	8,500	5,365	1,294	4,397	174	290	5,913

\* All income in excess of expenses for marketing was returned to the small farmer members. A facilities program as explained in this PP will use about one half of such funds generated until needs are met. This should produce a stronger, longer term benefit to members.

<b>Training</b>	11	11	8	7	7	8
<b>Contingency</b>	<u>7</u>	<u>18</u>	<u>11</u>	<u>14</u>	<u>3</u>	<u>11</u>
<b>Total</b>	<u>109</u>	<u>149</u>	<u>169</u>	<u>102</u>	<u>65</u>	<u>31</u>
<b>Total by Year</b>	258		271		96	

The direct contribution of CREDICOOP and the cooperatives to the Project is as follows, by project year on an accrued expenditure basis (in US\$000).

	<u>PY 78</u>	<u>PY 79</u>	<u>PY 80</u>
Contracting Services	10	10	5
Marketing Facilities & Equip.	40	58	96
CREDICOOP Operating Exp.	132	196	289
Training	<u>8</u>	<u>8</u>	<u>9</u>
<b>Total</b>	190	272	399

As indicated in Section II.B.5. above, the counterpart is that share of the entire locally financed cost of \$5,537,000 of the Small Farmer Development Program used to support directly the project activities. This counterpart is \$861,000, or 60% of the cost of the project inputs.

The following subsections detail the four categories of inputs to be funded:

a. Contracting Services - \$226,000 in A.I.D. funds is to extend the services of two specialists from the Credit Union National Association (CUNA) who are currently advising CREDICOOP. One specialist concentrates on advising CREDICOOP on over-all financial and policy issues; the other works more directly with the rural cooperatives and with programs related to them. Both are financed under FY 1977 obligations through March, 1978. The \$226,000 will enable one to be financed through June, 1979, and the other through December, 1979. The other \$20,000 in A.I.D. funds will finance outside consultants to perform an end of project evaluation, at deemed of value at that time. The \$25,000 of counterpart is the estimated amount of CREDICOOP's operating funds used to support the consulting services.

b. Marketing Facilities and Equipment - \$50,000 in A.I.D. foreign exchange funds will be used to purchase grain and other crop drying and handling equipment. They will be placed at regional collection points to serve small farmer cooperative members. This equipment will be owned and managed by CREDICOOP. Eighty-five thousand dollars in A.I.D. local currency funds will be used to finance crop storage facilities for rural cooperatives to provide services to small scale farmers. The funds will be lent by CREDICOOP to its member cooperatives from a permanent rotating fund that will be used continually to improve and expand the marketing facilities of present and future rural cooperatives. Twenty-five thousand dollars in counterpart funds will be provided by member cooperatives. It will be used to purchase equipment for transporting and handling crops. The remaining \$169,000 of

counterpart will come from CREDICOOP's marketing operations. It will be used to develop the regional collection centers, including structures for the temporary storage of crops and equipment to handle crops. In accordance with its policies discussed earlier, CREDICOOP will not normally take title to the crops stored, which will remain in the name of the cooperative or purchaser under a lease arrangement. (See Annex VII for Marketing Budget.)

c. CREDICOOP Operating Expenses - \$128,000 in A.I.D. local currency funds will be used to provide budget support to CREDICOOP. A.I.D. funds, in effect, will cover the estimated operating deficits over the three project years. The following schedule delineates A.I.D. and CREDICOOP's estimated share of the operating expenses. Counterpart is calculated as CREDICOOP's share of its expenses over those three years.

CREDICOOP's Operating Expenses  
(US\$000)

	<u>PY 78</u>	<u>PY 79</u>	<u>PY 80</u>	<u>PY 81</u>
A.I.D. Financed	70	46	12	0
CREDICOOP - regular expenses <u>1/</u>	132	196	289	330
- contracting services <u>2/</u>	10	10	5	0
Total	212	252	306	330

1/ Includes training expenses but excludes contracting services.

2/ Estimated amount of CREDICOOP's direct support of consulting services.

d. Training\* - \$26,000 in A.I.D. foreign exchange funds will be used for out of country participant training as required by CREDICOOP and member cooperatives. Twenty six thousand dollars in A.I.D. local currency funds will be used to finance a CREDICOOP program for training the directors and staff of member rural cooperatives. As counterpart, the cooperatives will be spending approximately \$25,000 in actual and in-kind expenses for training, particularly for training new members and for attending courses (excluding what it pays in cash to CREDICOOP, to avoid double counting). CREDICOOP's contribution to the training program is included in its overall operating expenses. (See Annex VII for Training Budget.)

D. Economic Analysis

There are three important economic issues concerning this project:

- 1) that CREDICOOP become a strong institution no longer dependent on grant assistance by June 30, 1981;
- 2) that CREDICOOP assistance be provided on a cost effective basis; and

\* CREDICOOP's training plan is available in USAID/Paraguay and LA/DR's files.

- 3) that the operations of CREDICOOP serve significantly to increase the income, output, and employment of small farm members.

The first issue was already addressed in the Financial Analysis Section. As to cost effectiveness, one must examine separately each of the major activities of CREDICOOP - credit, marketing, and technical assistance, each designed to address a major constraint to small farmer development in Paraguay.

Cooperative loans cost the farmer borrower 24% per annum on the average (in interest, commissions, and compensating balances), while the cost of borrowing from a commercial dealer or from private sources is approximately 52% per annum; and the supply of such credit is limited. Commercial bank credit is rarely available to small farmers at any price. The NDB committee program provides loans at a lower annual cost (14% plus some additional fees), but such credit is subsidized by the government and serves only about 1,000 small farmers. Those charges are lower primarily because NDB does not require a compensating balance as CREDICOOP does, so the relative cost effectiveness of the two institutions is difficult to compare. CAH also charges less than CREDICOOP, but since CAH is heavily subsidized by the government, the cost effectiveness of the programs are not comparable. USAID believes that realistic, nonsubsidized rates are a must for a successful long-term program reaching significant numbers of small farmers.

Moreover, CREDICOOP's requiring compensating balances to obtain loans has resulted in an appreciable increase in small farmer savings in the form of share capital. Rural savings in CREDICOOP amounted to \$820,000 in June 1977, and CREDICOOP estimates that they will almost double by 1981. There are few bank offices in the countryside where farmers can maintain savings deposits, nor would the existence of such branches automatically result in small farmers' savings accounts. No credit institution other than CREDICOOP has a system to stimulate farmer savings. Consequently USAID believes that CREDICOOP is developing an important capital market with its program to stimulate rural savings.

Lack of technical assistance is another major constraint CREDICOOP is addressing. SEAG has some 11 farm extension advisors to serve an estimated 189,500 small farmers, or one for every 1,606 farmers, a very low ratio. CREDICOOP has 26 para-technical advisors, the field assistants, for its 26 rural cooperatives and approximately 4,500 farmers; this constitutes one advisor for every 175 farmers. CREDICOOP also uses SEAG extension agents in certain group activities. Thus the technical assistance provided with loans by CREDICOOP appears to be greater than that generally available to other farmers.

Finally, marketing is considered to be a constraint for small farmers. As is shown below, farmers obtain 9.5% more for products they market through CREDICOOP. Furthermore, farmers pay 18% less for supplies imported through CREDICOOP. Thus from the viewpoint of the cooperative member, CREDICOOP is highly cost effective with respect to its marketing activities.

The third economic issue is whether the operations of CREDICOOP serve significantly to increase the income of small farm members. This is necessary if the project/program/sector goal is to be met.

Income and production data are not available at this writing from the Small Farm Sample Survey recently completed in Paraguay. If they were, it would be useful to compare the income and output of cooperative members versus nonmembers, particularly in comparison with baseline data gathered in 1973 and presented in the Small Farmer Development Loan Capital Assistance Paper. Such data might serve as a basis for projections of future trends. Nonetheless, data are available concerning the substantial economic benefits CREDICOOP is expected to provide its membership in the coming years. At least three of these benefits can be analyzed quantitatively.

In the area of purchases of imported agricultural equipment (e.g., sprayers, power saws), some 807 items are expected to be imported this project year, ranging in cost from \$55 to \$2,750 and totalling \$98,802. <sup>1/</sup> Assuming that some 500 families will purchase these items, and taking into account (1) the lower prices offered by a cooperative compared with a commercial dealer, averaging 12.9%, excluding consideration of import duties, (2) the savings averaging eight percent resulting from exoneration from import duties when items are imported by CREDICOOP, and (3) the difference in cost of credit for 11 months between 24% and 52%, the average family will realize savings of \$96.62 on the purchases, equivalent to about eight percent of its total yearly income. And this is quite apart from any increase in income which may be assumed to result from the use of the new equipment.

Savings per family from lower price	\$25.49
Savings per family from tax exemption	\$15.81
Savings per family on credit cost	<u>\$55.33</u>
Total average family savings	\$96.63

Savings from imported equipment and supplies purchased over the following four years are projected as follows (US\$000):

	Imported Ag. Supplies and Implements	Price Benefit 10% <sup>2/</sup>	Tax Exemption 8%	Interest Savings - Considered as part of total savings on loans - see below	Total Savings
77/78	131	13	10		23
78/79	200	20	16		36
79/80	300	30	24		54
80/81	400	<u>40</u>	<u>32</u>		<u>72</u>
		103	82		185

<sup>1/</sup> Individual items of greater value were not included on the ground that they probably would not be bought by small farmers.

<sup>2/</sup> It assumed for the projection that the average benefit will be slightly less than in the actual case cited above.

Savings to the farmer from the lower effective cost of agricultural credit will also be substantial (US\$000):

	Amount Borrowed	Cooperative Effective Rate 24%	Commercial and Informal Credit Rate 52%	Savings (Loan life 11 mos.) 28%
77/78	2,000			513
78/79	3,000			770
79/80	4,500			1,155
80/81	<u>7,000</u>			<u>1,797</u>
Total	16,500 <u>1/</u>			4,235

1/ Total amount loaned to farmers by CREDICOOP. This is a cumulative figure and is based on capital resources amounting to an estimated \$5.2 million, distributed as follows: A.I.D. loan, \$3.0 million; member savings in form of share capital, \$1.6 million; other capital resources, \$600,000.

Marketing provides three readily quantifiable benefits: volume bonuses averaging six percent, quality bonuses averaging one percent, and tax relief benefits on exports averaging five percent of exported crops, which are about half the amount marketed. These are on top of the farmers' receiving a competitive market price at the moment of sale.

	(US\$000)					
	Value of Crops Produced	Value of Crops Marketed	Volume Price Benefit	Quality Bonus Benefit	Minimum Export Tax Relief Benefit	Total Benefits
			6%	1%	2.5%	9.5%
77/78	4,000	\$ 1,400	84	14	35	133
78/79	6,000	2,300	138	23	57	218
79/80	9,000	4,100	246	41	103	390
80/81	<u>14,000</u>	<u>7,000</u>	<u>420</u>	<u>70</u>	<u>175</u>	<u>665</u>
Total	33,000	\$ 14,800	888	148	370	1,406

Over the coming four years, the direct benefits to farmers from these three phases of the CREDICOOP program will be over \$5.8 million:

Benefits from imported equipment purchases	\$ 185,000
Benefits from credit costs	4,235,000
Benefits from marketing	<u>1,406,000</u>
	\$ 5,826,000

By June 1981 there are expected to be \$14,460 farmer members, growing from 4,378 at present and 6,500 in June 1978 (see Section II.B.3.). If all benefits were spread equally among all farmer members, taking into account membership numbers each year, each will have received benefits of \$142.81 per year, or about 10% of average family income over the period. These direct benefits, attributable solely to cooperative membership, provide convincing substantiation of the economic return to the small farmer of the CREDICOOP program, of which the project is an integral part. If increases in production and productivity, more difficult to quantify, were included, the total economic benefits would be even more impressive.

A recent OECD study <sup>1/</sup> concludes that: "A new agricultural structure designed to improve the well being of the majority of agricultural households should probably include cooperatives. Not only can production cooperatives allow small holders to benefit from any possible economies of large scale production, they can also facilitate cooperative marketing and borrowing.... Apart from reducing the cost of both functions, cooperatives should be able to reduce the risk of lending to small holders, to obviate small holders' dependence on agents and money lenders for their credit and, in general, to achieve greater bargaining power on behalf of each small holder than he has as an individual producer."

Much of the previous discussion about benefits illustrates that Paraguayan farmers who are members of CREDICOOP receive the same type of advantages as are discussed in the OECD study. USAID lacks the historical information on production and income necessary to project these variables in a typical cost-benefit study to show the value of the project to the Paraguayan economy. In the absence of such information, USAID has done a study relating total project costs (including the operating costs of CREDICOOP and interest on total capital resources) to the direct benefits of the project to the target group of small farmer cooperative members during the project period (See Table 5). Some of these benefits represent transfer payments from the public sector, and thus do not necessarily represent benefits to the economy. Others, reflecting economies of scale in marketing and finance, do represent real gains to the economy. The direct benefits to the farmer in the form of lower costs should lead to an increase in net income and eventually to an increase in investments and output. The net result of the analysis in Table 5 is to show a benefit-cost ratio of 1.05 and an internal rate of return of 37% for the four year project life.

The lack of historical data on small farm income, output, and employment makes it difficult to project the probable effects of the USAID loan and grant on the development of the economy. Nevertheless the cooperative system that has developed in recent years represents a structural change with profound implications for future development. Most members will be able to obtain formal production credit for the first time; they will be able to get credit, marketing, and supply services at greatly reduced costs, and many members for the first time will have the means to increase their financial savings.

<sup>1/</sup> Yudelman, Butler, and Benerji, Technological Change in Agriculture and Employment in Developing Countries, Development Center, OECD, Paris, 1971, p. 62.

An increase in production loans by cooperatives from \$1.6 million to \$7.0 million is projected (See Section II.B.3.). It can be assumed that this \$5.4 million farm investment will give rise to an additional \$600,000 investment by farmers from their own resources. If we can assume a capital output ratio of 2.5 for Paraguayan agriculture, the \$6 million investment increase will result in a \$2.4 million increase in farm output ( $\frac{6}{2.5} = 2.4$ )<sup>1/</sup>. Although this is conjecture, the estimate does not appear to be unreasonable. Since cooperative members export about half their output, the resultant increase in exports would amount to \$1.4 million.

The employment effect is even more difficult to estimate. Considerable underemployment is known to exist among the smaller farmers, those cultivating less than five hectares of land. On the other hand, studies of the employment effects of yield augmenting inputs in India have shown that the resultant increases in employment of labor per hectare were considerable <sup>2/</sup>. It can be assumed that the CREDICOOP loan and this project will increase the average area under cultivation by 1.3 hectares in the four years of the project. Since the average size of the area under cultivation of cooperative farmers is estimated to be 3.9 hectares <sup>3/</sup>, the program will serve to increase the area under cultivation by 33%. Assuming a fixed relationship among factor inputs, a proportional increase in employment would occur because of more extensive cultivation. We therefore assume that the project will have a significant employment effect.

Looked at from the viewpoint of aggregate demand, if the A.I.D. loan could be assumed to have a multiplier effect equivalent to two or three, <sup>4/</sup> the ultimate direct growth effect on production could amount to from \$6 million to \$9 million. ("The conditions under which the full multiplier effects of an agricultural project as they are typically estimated would constitute a real net change in welfare are specific and operationally very limiting."<sup>5/</sup>) Among the considerations that would be of concern is the need for conditions of supply for all factors stimulated to employment by the investment, that are perfectly elastic at prevailing prices. Output bottlenecks and lack of factor mobility are common conditions in developing countries which make uncertain the real multiplier or secondary effects of investments. As a consequence, the initial increase in demand can be dissipated in rising prices. Because of the failure to consider these limiting conditions,

- 
- <sup>1/</sup> While there exist no estimates for a capital output ratio in Paraguay, a low ratio for agriculture in the range of 2.0 - 3.0 is frequently found in developing countries.
  - <sup>2/</sup> OECD, op. cit. p. 76. On the average farmers adopting new seeds and fertilizers increased their expenditures on labor per hectare by 40% compared to those who did not do so.
  - <sup>3/</sup> The size for farmers having 5-10 hectares available to them according to the Small Farmer Subsector Assessment, p. 454
  - <sup>4/</sup> In 1975 investments constituted 23% and imports 20% of GDP. The marginal propensity to consume domestic output must have been less than 0.6.
  - <sup>5/</sup> J. Price Gittinger, Economic Analysis of Agricultural Projects, IBRD, Johns Hopkins Press, 1971, p. 27.

secondary effects of multiplier analysis have been overestimated and economists have been reluctant to agree to the inclusion of more than the primary effect of an investment. 1/

1/ Ibid. p. 28.

TABLE 5

BENEFIT-COST  
(US\$000)

	<u>Costs</u>		<u>Benefit</u>		<u>Incre-</u>	<u>3/</u>	<u>4/</u>
	<u>1/</u>	<u>PV 14%</u>	<u>2/</u>	<u>PV 14%</u>	<u>mental</u>	<u>Dis-</u>	<u>Dis-</u>
					<u>Benefits</u>	<u>count</u>	<u>count</u>
1978	931	817	687	603	-244	-188	-174
1979	1,228	945	1,051	809	-177	-105	- 90
1980	1,445	975	1,637	1,105	192	88	88
1981	1,905	1,128	2,588	1,537	683	239	178
	5,509	3,865	5,963	4,049	454	34	- 16

$$\text{Benefit/Cost} = \frac{4,049}{3,865} = 1.05$$

$$\text{Internal Rate of Return} = 30 + 10 \left( \frac{34}{50} \right) = 36.8 = 37\%$$

1/ Costs include CREDICOOP operating expenses, all other project costs, and interest on all loanable funds regardless of source at 14% (assumed to be the opportunity cost of money).

2/ Benefits include \$5,963,000 in benefits deriving from savings on imports, credit, and marketing (as discussed in the text). Also included are \$137,000 in net income which results from the assumed capacity of each borrower to increase the area he cultivates by 0.3 hectares a year.

3/ Present value at 30%.

4/ Present value at 40%.

#### IV. IMPLEMENTATION ARRANGEMENTS

##### A. Analysis of Project Administration

###### 1. Recipient

###### a. Organization

(1) CREDICOOP: CREDICOOP's organization chart is shown on the following page (Chart III). The oversight functions are carried out by a volunteer committee reporting to the general membership, a board of directors, a working committee of the board, and two volunteer committees reporting to the board. Members of the board of directors are named by an annual general assembly, composed of representatives of the member cooperatives, each cooperative having one vote. The supervisory committee is also named by the general assembly and reports to it. The credit and education committees are nominated by the board of directors and voted upon by the general assembly. They report to the board.

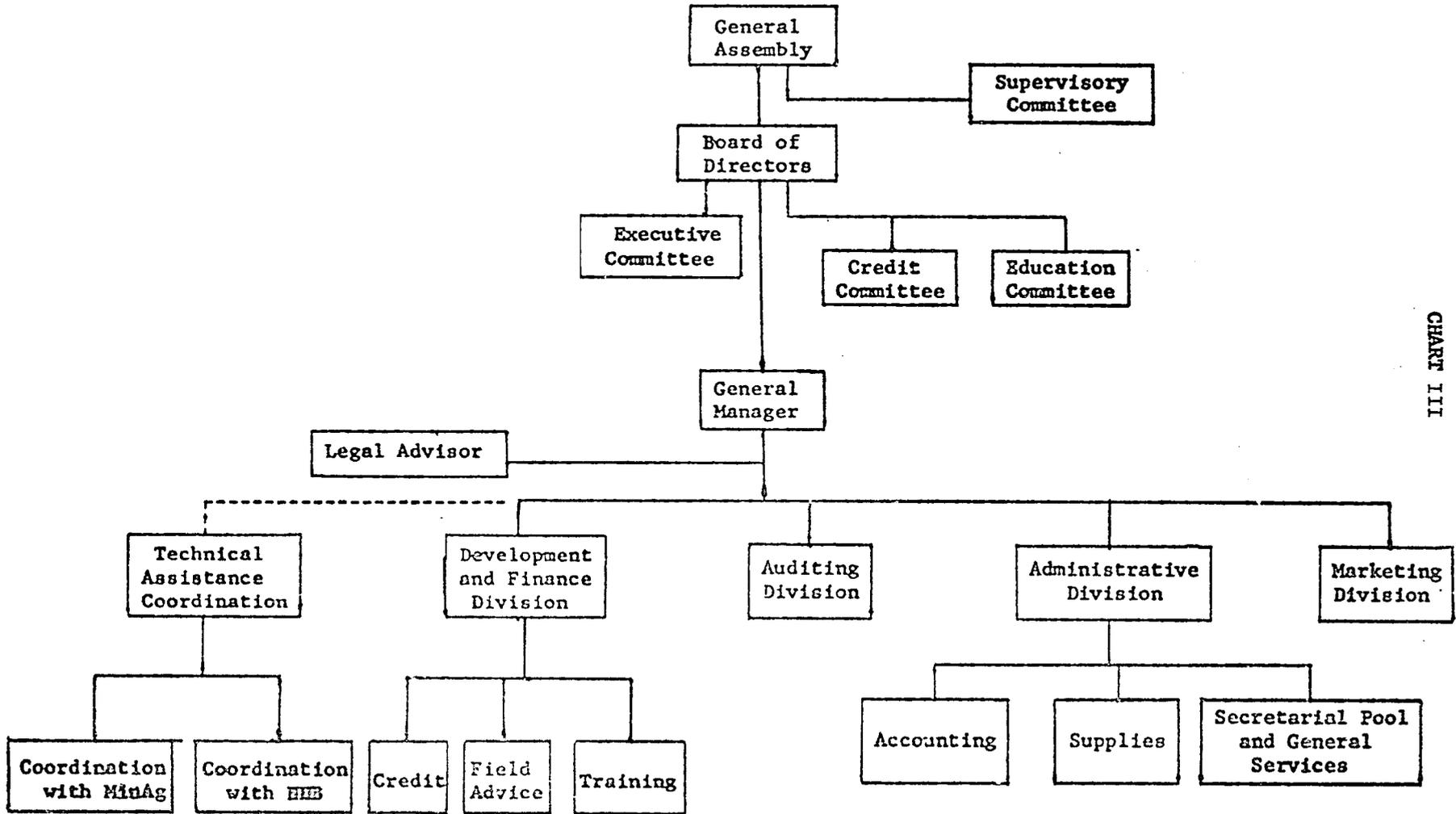
(i) Supervisory Committee: The supervisory committee is composed of three persons, one or two of whom are usually professional accountants. It meets as needed, always at least once a month, to oversee financial operations and to review all financial statements and books. In addition, it certifies that the financial statements presented to the annual meeting are correct.

(ii) Board of Directors: The board of Directors meets monthly for a full day, reviewing financial statements, reports, and other data and information, discussing management problems, and setting general policy and plans. To handle matters on a more timely basis whenever necessary and to provide effective liaison between the management and the board, the board has established a permanent working executive committee composed of two members and the General Manager. This committee meets once a day at CREDICOOP. It makes decisions within limits as delegated by the board, and the two board members keep informed as to all problems and issues as they arise so that the board can make realistic decisions when it meets.

(iii) Credit Committee: The Credit Committee consists of one board member and two nonboard members. It meets at least once a month and must approve all loans from CREDICOOP to member cooperatives of \$400 or more. Such loans come to the credit committee only after an analysis by the credit department with its recommendation.

(iv) Education Committee: The education committee consists of one board member and three nonboard members. Its function is to study and recommend to the board educational policy and to oversee the implementation of the educational program. In practice, most of its functions have been assigned directly to CREDICOOP's education department by the board.

CREDICOOP  
Organization Chart



(v) Staff: CREDICOOP has 24 full-time employees who work 44 hours per week; 18 of the employees are professionals. In addition, it has two full-time advisors from MinAg and NDB, nine Peace Corps Volunteers assigned to individual cooperatives, a legal advisor on half-time contract, a cotton buyer on contract during the cotton harvest season, and a fish salesman on commission. All evaluations have noted the high quality of CREDICOOP's staff.

CREDICOOP's future personnel growth plans combine its objective of becoming self-sufficient with the need to serve adequately its growing membership. CREDICOOP does not foresee the need to increase its staff concomitant with the growth of its operations because of various efficiencies of scale. (This is a built in incentive for CREDICOOP to continue to promote rural cooperatives and small farmer members after A.I.D. assistance is terminated.) For example, marketing 7,000 tons does not involve seven times the work of marketing 1,000 tons. In fact, the marketing of a significant volume can result in the elimination of certain problems involved in marketing smaller quantities. As to credit accounting, CREDICOOP has purchased a NCR-299 minicomputer which will allow it to control an increasing volume of transactions without a significant increase in personnel. CREDICOOP now has three field workers, who advise an average of 13 cooperatives each. CREDICOOP believes that each field worker could handle up to 20 cooperatives in the future, particularly as most of the current member cooperatives require less field effort. In short, CREDICOOP has a limited plan of staff growth, with the staff probably not exceeding 28-30 by 1980.

(2) Member Cooperatives: The structure of the member cooperatives is similar to that of CREDICOOP because both are organized under the same laws and regulations (see Chart IV). The general assembly of members of each cooperative meets once a year to elect a board of directors and a supervisory committee. The education and credit committees are appointed by the board. They are all members, who serve voluntarily without pay.

(i) Board of Directors: The board usually consists of five members, with two alternates, who normally meet at least twice a month. Its duties include personnel management, policy decisions, planning and evaluation, and acceptance of new members.

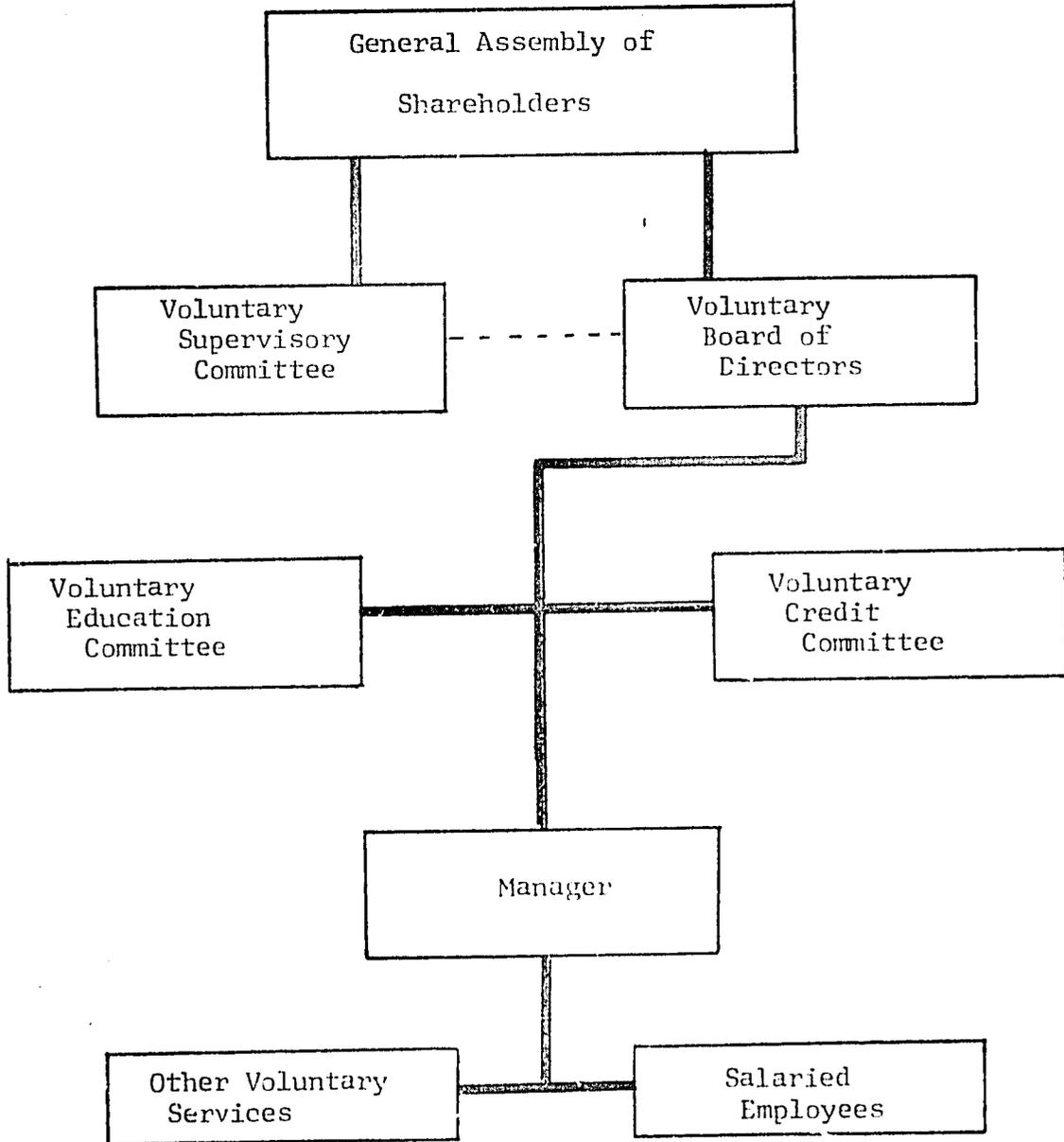
(ii) Supervisory Committee: This committee informs the assembly on the status of the cooperative. Its tasks include verification of cash accounts, control of the general ledger, and review of share and loan balances. Its observations are generally made on the basis of independent audits.

(iii) Credit Committee: This committee meets weekly, and its main task is to evaluate loan requests. This continues to be the most critical part of the operation, and CREDICOOP emphasizes it in its training program. It is planned that CREDICOOP's field staff will take a more active part in credit committee meetings.

CHART IV

ORGANIZATION DIAGRAM

RURAL CREDIT COOPERATIVE



(iv) Education Committee: This committee is responsible for orienting new members and borrowers in the functions of the cooperative and the responsibilities of the members. Most cooperatives take this committee and its functions seriously.

(v) Staffing: Most rural cooperatives are staffed with a manager, a field assistant and an office assistant. Bookkeepers are also found in larger cooperatives.

b. Management Capabilities

(1) CREDICOOP: USAID is confident that CREDICOOP can achieve the objectives of this project due to the existence of management talent in depth among its employees and board members. CREDICOOP has managed to employ high grade people through utilization of personal recommendations from existing employees and others, combined with the use of both aptitude and ability tests. The use of testing is new to Paraguay and is at times open to question. There is no doubt, however, that the testing and careful selection done by CREDICOOP have enabled it to avoid hiring people who were not qualified to perform jobs in their claimed areas of specialization. It has also served to prevent hiring a person just because that person had been recommended by influential sources.

USAID's confidence in CREDICOOP's management and administration abilities has been confirmed by analyses made by contract consultant firms. The evaluations performed by GAMCO and by Latin American Development Associates, described in Section II.A.5. above, both spoke highly of CREDICOOP's management capabilities.

(2) Member Cooperatives: In the member cooperatives, quality of management is dependent on several factors. In general, CREDICOOP considers it important to have a manager who comes from the community in which the cooperative is located. This means a more immediate acceptance of the manager by the members and faith in the cooperative by the populace in general. Also, a local manager has a more exact knowledge of his own community. One draw back, however, is that a cooperative is limited to selecting from among the most qualified people in any given community, while a more qualified person may be found in another community. Member cooperatives are able to overcome this draw back to some extent by using CREDICOOP testing to assure that their own local candidates are sufficiently capable of carrying out good management and administrative practices. As a last resort, CREDICOOP is willing to contract managers for its member cooperatives. CREDICOOP, however, encourages local boards to find and contract their own employees.

The rural member cooperatives have generally been able to obtain a fairly good staff from among local secondary school teachers. Experienced bookkeepers have also been hired where the quantity of loan transactions warrants it. Board members have generally been selected from among the nonfarm membership. Though this practice has some disadvantages

for rural cooperatives servicing small farmers, on the whole it has enabled the cooperatives to obtain the most qualified persons as board and committee members.

Board and committee members, as well as managers and employees, all participate in the CREDICOOP education program. CREDICOOP keeps a data file on all who attend courses and who are otherwise trained, in order to select properly suitable people for future courses and to provide a means of evaluating the results of courses.

In conclusion, though the management skills of the rural member cooperatives are still in an early, rudimentary phase, CREDICOOP is assuring that the proper elements are present (e.g., proper selection, training, assistance) so that the cooperatives can fulfill their role in providing the small farmer member with the services needed to overcome his income limiting constraints.

## 2. A.I.D.

The proposed project does not require unusual or special procedures on the part of A.I.D. USAID's Capital Development Office will continue to monitor the project as part of the Small Farmer Development Program. USAID's role includes receiving required reports and reviewing for approval all global credit and marketing plans, annual lending limit percentages, and certain other actions, all as spelled out in the Agreement for Loan 027. Financial procedures to be used for the project are as follows:

a. Local Currency Disbursements: A.I.D. local currency contributions to the project will be made to CREDICOOP on a reimbursable basis in accordance with the following guidelines:

1) Operating Expenses: A.I.D. will reimburse CREDICOOP for those operating expenses acceptable to USAID up to the yearly amounts specified in the financial plan. As explained in Section II.C.1.c. above, if at the end of each project year CREDICOOP's income from sources other than marketing, including the A.I.D. contribution, is greater than its overall operating expenses, CREDICOOP will increase its provision for bad debts by that amount.

2) Local Procurement: A.I.D. will reimburse CREDICOOP for local purchases acceptable to USAID that are made for storage and other marketing activities being carried out by CREDICOOP and its rural member cooperatives, up to the amounts specified in the financial plan.

3) Construction: A.I.D. will reimburse CREDICOOP for costs incurred in the construction of storage and other marketing facilities approved by USAID, up to the amounts specified in the financial plan.

4) Training: A.I.D. will reimburse CREDICOOP for actual costs incurred in the training of the members and staff of affiliated rural cooperatives, up to the amounts specified in the financial plan.

b. Foreign Exchange Disbursements: A.I.D. foreign exchange contributions to the project will be made in accordance with the following guidelines:

1) Consulting Services: The two on-going consultants to the project are employees of the Credit Union National Association (CUNA). A.I.D. reimburses CUNA in accordance with the terms and conditions specified in the PIO/T and the contract.

2) Project Evaluation: Contracting of the end-of-project evaluation conducted by a third party is expected to be done by means of a PIO/T submitted to AID/W. A.I.D. will reimburse the contractor according to standard procedures.

3) Participant Training: Third country or U.S. training for CREDICOOP's staff or that of its rural member cooperatives will be handled by USAID with standard PIO/P procedures.

4) Dollar Procurement: Procurement is normally expected to be done by means of a PIO/C, with actual dollar costs charged against it.

## B. Project Timetable

The major events of the entire Small Farmer Development Program occur on an annual cycle and are detailed in the CAP for Loan 027 and in the PPF Network prepared for that project.

It is expected that this extended project will be authorized by AID/W by November 15, 1977, and that the new Project Agreement will be signed by December 1. Such timing is essential if assistance to CREDICOOP is to continue on a basis which will permit it to achieve its objectives. Delays will cause restriction of services CREDICOOP provides as well as discontinuation of the services of the contracted consultants, which have proven so valuable to CREDICOOP.

## C. Evaluation Plan

Evaluation of the project will be part of the annual evaluation of the entire Small Farmer Development Program, to be carried out jointly by CREDICOOP, USAID, CUNA, and COLAC (Confederación Latinoamericana de Cooperativas de Ahorro y Crédito). The evaluation will combine the A.I.D. format (based on the logical frameworks in the CAP for Loan 027 and in this PP) with certain measurements suggested by CUNA and COLAC. Representatives of the four organizations met in early 1977 to discuss the methodology to be

used. The evaluation will essentially cover the following:

1. Measurement of input/output level indicators. The evaluation team will study the various output indicators of progress - as to trained staff and leadership; standardized procedures in accounting, capitalization, and credit; marketing operations; credit operations; and future planning. It will study the inputs to see if they are adequate for achievement of the outputs. Of particular emphasis will be evaluation of functions and processes, i.e., how credit union cooperatives manage their resources, handle training, set policies, and otherwise carry out their roles. This will be done by intensive field study of up to 12 cooperatives.

2. Measurement of purpose level indicators: The evaluation team will test progress toward the achievement of financial self-sufficiency and of growth of the entire CREDICOOP - cooperative system. Particular emphasis will be given to addressing a set of issues already prepared related to lending criteria, cooperatives' membership policies, the use of farmer committees, the role of voluntary savings, the means of handling delinquency, the efficacy of monetary readjustment, and other similar issues for which overall policy has been set by CREDICOOP.

3. Measurement of goal level indicators: The principal measure of goal achievement, that of a 50% increase in the net income of participating small farm families over a five year period, has been in effect for almost three years. CREDICOOP and USAID have gathered some baseline data from earlier USAID surveys and will be able to compare these with the recently completed Small Farmer Study and an expected follow-on survey in 1980 or 1981. Cooperative loan request records and membership applications are also a source of baseline and follow-on data. In addition to obtaining quantitative indicators of goal level achievement, the evaluation team will try to look beyond the numbers to assess the causal linkages between the indicators and project or outside factors.

The annual evaluations will be held between October and December of each year, which is sufficient time to have all data compiled from the project year ending the previous June. Each of the parties will finance their shares of the cost of the evaluation, with USAID providing overall logistical support. The final evaluation is expected to go beyond the above, with the contracting of an outside consultant to assess overall accomplishments and lessons learned, similar, in abbreviated form, to the A.I.D. financed Intercountry Evaluation of Small Farmer Organizations, carried out in 1976.

ANNEX I  
PROJECT DESIGN SUMMARY  
LOGICAL FRAMEWORK

(INSTRUCTION: THIS IS AN OPTIONAL FORM WHICH CAN BE USED AS AN AID TO ORGANIZING DATA FOR THE PAR REPORT. IT NEED NOT BE RETAINED OR SUBMITTED.)

Life of Project: (extension only)  
From FY 1978 to FY 1980  
Total U.S. Funding \$625,000  
Date Prepared: October 3, 1977

Project Title & Number: CREDIT UNIONS 526-0101

PAGE 1

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>Program or Sector Goal: The broader objective to which this project contributes:</p> <p><b>Increase rural family income from agricultural activities.</b></p>	<p>Measures of Goal Achievement:</p> <ol style="list-style-type: none"> <li>1. A 50% increase in the net income of participating small farm families over a five year period with a statistically significant increase over nonparticipating families.</li> <li>2. Average capitalization of rural members of \$85.</li> </ol>	<ol style="list-style-type: none"> <li>1. This is an on-going measure begun in FY 1975 (see FROP for this Project, Revision #1, dated May 20, 1974). Data are to be gathered from cooperative loan request records. The Small Farmer Survey and an expected follow-up in 1980 or 1981 will provide data on member versus nonmember families.</li> <li>2. From cooperative records.</li> </ol>	<p>Assumptions for achieving goal targets:</p> <ol style="list-style-type: none"> <li>1. World market prices for Paraguay's agricultural exports fluctuate no more than they have in recent years.</li> <li>2. Crop selection and hedging will enable small farmers to modify the effects of price fluctuations to manageable levels.</li> </ol> <p>Premise: That lack of agricultural credit, marketing services, and technical services are major constraints to increased income by small farmers in Paraguay, and that relieving such constraints will cause more rapid increases in income than otherwise would occur.</p>

PROJECT DESIGN SUMMARY  
LOGICAL FRAMEWORK

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Total U.S. Funding \$625,000  
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Project Title & Number: CREDIT UNIONS 526-0101

PAGE 2

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>Project Purpose:</p> <p>To enable CREDICOOP to generate income in excess of costs while providing the full range of services required by its member cooperatives.</p>	<p>Conditions that will indicate purpose has been achieved: End of project status. By June 1981:</p> <ol style="list-style-type: none"> <li>1. Financial Strength:               <ol style="list-style-type: none"> <li>a. CREDICOOP shows a net profit of \$26,000.</li> <li>b. Rural cooperatives have share capital of \$1,619,000.</li> <li>c. Cooperatives' savings in CREDICOOP reach \$500,000.</li> </ol> </li> <li>2. Membership: There are 38 rural cooperatives with 15,100 farmer members.</li> <li>3. Agricultural Credit:               <ol style="list-style-type: none"> <li>a. Annual cooperative loan volume reaches \$7,000,000.</li> <li>b. There are 1,050 borrowers with fewer than five hectares, 6,120 with five to 20, and 1,800 with over 20.</li> <li>c. 44,100 hectares are financed.</li> <li>d. CREDICOOP charge-offs do not exceed 1% of loans made from 1976 through 1980.</li> </ol> </li> <li>4. Marketing: The volume of crops marketed reaches \$7,000,000.</li> </ol>	<p>All data can be obtained from CREDICOOP's monthly, quarterly, and annual reports, from the contractor's quarterly reports, and from the investment plans of member cooperatives as submitted to CREDICOOP. Interim progress indicators are included in the text of the Project Paper.</p>	<p>Assumptions for achieving purpose:</p> <p>The GOP does not mount a massive program of subsidized agricultural credit.</p> <p>Premises:</p> <ol style="list-style-type: none"> <li>1. CREDICOOP can respond to economic factors in such a way as to achieve self-sufficiency.</li> <li>2. Farmers are predisposed toward joining cooperatives.</li> <li>3. There is an incentive for CREDICOOP to continue serving more rural cooperatives and small farmers once A.I.D. assistance has terminated since it can achieve economies of scale by doing so.</li> </ol>

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NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>Outputs:</p> <p>1. Trained staff and leadership.</p>	<p>Magnitude of Outputs: By June 1981:</p> <p>1.a. CREDICOOP with 28 staff members with a minimum of two years of on the job training.</p> <p>b. 30 rural cooperatives with managers with at least 50 hours each of specialized training.</p> <p>c. 100 cooperative board members with at least 20 hours of training in cooperative promotion and management.</p> <p>d. A continuing training capability in place.</p>	<p>Data for all output indicators can be obtained from records of CREDICOOP and its member cooperatives.</p>	<p>Assumptions for achieving outputs:</p> <p>1. CREDICOOP will be able to increase charges for its services commensurate with increased operating costs should such costs rise more rapidly than projected.</p> <p>2. The majority of personnel will remain in the positions for which they were trained or in other positions in the cooperative system.</p> <p>3. Member cooperatives will continue to comply with CREDICOOP policies.</p>
<p>2. Standardized procedures in accounting, capitalization, and credit.</p> <p>3. Marketing operations.</p>	<p>2.a. 30 rural cooperatives using the standard accounting system recommended by CREDICOOP.</p> <p>b. All rural cooperatives complying with requirements that minimum share purchase in CREDICOOP of 5% be made on production loans and 2 1/2% on marketing loans, and that cooperative members make share purchases of 10% in their cooperatives for each production loan.</p> <p>c. 30 rural cooperatives using written credit procedures based on CREDICOOP model.</p> <p>3.a. CREDICOOP's marketing department staffed by at least four employees.</p> <p>b. CREDICOOP with two storage facilities with dryers and with adequate vehicles and equipment to provide marketing services to 38 rural cooperatives at projected volume.</p>	<p>Outputs: (Cont.)</p> <p>4. Credit operations.</p> <p>5. Plans for future operations to benefit small farmers.</p>	<p>Magnitude of Outputs: (Cont.)</p> <p>4. CREDICOOP generating enough income from lending operations to cover its costs while still providing adequate support to achieve projected lending levels and delinquency objectives.</p> <p>5. At least one feasibility study by outside consultants to determine the advisability, profitability, and best location for a cotton gin and/or other agroindustrial investments.</p>

PROJECT DESIGN SUMMARY  
LOGICAL FRAMEWORK

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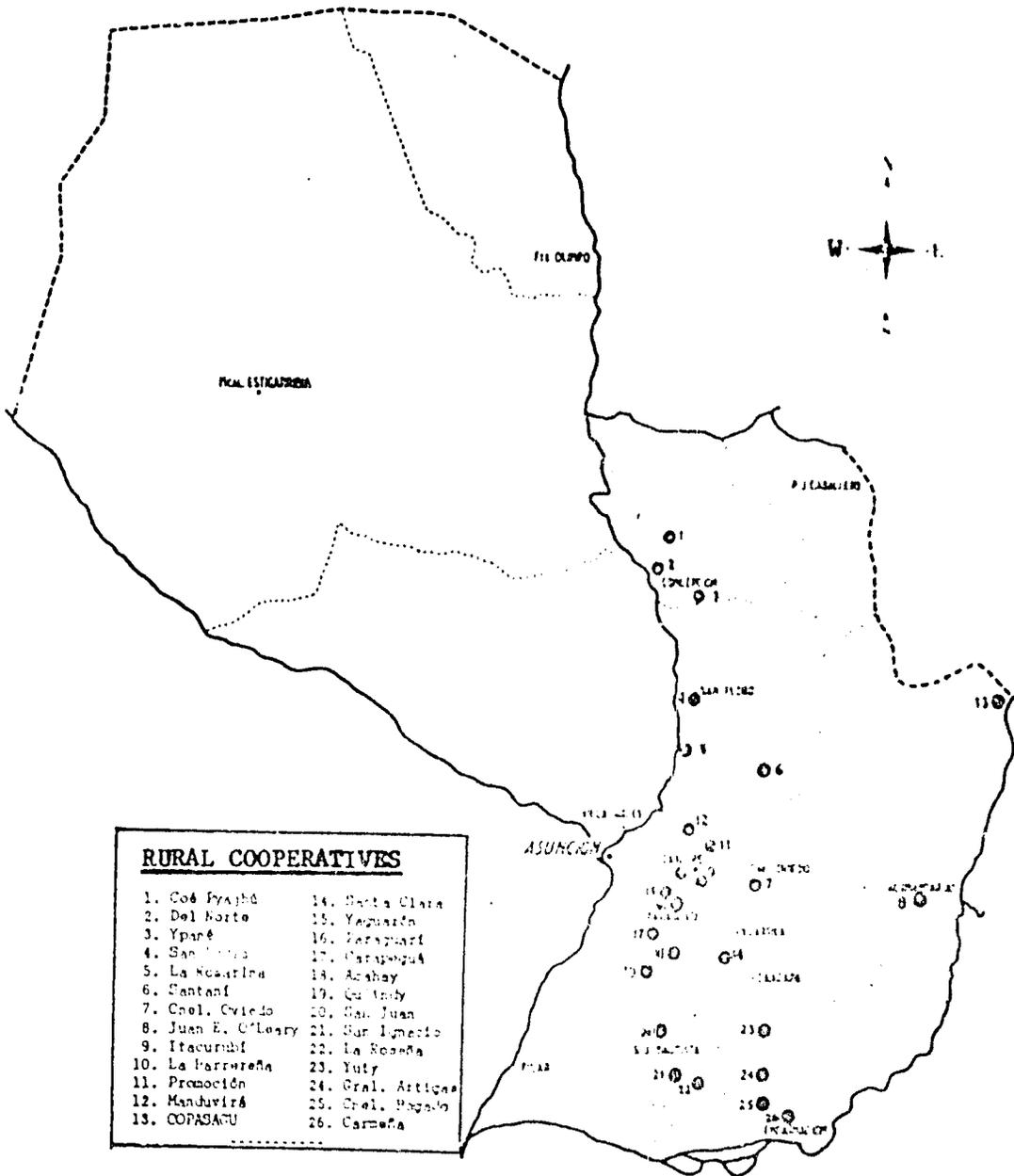
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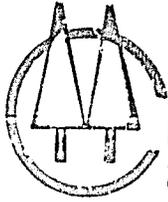
NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS			MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
Inputs: Project Extension Only:	Implementation Target (Type and Quantity) (US\$000)				Assumptions for providing inputs:
1. A.I.D. Grant	<u>FY 1978</u>	<u>FY 1979</u>	<u>FY 1980</u>	Data to verify all implementation targets can be obtained from CREDICOOP, NDB, and USAID records.	<ol style="list-style-type: none"> <li>1. A.I.D. loan funds are fully disbursed and used as planned.</li> <li>2. The Ministry of Agriculture and the National Development Bank will continue the support presently provided.</li> <li>3. NDB continues to view CREDICOOP and its member cooperatives as credit-worthy.</li> <li>4. GOP tax incentives for cooperatives will continue at least through 1980.</li> <li>5. Cooperative members continue their present rate of savings.</li> </ol>
a. Contracting Services	56	135	55		
b. Marketing Facilities & Equip.	85	50	-		
c. CREDICOOP Operating Expenses	83	58	21		
d. Training	22	15	15		
Contingency	12	13	5		
Total	<u>258</u>	<u>271</u>	<u>96</u>		
2. CREDICOOP Funds					
a. Contracting Services	10	10	5		
b. Marketing Facilities & Equip.	40	58	96		
c. CREDICOOP Operating Expenses	<u>86</u>	<u>142</u>	<u>225</u>		
d. Training	8	8	9		
Total	<u>144</u>	<u>218</u>	<u>335</u>		

ANNEX II

Locations of CREDICCOP's Rural Cooperatives

PARAGUAY



**CREDICOOP LTDA.**

CENTRAL COOPERATIVA NACIONAL DE AHORRO Y CREDITO

N° 623/77

31 de agosto de 1977.

Señor  
Abe Peña, Director  
Misión Económica de los  
Estados Unidos en el Paraguay  
Ciudad

De nuestra más distinguida consideración :

Quisiéramos aprovechar la oportunidad para expresarle nuestros más sinceros deseos de bienestar para Ud. y su familia y al mismo tiempo reiterarle nuestros agradecimientos por la valiosa y continuada ayuda que esa Misión está prestando al movimiento cooperativo nacional a través de CREDICOOP.

En este sentido, quisiéramos volver a molestar su atención para solicitarle una donación adicional de la AID por un monto de US\$ 700.000. Esta cantidad hará posible la continuación del apoyo que la AID ha brindado a CREDICOOP para que podamos lograr nuestros objetivos de convertirnos en una Central auto-suficiente y que proporcione una amplia gama de servicios esenciales a sus cooperativas afiliadas. Este objetivo está contribuyendo a los fines comunes que tenemos con la AID de ayudar a que el pequeño agricultor aumente sus ingresos. Es tal vez apropiado traer a colación en este punto nuestro entendimiento del compromiso hecho por la AID en el Préstamo 526-T-027 de proporcionar ayuda financiera a CREDICOOP durante toda la vida de nuestros esfuerzos conjuntos por lograr los fines mutuos del proyecto.

La donación solicitada sería usada de la siguiente manera :

- US\$ 375.000 para Asesoría Técnica proporcionada por CUNA, que ha sido tan útil para nosotros;
- US\$ 20.000 para una evaluación final del proyecto de manera que las lecciones aprendidas puedan ser capitalizadas y aplicadas en el futuro;
- US\$ 52.000 para continuar con nuestro programa de educación y adiestramiento práctico en el país a funcionarios y directivos de CREDICOOP y sus cooperativas;
- US\$ 50.000 en equipos para comercialización que consideramos de esencial importancia para nuestro programa de mercadeo;
- US\$ 85.000 en préstamos en moneda local para cooperativas con el propósito de dotarles de infraestructura básica adecuada para el programa de comercialización;
- US\$ 118.000 de apoyo a nuestro presupuesto hasta el momento en que nosotros podamos cubrir todos nuestros gastos.

Nº 623/77  
31 de agosto de 1977.

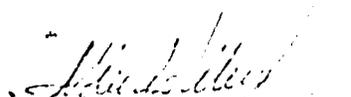
En cuanto a los fondos de contrapartida, notamos que al sumar todos los elementos - capital en las cooperativas rurales, gastos operativos en estas cooperativas, ahorros de las mismas en CREDICOOP, apoyo del Ministerio de Agricultura y del Banco Nacional de Fomento, beneficios fiscales a la exportación, y el tiempo de los voluntarios - el total llega a más que US\$ 5.500.000.

De esta cantidad, US\$ 2.120.175 se reservó como contrapartida para el préstamo, dejando el restante de US\$ 3.400.000 para ser aplicado como contrapartida a la donación de AID, la que totalizará US\$ 2.003.000 una vez que estos últimos US\$ 700.000 sean utilizados.

En relación al nivel de apoyo de contrapartida estimamos que se están logrando en el nivel esperado y creemos que se seguirá de la misma forma.

Entendemos que la aprobación de esta donación adicional requerirá la firma de un nuevo Convenio por lo que estaremos listos para cuando llegue la oportunidad.

En la esperanza firme de que nuestras relaciones con la AID continuarán fortaleciéndose en el cumplimiento de objetivos y metas comunes, quedamos de Ud. a sus sinceras órdenes.

  
María Selva Caballero  
Secretaria

  
Dr. Miguel Angel Britos  
Tesorero



  
Sen. Nac. Leonidas P. de Virgili  
Presidente

  
Ciriilo Martínez  
Vice-Presidente

ANNEX IV

Draft Project Authorization

Paraguay

Credit Unions  
526-0101

Pursuant to Part I, Chapter 1, Section 103 of the Foreign Assistance Act of 1961, as amended, I hereby authorize a Grant to the Central Cooperativa Nacional Ltda. of Paraguay ("CREDICOOP" or "Grantee") of not to exceed six hundred twenty-five thousand United States dollars (\$625,000) ("Authorized Amount") to help in financing certain foreign exchange and local currency costs of goods and services required for a project hereinafter described. The entire amount of the Agency for International Development ("A.I.D.") financing herein authorized for the project will be obligated when the Project Agreement is executed. The project ("Project") involves assisting CREDICOOP to be a self-sufficient cooperative central, providing credit, marketing, and technical assistance services to its member cooperatives. The Project is an integral part of a larger project effort of assistance to small farmers in Paraguay, which includes A.I.D. Loan 526-T-027 and previous grant assistance.

I approve the total level of A.I.D. appropriated funding planned for the Project of not to exceed the Authorized Amount during the period FY 1978 through FY 1980. I hereby authorize the initiation of negotiation and execution of the Project Agreement by the officer to whom such authority has been delegated in accordance with A.I.D. regulations and Delegations of Authority, subject to the following essential terms and conditions, together with such other terms and conditions as A.I.D. may deem appropriate:

Source and Origin of Goods and Services

Except for ocean shipping, goods and services financed by A.I.D. under the Project shall have their source and origin in Paraguay or in the United States of America, except as A.I.D. may otherwise agree in writing. Ocean shipping financed by A.I.D. under the Project shall be procured only in the United States of America.

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Assistant Administrator  
Bureau for Latin America

ANNEX V

Projections of Small Farmer Members of Rural Cooperatives

SMALL FARMER MEMBERS

	June 1977	June 1978	June 1979	June 1980	June 1981
A. Members at end of previous years	4,225	4,378	7,152	9,175	11,612
B. Increases during year					
1. in existing 26 coops	150	1,170	1,430	1,690	1,950
2. organizing new coops	-0-	210	300	410	435
3. affiliating cooperatives	-0-	1,294	243	287	414
4. in urban cooperative	-0-	100	50	50	50
(Total increase)	(150)	(2,774)	(2,023)	(2,437)	(2,849)
C. Projected Membership	4,378	7,152	9,175	11,612	14,461
D. Farmer Borrowers	2,000	3,050	4,500	7,300	9,000

The assumptions for achieving the projections of item B.1. are that each of the existing 26 cooperatives will increase its membership by 45 in 1978, 55 in 1979, 65 in 1980 and 75 in 1981. This will require each cooperative to add to its membership about four farmers per month in 1978, about five per month in 1979, about six per month in 1980 and about seven per month in 1981.

The assumptions for achieving the projections of item B.2. are that two new cooperatives will be established in 1978, 1979 and 1980; that one new cooperative will be established in 1981; that each new cooperative will have 135 members when it is established; and that these new cooperatives will gain 45, 55, and 65 members per year respectively during the first, second and third years of operation. This will require each cooperative to add to its membership about four members per month during the first year, about five the second year and about six per month during the third year.

The assumption for achieving B.3. is that some of the existing small farmer marketing and production cooperatives will affiliate with CREDICOOP to obtain credit and to obtain better prices through volume sales. The 1,294 farmers projected to affiliate in 1978 belong to cooperatives established under an AID marketing cooperative project which is phasing out. The cooperatives of these farmers have already applied for membership in CREDICOOP and it is expected that these cooperatives will become affiliated by June 1978.

The assumption for achieving B.4. is that the urban cooperative, Pilar, will be able to carry out its plans to provide services to small farmers. Its promotion efforts among small farmers began after June 1977 and it now has 40 small farmer members.

There was little growth in membership in the cooperatives during 1977 because no promotion efforts were undertaken. CREDICOOP, the consultants and AID agreed that CREDICOOP's efforts should be directed to strengthening the loan recuperation activities of CREDICOOP's cooperatives. Over a two year period beginning in 1975 loan recuperations improved in all cooperatives and seven cooperatives, previously denied loans because of high loan delinquency, became eligible for loans. Last June normal membership promotion activities resumed after a two year hiatus (see page 49 delinquency policy).

Two CUNA consultants, one who has been with the project for over three years and the other for over one year, assisted in preparing the membership projections.

The assumption for item D. is that not all cooperatives will be eligible for CREDICOOP loans. CREDICOOP lending policy denies credit to cooperatives with a delinquency rate of more than 10% unless the delinquency is justified. The differences between C and D are the farmers belonging to cooperatives which are ineligible for CREDICOOP loans. The new lending policy instituted by CREDICOOP in 1974 should reduce future delinquency problems and enable the percentage of eligible borrowers to rise from 45% of farmer members in 1977 to 62% in 1981. (See page 49 Delinquency policy.)

ANNEX VI - Projection of Interest Income

INTEREST INCOME AND INTEREST EXPENSE

	June 1977	June 1978	June 1979	June 1980	June 1981
A. Production Loans	400,000	865,000	1,438,000	2,270,000	3,530,000
Interest Income	a/	83,617	139,007	219,433	341,233
B. Marketing Funds	450,000	575,000	600,000	650,000	700,000
Interest Income	a/	38,333	40,000	43,333	--
C. Total Interest Income	41,009	121,950	179,007	262,766	341,233
D. Interest Expenses	22,007	43,950	63,000	90,000	90,000

CREDICOOP charges a commission and interest for its production loans. The commission is .5% of the value of the loan regardless of the length of the loan. The interest rate is ten percent per annum. The length of the loans is eleven months and it is assumed that the funds have drawn no interest for one month of the year.

CREDICOOP charges 10% interest for marketing loans made to cooperatives. CREDICOOP also uses this money as operating capital to carry out its marketing operations. When the funds are not being used they will be placed in a bank account where they will draw eight percent interest. The projections assume that the marketing funds will generate an average return of eight percent for ten months of the year. No income from marketing loans is projected for 1981. In that year it is anticipated that the AID loan funds and CREDICOOP's savings will be used to finance production and CREDICOOP will need to borrow commercial funds for marketing. The projections reflect the assumption that CREDICOOP will break even on borrowing and lending activities connected with marketing in 1981.

The volume of lending for 1977 is unexpectedly small because: (1) the AID loan is CREDICOOP's main source of funds; (2) the AID loan began disbursing in December 1976; and (3) the accounting period ends June 30. The interest expense is unexpectedly high because CREDICOOP found it necessary to borrow from banks at commercial interest rates during 1977. CREDICOOP does not expect to borrow from banks again until 1981.

Interest expenses total three percent for the AID-provided funds: two percent to AID and one percent to the National Development Bank. No interest is paid on the credit union savings deposited with CREDICOOP and no dividends are to be paid on them through June 1981.

ANNEX VII

Budget for Training

Travel	\$ 8,000
Tuition	7,000
Per Diem	9,000
New Member Training	
\$2.00/members X 7,600 new members	15,200
Travel	
\$5.00/dy X 3dys X 8 leaders X 26 coops	1,040
Training	
\$65/coop to train small farmers	5,388
Contingency Costs	<u>6,372</u>
	\$52,000

1. Two people from CREDICOOP's marketing section will attend a course in grain and grain handling sponsored by AID.
2. One credit analyst will attend a course in techniques for financial and economic analysis of agriculture projects.
3. Three cooperative managers will receive on-the-job training in cooperatives in Argentina.
4. The MINAG supervisory extension agent assigned to CREDICOOP will attend a course in bio-control of agriculture pests.

The courses will take place in the U.S. and Latin America.

Budget for Marketing

Grain dryer UREKA E-306	-	\$35,000
Various grain augers and cleaners	-	15,000
		<u>\$50,000</u>
Warehouses for crop storage		85,000
for 26 cooperatives		<u>\$135,000</u>

This equipment will be combined with silos to be purchased by CREDICOOP to set up two grain storage facilities: one on the river at Villeta and the other at a site to be determined after further study.